Psychiatry dossier

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01

History taking and mental state examination

History taking components

- Patient profile: Name, age, address, occupation, marital status
- Chief complaint (In patient's own words)
- Hx of present illness: reason of referral, referred by who, main problems, how the problems affected you, precipitating factors, last time you felt well (obtain clear chronological sequence of symptoms and their effect on behavior)
- Past psychiatric history: seeing a psychiatrist, hospital admission, treatments, suicidal thoughts
- Past medical and surgical
- Current medications
- Smoking (pack-year), alcohol and drug history
- Family history relationship with family, if any of them are dead and how, hx of mental disorders
- Personal history: infancy and early childhood, education and adolescence, occupation history, relationship history and present social circumstances
- Premorbid history: description of self before illness, coping mechanisms, hobbies, plans and ambitions
- Past forensic history: if they were ever in trouble with the police

History checklist https://drive.google.com/file/d/1naBylwEmQFNN26gyjZdfTYhPWGotjiRN/view?usp=sharing

Mental status examination

- Analogous to physical exam in other areas of medicine
- Assesses the following:
  - Appearance/behavior
  - Speech
  - Mood/affect
  - Thought process and content
  - Perceptual disturbances
  - Cognition
  - Insight and judgement/impulse control
- Mental status exam tells about the mental status at the moment ONLY, it can change hourly or daily.

Appearance, attitude and behavior

- *Appearance :*
  1. Gender.
  2. Age.
  3. Type of clothing.
  4. Hygiene (Including smelling of alcohol, urine , feces)
  5. Posture.
  6. Grooming.
  7. Physical abnormalities.
  8. Tattoos.
  9. Body piercings.

- Take specific notice of the following, which may be clues for possible diagnoses :

✔ Pupil size: Drug intoxication/withdrawal.

✔ Bruises in hidden areas: ↑ suspicion for abuse.

✔ Needle marks/tracks: Drug use.

✔ Eroding of tooth enamel: Eating disorders (from vomiting).

✔ Superficial cuts on arms: Self-harm.

Behavior: Attitude (cooperative, seductive, flattering, charming, eager to please, entitled, controlling, uncooperative, hostile, guarded, critical, antagonistic, childish), mannerisms, tics, eye contact, activity level, psychomotor retardation/agitation, akathisia, automatisms, catatonia, choreoathetoid movements, compulsions, dystonias, tremor

Speech and language

Assess for :

1. Rate (pressured, slowed, regular).
2. Rhythm , articulation (dysarthria, stuttering).
3. Accent/dialect.
4. Volume/modulation (loudness or softness).
5. Tone.
6. Long or short latency of speech

Mood and affect

Mood ***is*** *the emotion that the patient tells you he/she feels, often in quotations.*

** ***Affect*** *is an assessment of how the patient's mood appears to the examiner, including the amount and range of emotional expression.*

It is described with the following dimensions :

1. *Type of affect :* Euthymic, euphoric, neutral, dysphoric.
2. *Range:* the depth and range of the feelings shown : flat (none) —blunted (shallow) —constricted (limited) —full (average) —intense (more than normal).
3. *Motility:* how quickly a person appears to shift emotional states : sluggish —supple —labile.
4. *Appropriateness to content* whether the affect is congruent with the subject of conversation or stated mood : appropriate —not appropriate.

Thought form

- **Form of thinking**: *how they use language and put ideas together*. Describing whether the thought are logical, meaningful, and goal directed. (no comments are made on what the patient thinks or how they express their thoughts)
- Logical/Linear/Goal-directed: Answers to questions and conversation clear and follows a logical sequence.
- ** Circumstantiality is when the point of the conversation is eventually reached but with overinclusion of trivial or irrelevant details.

Examples of thought disorders include :

** Tangentiality: Can follow conversation but point never reached or question never answered.
Loosening of associations: No logical connection from one thought to another.
Flight of ideas: Thoughts change abruptly from one idea to another, usually accompanied by rapid/pressured speech.
Neologisms: Made-up words.
Word salad: Incoherent collection of words.
Clang associations : Word connections due to phonetics rather than actual meaning. “My car is red. I’ve been in bed. It hurts my head.”
Thought blocking : Abrupt cessation of communication before the idea is finished.

Thought content

- Describing the **type of ideas expressed** by patient

Examples of disorders:

- Poverty of thought versus overabundance: Too few versus too many ideas expressed.
- Delusions: Fixed, false beliefs that are not shared by the person's culture and remain despite evidence to the contrary.
  - Delusions are classified as bizarre (impossible to be true) or non-bizarre (at least possible).
- Suicidal and homicidal ideation: Ask if the patient feels like harming himself/herself or others.
  - Identify if the plan is well formulated.
  - Ask if the patient has an intent
  - Ask if the patient has means to kill himself/herself (firearms in the house/multiple prescription bottles).
- Phobias: Persistent, irrational fears.
- Obsessions: Repetitive, intrusive thoughts.

** Perceptual abnormalities

- Hallucinations (Sensory perceptions that occur in the absence of an actual stimulus).
  - Describe the sensory modality: Auditory (most common), visual, gustatory, olfactory, or tactile.
  - Describe the details (e.g., auditory hallucinations may be ringing, humming, whispers, or voices speaking clear words, Command auditory hallucinations are voices that instruct the patient to do something).
  - Ask if the hallucination is experienced only while falling asleep (*hypnagogic hallucination*) or upon awakening (*hypnopompic hallucination*).
- Illusions (Inaccurate perception of existing sensory stimuli (e.g., wall appears as if it's moving).
- Derealization (The experience of feeling detached from one's surroundings).
- Depersonalization (The experience of feeling detached from one's mental processes).

Cognition

- Consciousness: Patient's level of awareness; possible range includes Alert —Drowsy —Lethargic —Stuporous —Comatose.
- Orientation: To person, place, and time.
- Calculation: Ability to add/subtract.
- Memory:
  - Immediate (registration) —dependent on attention/concentration and can be tested by asking a patient to repeat several digits or words.
  - Recent (short-term memory) —events within the past few minutes, hours, or days.
  - Remote memory (long-term memory).
- Fund of knowledge: Level of knowledge in the context of the patient's culture and education (e.g., Who is the King? Who was the Prophet? Etc.)
- Attention/Concentration: Ability to subtract serial 7s from 100 or to count the days of the week backwards.
- Reading/Writing: Simple sentences (must make sure the patient is literate first).
- ** Abstract concepts: Ability to explain similarities between objects and understand the meaning of simple proverbs.

Mini mental state examination

- ✔ **24-30 Within normal limit**
- ✔ **18-23 Mild ~ Moderate cognitive impairment**
- ✔ **0-17 Severe cognitive impairment**

The mini mental state examination

Orientation

Year, month, day, date. season	_____/5
Country, county, town, hospital, ward (clinic)	_____/5

Registration

Examiner names three objects (for example, apple, pen, and table)	
Patient asked to repeat objects, one point for each.	_____/3

Attention

Subtract 7 from 100 then repeat from result, stop after five subtractions. (Answers: 93, 86, 79, 72, 65)	
Alternatively if patient errs on subtraction get them to spell world backwards: D L R O W	
Score best performance on either task.	_____/5

Recall

Ask for the names of the objects learned earlier.	_____/3

Language

Name a pencil and a watch.	_____/2
Repeat: 'No ifs, and or buts.'	_____/1
Give a three stage command. Score one for each stage (for example, 'Take this piece of paper in your right hand, fold it in half and place it on the table.'	_____/3
Ask patient to read and obey a written command on a piece of paper stating: 'Close your eyes.'	_____/1
Ask patient to write a sentence. Score correct if it has a subject and a verb.	_____/1

Copying

Ask patient to copy intersecting pentagons.	
Score as correct if they overlap and each has five sides.	_____/1

Total score: _____/30

Insight and judgement

** **1. Awareness of disease :**

- Do you consider that you are ill in any way ?
- Why have you come into hospital ?
- Do you have a physical or a mental illness ?
- If you have a mental illness, what is it?

2. Correct labelling of abnormality :

- You described several symptoms…..namely….
- What is your explanation of these experiences ?

3. Willingness to take treatment :

- How do you feel about being in hospital…..? Coming to the clinic….
- How do you feel about taking medication ?
- Has the medication been helpful ?
- Have any other treatments been helpful ?
- Do you think that medication helps you to remain well ?

Lastly remember to always do a physical examination

Past years questions

1. Insight meaning?
   a) the relationship between the patient and the doctor.
   b) Patient knowledge that he has illness.
   c) patient behavior
   d) abstract thinking
2. Affect is type of the following?
   a) Thought
   b) Cognition
   c) Mood
   d) Behavior
3. Not included in mental state examination?
   IQ
4. Asking the patient to tell proverbs is a test for?

a) insight
b) abstract thinking
c) Cognitive
d) thought content

5. Emotions are examined under this category
   a) Thought
   b) Behavior
   c) Perception
   d) Affect
6. In mental state examination, what is concerned with speed and coherency of thought?
   Thought form

Past years questions

7. description of tangentiality refer to what :

A_ Speech
B_ Thoughts
C_ Mood

8. One of the following is not true about mental examination:

Hallucination is a disorder of thought content

9. Patient talking with excessive details, but reaching to the point in the end?

Circumstantiality

10. which one of these is a disorder of perception

a-delusion
b-hallucination
c-flight of ideas
d-thought insertion

11. how do you test abstract thinking?

using proverbs

12. Which of the following is not considered a perceptual disturbance?

a. Derealization.
b. Illusion.
c. Depersonalization.
d. Delusion.
e. Hallucination.

13. Observed expression of emotion; may be inconsistent with patient's description of emotion?

Affect

14. A depressed patient does not smile or laugh when a joke is shared by a fellow patient. She shows a defect in which of the following aspects of mental state examination?

Reactivity of affect

15. How u usually spend your leisure time , the psychiatrist in this question try to test :

personal trait

02

Signs and symptoms of psychiatric illnesses

Motor and behavior signs

1. **Echopraxia:** pathological imitation of movements of one person by another.
2. **Catatonia:** motor anomalies in non organic disorders

** a) Catalepsy: general term for an immobile position that is constantly maintained (patient is sitting like a statue in one position and not moving seen in schizophrenia or depression).

b) Catatonic excitement: agitated, purposeless motor activity, uninfluenced by external stimuli.

c) Catatonic stupor: markedly slowed motor activity, often to a point of immobility and seeming unawareness of surroundings.

d) Catatonic rigidity: voluntary assumption of a rigid posture, held against all efforts to be moved.

e) Catatonic posturing: voluntary assumption of an inappropriate or bizarre posture, for long periods of time.

f) Waxy flexibility: the person can be molded into a position that is then maintained; when the examiner moves the person's limb, the limb feels as if it were made of wax. Also called "Psychological pillow" (in Schizophrenia).

Motor signs cont.

** **3. Negativism**: motiveless *resistance* to all attempts to be moved or to all instructions (In schizophrenia).

** **4. Cataplexy**: temporary loss of muscle tone and weakness precipitated by a variety of *emotional* states.

** **5. Stereotypy**: repetitive *non-goal-directed* fixed pattern of physical action or speech.

** **6. Mannerism:** Abnormal, repetitive *goal-directed* movement of some functional significance.

7. Perseveration: The senseless repetition of a motor response after the stimulus is *withdrawn* (organic brain conditions).

8. Automatic obedience: automatic following of suggestions; The patient does whatever the interviewer asks of him irrespective of the consequences.

9. Ambitendence: The patient begins to make a movement but, before completing it, starts the opposite movement.

Motor signs cont.

10. Overactivity

** • Psychomotor agitation : excessive motor and cognitive overactivity, usually nonproductive and in response to inner tension.
- Hyperactivity (hyperkinesis): restless, aggressive, destructive activity, often associated with some underlying brain pathology.
- Tics: sudden, involuntary, spasmodic motor movement of small groups of muscle.

** • Akathisia: Subjective feeling of muscular tension secondary to antipsychotic or other medication, which can cause restlessness, pacing, repeated sitting & standing.
- Compulsion: uncontrollable impulse to perform an act repetitively (preceded by obsession).

11. Chorea: Random, jerky movements, resembling fragments of goal-directed behavior (i.e., *semi-purposeful*)

Speech

1. **Pressure of speech:** Rapid & copious speech, as thoughts crowd into the patients mind in quick succession (Bipolar in manic state , ADHD).
2. **Poverty of speech:** Slow, monotonous and sparse speech, as thoughts enter the patient's mind only occasionally (Depression , Negative schizophrenia).
3. **Neologism:** The patient uses words or phrases invented by himself/herself , or use of known words not in their place.
4. **Mutism:** The total loss of speech.
5. **Word salad (word diarrhea):** incoherent mixture of words and phrases which are not connected.
6. **Non Spontaneous speech:** verbal responses given only when asked or spoken to directly; no self-initiation of speech (Depression , Negative schizophrenia , autistic spectrum disorders).
7. **Poverty of content of speech:** speech that is adequate in amount but conveys little information because of vagueness, emptiness, or stereotyped phrases.
8. **Verbigeration:** refers to the repetition of words or syllables that expressive aphasic patients may use while searching for the correct word.

Mood and affect

- Mood vs affect
- Affect – objective assessment of mood.
- Mood – A sustained and subjective emotion – short lived

A. Affect: Observed expression of emotion; may be inconsistent with patient's description of emotion

** I. Incongruity of affect (inappropriate affect): The affect is not in line with the mood expected, e.g., laughs when told about death of someone.

II. Blunted affect: severe reduction in the intensity of externalized feeling tone & emotional response.

III. Restricted or constricted affect: reduction in intensity of feeling tone less severe than blunted affect but clearly reduced.

IV. Flat affect: absence or near absence of any signs of affective expression; *voice monotonous, mask & immobile face.*

V. Labile affect: rapid and abrupt changes in emotional feeling tone, unrelated to external stimuli (Severe *oscillation* between euphoria & Depression).

Mood

B. Mood: A pervasive and sustained emotion, subjectively experienced and reported by the patient and observed by others; examples include depression, elation, anger

I. **Dysphoric mood:** an unpleasant mood (less severe than depression).
II. **Euthymic mood:** normal range of mood, implying absence of depressed or elevated mood.
III. **Expansive mood:** expression of one's feelings without restraint, with an overestimation of one's significance
IV. **Irritable mood:** easily annoyed and provoked to anger
V. **Mood swings (labile mood):** oscillations between euphoria and depression or anxiety.
VI. **Elevated mood:** air of confidence and enjoyment; a mood more cheerful than usual.

I. **Euphoria:** Exaggerated feeling of well-being that is *inappropriate* to real events. Can occur with drugs such as **opiates, amphetamines, and alcohol**.
II. **Depression:** psychopathological sadness.
III. **Anhedonia:** loss of interest in and withdrawal from all regular and pleasurable activities, often associated with depression.
IV. **Apathy:** Dulled emotional tone associated with detachment or indifference; observed in certain types of **schizophrenia** and **depression.**
V. ** **Alexithymia:** inability or difficulty in describing or being aware of one's emotions or moods.

Disturbances in thought form

- General disturbances
- **Psychosis:** inability to distinguish reality from fantasy.
- **Illogical thinking:** thinking containing erroneous conclusions or internal contradictions.

** • **Magical thinking (superstitious thinking):** a form of dereistic thought, in which thoughts, words , or actions assume power (e.g., they can cause or prevent events), or belief that unrelated events are causally connected despite the no plausible causal link between them, particularly because of supernatural effects.

Disturbances in thought form

- Specific disturbances
  - **Pressure of thought:** Ideas arise in unusual variety and abundance and pass through the mind rapidly.
  - **Poverty of thought:** only a few ideas, which lack variety and abundance, and pass through the mind slowly.
  - **Word salad (verbigeration):** no connection between topics and bad grammar of speech.
  - **Tangentiality:** can't have goal-directed associations of thought; never gets to desired goal.
  - **Loosening of associations (Derailment):** ideas shift from one subject to another in a completely unrelated way; when severe, speech may be incoherent (Severe mania & Schizophrenia).
    - **Flight of ideas:** rapid, continuous verbalizations or plays on words produce constant shifting from one idea to another; the ideas tend to be connected, and a listener may be able to follow them (Schizophrenia).
  - ** **Thought blocking:** patient's mind going entirely blank in the middle of a train of thought.
  - ** **Perseveration:** The persistent and inappropriate repetition of same thoughts In response to a series of different questions,

Disturbances in thought content

- **Delusion:** Fixed false belief which is unshakeable, based on incorrect inference about external reality, not consistent with patient's intelligence and cultural background, that cannot be corrected by reasoning

Types of delusions:

1. **Bizarre delusion:** an absurd, totally implausible, strange false belief.

** 2. **Nihilistic delusion:** false feeling that self, others, or the world is nonexistent or ending (Cotard Syndrome).

3. **Persecutary:** Fixed false belief that one is being harmed or harm is impending & that the perpetrators of that harm are causing it intentionally.

4. **Grandiose:** Insightless & unshakable conviction that one possesses special powers, knowledge, talents or abilities, is famous or holds a special relationship with a famous person.

1. **Religious:** Any delusion with religious content, especially beliefs that one is God, Angel, Devil, Prophet or son or daughter of God.

** 2. **Delusions of reference:** fixed false belief that remarks, events, objects or other phenomena are directed at oneself.

3. **Delusional Perception:** Linking a normal percept to a bizarre conclusion.

4. **Morbid jealousy:** fixed false belief that a spouse or lover is unfaithful, also called "Delusion of infidelity" , "Othello's Syndrome"

5. **Erotomania:** Delusion that one is loved by another person (usually celebrity or higher status)

** Passivity phenomenon

1. **Delusion of control** "Made volition ": false feeling that one's will, thoughts, actions or feeling are being controlled by external forces.
2. **Thought withdrawal**: thinks one's thoughts are being removed from their mind by other people or forces.
3. **Thought insertion**: thinks that thoughts are being implanted in their mind by other people or forces.
4. **Thought broadcasting**: thinks that one's thoughts can be heard by others, as though they were being broadcast into the air.

Disturbances of perception

1- Sensory Distortion (Altered): There is constant real perception object which is perceived in a distorted way.

- Illusion: misperception or misinterpretation of real external sensory stimuli.

2- Sensory Deception (False): A new perception occur which may or may not be in response to an external stimulus.

- Hallucination: false sensory perception not associated with real external stimuli; there may or may not be a delusional interpretation of the hallucinatory experience.

- Characteristics of hallucinations
    1. Delineated & clear
    2. In object space
    3. Constant (independent of will)
    4. Patient reacts to them as if they are true
    5. Perception coming from outside
    6. No stimulus
- Non pathological Hallucinations
- Hypnagogic hallucination: false sensory perception occurring while falling asleep; generally considered non-pathological phenomenon when this happens upon awakening it's called - Hypnopompic hallucinations

Types of hallucinations

1. Auditory hallucinations: false perception of sound, usually voices but also other noises, such as music; most common hallucination in psychiatric disorders

- Types of auditory hallucinations
  - Elementary: Are perception of sounds such as hissing, whistling, an extended tone.
  - Complex:

A. Second person hallucination: One voice only may seem to address the patient directly.

**B. Third person hallucination: Two voices or more talk to one another referring to the patient as “he” or “she" and may give a running commentary on the patient’s action or intention.

C. Thoughts are spoken aloud: hears his own thoughts *as he thinks them*.

**D. Thought echo: hears his own thoughts *after* he has thought of them.

2. Visual hallucinations: false perception involving sight, consisting of both formed images (for example, people) and unformed images (for example, flashes of light); most common in medically determined disorders & acute organic states.

- Lilliputian hallucination: false perception in which objects are seen as reduced in size.
- Extracampine visual hallucination: Are experienced as located outside the field of vision, behind the head.
- Autoscopic Hallucination: The experience of seeing one’s own body in external space.

Types of hallucinations cont.

3. Olfactory hallucination: false perception of smell; most common in viral infection, brain tumor, trauma, surgery, and possibly exposure to toxins or drugs and uncommonly in depressive psychosis.

4. Gustatory hallucination: false perception of taste, such as unpleasant taste caused by schizophrenia, acute organic states focal epilepsy, especially temporal lobe epilepsy. The regions of the brain responsible for gustatory hallucination in this case are the insula and the superior bank of the Sylvian fissure.

5. Tactile (haptic) hallucination: false perception of touch or surface sensation, as from an amputated limb (phantom limb), or crawling sensation on or under the skin (formication).

- may occur in schizophrenia, but more common in acute brain syndrome.
- Occurs in organic states, delirium tremens, in cocaine psychosis & also in withdrawal from alcohol or benzodiazepines.
- Formication may also be the result of normal hormonal changes such as menopause, or disorders such as peripheral neuropathy, high fevers, Lyme disease, skin cancer

6. Somatic hallucination: false sensation of things occurring in or to the body, most often as visceral, sexual stimulation or electrical shock.

Disorders of memory

- **Amnesia:** Partial or total inability to recall past experiences; may be organic (amnestic disorder) or emotional (dissociative amnesia) in origin.
  - Psychogenic amnesias: Dissociative or hysterical amnesia is the sudden amnesia that occurs during periods of extreme trauma and can last for hours or even days.
  - Anterograde amnesia: Loss of memory for events after the onset of the unconsciousness; common after trauma.
  - Retrograde amnesia: Inability to recall events before the onset of unconsciousness
- **Confabulation**: falsification of memory occurring in clear consciousness in association with organic pathology. It manifests itself as the filling-in of gaps in memory by imagined or untrue experiences that have no basis in fact. Some schizophrenics & patients with Dementia confabulate.
- Pseudologia phantastica (pathological lying): describe the confabulation that occurs in those without organic brain pathology such as antisocial or hysterical personality disorders

Distortions of memory or paramnesia

It can occur in those with emotional problems as well as in organic states.

- **Anxiety amnesia:** occurs when there is anxious preoccupation or poor concentration in disorders such as depressive illness or generalized anxiety. Initially it may wrongly suggest dissociative amnesia. More severe forms of amnesia in depressive disorders resemble dementia and are known as depressive pseudodementia. Amnesias in anxiety and depressive disorders are generally caused by impaired concentration and resolve once the underlying disorder is treated.

- **Hyperamnesia**: exaggerated registration, retention and recall. Flashbulb memories are those memories that are associated with intense emotion. It is regarded as one of the characteristic symptoms of post-traumatic stress disorder but is also associated with emotional events

Attention

- Attention is the amount of effort exerted in focusing on certain portions of an experience; ability to sustain a focus on one activity; ability to concentrate.
  ** 1. Distractibility: inability to concentrate attention; attention drawn to unimportant or irrelevant external stimuli
  2. Selective inattention: blocking out only those things that generate anxiety
  3. Hypervigilance: excessive attention and focus on all internal and external stimuli, usually secondary to delusional or paranoid states
  4. Trance: focused attention and altered consciousness, usually seen in hypnosis, dissociative disorders, and ecstatic religious experiences

Past years questions

1- Abnormal, repetitive goal-directed movement?

A- Stereotypy
B- Mannerism
C- Agitation
D- Dystonia
E- Chorea

2- A person is talking about his father death while he is laughing, Dx?

A- Flat affect
B- Euphoria
C- Incongruity of affect
D- Restricted affect

3- Patient who has motiveless resistance to all attempts to be moved or to all instructions?

A- Mannerism
B- Ambitendence
C- Negativism
D- Compulsion

4- 'Senseless repetition of previously requested movement' means ONE of the following;

a. Echopraxia
b. Catalepsy
c. Stereotype
d. Excitation
e. Perseveration

5- Repetitive monotonous non-goal directed movements: Stereotypy

6- Perceptual disturbance? Formication

7- Derailment is a disorder of which component of these :-

a-speech
b-thought
c-mood
d-affect
e-memory

8- One of the following isn't perceptual disturbance? Echolalia

Past years questions

9- Syndrome with nihilistic delusion: Cotards syndrome

10- Wrong about passivity phenomena

A) Thought block
B) Thought broadcasting
C) Thought withdrawal

11- The patient constantly imitates and does whatever movements the doctor make without being asked to:

A-Echopraxia
B- Catalepsy
C-Catalepsy
D-Waxy flexibility
E- Preservation

12- One sees his own body in space: Autoscopic hallucinations

13- All of the following are motor signs & symptoms of psychiatric illness except:

a. Echopraxia.
b. Mannerism
c. Neologism
d. Stereotype
e. Waxy flexibility

14- Which of the following not considered as disturbances of attention: Echopraxia

15- The patient would think "I must put the kettle on, and after a pause of not more than one second would hear a voice say "I must put the Kettle on ' This is described as

A. Thought insertion
B. Thought withdrawal
C. Audible thoughts
D. Thought broadcast
E. Tangentiality

Past years questions

16- Which of the following is not a catatonic sign:

A. Catalepsy
B. Posturing
D. Cataplexy
E. Waxy flexibility

17- A 30-year-old man was brought to the Accident and Emergency Department. He suddenly fell down after hearing a loud sound at a party. There was no loss of consciousness. The psychopathology being described is:

A. Catalepsy
B. Cataplexy
C. Posturing

18- Giving information that may not be related to the original inquiry:

A. Loose association
B. Circumstantiality
C. Tangentiality

19- Person wear yellow underwear to keep day sunny is an example of: magical thinking

20- Pt with slow motion and delaying in speech: Psychomotor Retardation

21- Restlessness with inner tension. Patient is NOT fully aware of restlessness: Agitation

22- Restlessness with inner tension. Patient is fully aware of restlessness: Akathisia

23- pt look at bee when dr talk to him, example of:

A. Inattention هاد الجواب اللي مكتوب بالارشيف بس الخيار التاني ادق
B. Distractibility

24- Inability or difficulty in describing or being aware of one's emotions or mood ? Alexithymia

25- Patient is thinking and he feels thoughts stopping, this is? Thought block

26- Voices commenting on patient's actions? Third person hallucination

Past years questions

27- Fixed false belief that events, remarks, and objects are directed at oneself?

A- Delusional Perception

B- Delusions of reference

D- Delusion of control

28- Pt. thinks that his neighbor can order him and push him to do things he doesn't like to do: delusion of control

29- Definition of persecutory delusion: Fixed false belief that one is being harmed or harm is impending & that the perpetrators of that harm are causing it intentionally

30- Two voices or more talk to another referring to the patient as “he” or “she" and may give a running commentary on the patients action or intention

-Third person hallucination

03

Psychotherapy

Goals of psychotherapy

- Explore thoughts, feelings, and behaviors
- Problem-solving or achieving higher levels of functioning
- Increase the individual's sense of their own well-being
- Reduce negative symptoms of an emotional or mental health problem

Types of psychotherapy

1. Psychoanalysis
2. Cognitive Behavioral Therapy
3. Dialectical Behavioral Therapy: specific type of CBT that helps regulate emotions
4. Interpersonal Therapy: is a short-term form of treatment. It can help people learn healthy ways to express emotions and ways to improve communication and how they relate to others. **It is most often used to treat depression**.
5. Psychodynamic Therapy: based on the idea that behavior and mental well-being are influenced by childhood experiences and inappropriate repetitive thoughts or feelings that are unconscious (outside of the person's awareness). A person works with the therapist to improve self-awareness and to change old patterns so he/she can more fully take charge of his/her life.
6. Supportive Therapy: It helps build self-esteem, reduce anxiety, strengthen coping mechanisms, and improve social and community functioning

Psychoanalysis

- Psychoanalysis is a therapy as well as a theory
- The overall process of analysis is one in which unconscious neurotic conflicts are recovered from memory and verbally expressed, reexperienced in the transference, reconstructed by the analyst, and, ultimately, resolved through understanding.

Concepts and techniques used in psychoanalysis

- **Free association:** The patient is asked to say whatever comes into his or her mind during therapy sessions. The purpose is to bring forth thoughts and feelings from the *unconscious* so that the therapist may interpret them.
- **Dream interpretation**: Dreams are seen to represent conflict between urges and fears. Interpretation of dreams by the psychoanalyst is used to help achieve therapeutic goals.
- ** **Therapeutic alliance:** This is the bond between the therapist and the patient, who work together toward a therapeutic goal.
- ** **Transference:** Projection of unconscious feelings regarding important figures in the patient's life onto the therapist. Interpretation of transference is used to help the patient gain insight and resolve unconscious conflict.
- **Countertransference:** Projection of unconscious feelings about important figures in the therapist's life onto the patient. The therapist must remain aware of countertransference issues, as they may interfere with his or her objectivity

Uses of psychoanalysis

Psychoanalysis can be useful in the treatment of:

- Clusters B and C personality disorders
- Anxiety disorders
- Problems coping with life events
- Sexual disorders
- Depression

Cognitive behavioral therapy

Combines cognitive therapy and behavior therapy, follows a protocol with homework between sessions

- **Cognitive therapy**: correcting faulty assumptions and negative feelings that exacerbate psychiatric symptoms. The patient is taught to identify maladaptive thoughts and replace them with positive ones
- **Behavior therapy**: helping patients change behaviors that contribute to their symptoms. It can be used to extinguish maladaptive behaviors (such as phobic avoidance, compulsions, etc.) by replacing them with healthy alternatives

The patients learn how their feelings and behavior are influenced by their thoughts not by external elements such as people, situations, and events.

**
- Treatment is usually ***brief and time-limited*** and may last from 6 weeks to 6 months with an average of 16 sessions
- CBT is used in depression, anxiety disorders, schizophrenia, and substance use disorders. (sometimes used to help patients cope better with medical chronic illnesses like Irritable bowel and chronic fatigue)

Types of cognitive behavioral therapy

1. **Rational Emotive Behavioral Therapy (REBT)**
   - Encouraging the person to examine and change irrational thought patterns (irrational thinking) and beliefs in order to reduce dysfunctional behavior.
   - Effective in treating individuals dealing with: Anxiety, Depression, Inappropriate or extreme anger, Unhealthy eating, Aggression
2. **Dialectical behavioral therapy**
   - Designed to help people change patterns of behavior that are not helpful, Focuses on teaching new skills
   - ** Originally developed for chronically self-injurious patients with ***borderline personality disorder*** and parasuicidal behavior now also used for eating disorders, substance use disorders and PTSD.
3. **Structured cognitive behavioral training**
   - Regimented cognitive-behavioral process that uses a systematic, highly structured workshop-style approach to break down and replace dysfunctional emotionally dependent behaviors.
   - Used primarily in behavioral health industry and criminal psychology

Group therapy

- Aims to form a support network for individuals with similar diseases or difficulties
- Allows direct interaction between therapists and patients, and direct interaction between patients
- Certain groups can be peer-lead and do not need to have a therapist present (e.g., Alcoholics Anonymous) These groups meet to discuss problems, share feelings, and provide support to each other
- Advantages of group therapy

1. Patients get immediate feedback and support from their peers
2. Patients gain insight into their own condition by listening to others with similar problems.
3. If a therapist is present, there is an opportunity to observe interactions.

Indications:

Personality disorders

Substance use disorders

Family and group disorders

Chronic or life-threatening conditions (e.g., diabetes, cancer)

Other forms of therapies

Family therapy

- Focuses on identifying and resolving familial dysfunctions and problems of individual members that affect the family as a whole
- Aims to improve communication skills between family members
- Indications
  - Behavioral problems in family members (e.g., antisocial behavior in adolescents, substance use)
  - Conflict between parents, siblings, or parents and children
  - Changes and other challenges within the family (e.g., illness, death, etc....)

Couple therapy

- Useful in the treatment of conflicts, sexual problems, and communication problems between couples
- The therapist sees the couple together (conjoint therapy), or separately (concurrent therapy). In addition, each person may have a separate therapist and be seen individually (collaborative therapy).
- Relative contraindications include lack of motivation by one or both spouses and severe illness in one of the spouses

Past years questions

1- Which of the following is not related to psychoanalysis

A- Interpersonal therapy

B- Supportive psychotherapy

C- brief dynamic psychotherapy

D- Brief cognitive behavioral therapy

2- Which of the following should be present for psychotherapy to proceed?

A-Work out

B- idealization

C- Therapeutic alliance

D- Repression

E- acting out

3- We use interpersonal therapy in: Depression

4- Techniques used in psychoanalysis are except

a. Transference

b. Countertransference

e. Therapeutic alliance

d. Aversion therapy

e Free association

5- Wrong about Cognitive behavioral therapy? Long and Time Consuming

6- What type of psychotherapy is best for a patient with borderline personality disorder? Dialectical Behavioral Therapy

7- Projection of unconscious feelings regarding important figures in the patient's life onto the therapist

A) Transference

B) Countertransference

04

Forensic psychiatry

Definitions in forensic Psychiatry

- **Forensic psychiatry** is a medical subspecialty that includes areas in which psychiatry is applied to legal matters. Forensic psychiatrists often conduct evaluations requested by the court or attorneys
- **Standard of care** in psychiatry is generally defined as the skill level and knowledge base of the average, cautious psychiatrist in a given community.
- **Negligence:** is practicing below the standard of care.
- **Malpractice:** is the act of being negligent as a doctor.

** • The 4D's of medical malpractice
  - **Duty of care**
  - **Deviation** from the standard of care
  - **Damages** (error made by medical staff led to damages)
  - **Direct causation**

Confidentiality

- Exceptions where confidentiality can be broken:

  1. When sharing relevant information with other staff members who are also treating the patient.
  2. If subpoenaed—physician must supply all requested information. استدعي للمحكمة
  3. If child abuse is suspected—obligated to report to the proper authorities.
  4. If a patient is suicidal—physician may need to admit the patient, with or without the patient's consent, and share information with the hospital staff.
  5. If a patient threatens direct harm to another person—physician may have a duty to warn the intended victim

Decision making and informed consent

- **Decision making:** Process by which patients knowingly and voluntarily agree to a treatment or procedure.
- **Elements of informed consent 4Rs**
  - **Reason for treatment**
  - **Risks and benefits**
  - **Reasonable alternative**
  - **Refused treatment consequence**

  + the patient should have the ability to ask questions
- **Situations that do not require informed consent**
  1. **Lifesaving** medical emergency.
  2. Prevention of **suicidal or homicidal behavior**.
  3. **Unemancipated minors** (typically require informed consent from the parent or legal guardian).

     ↘ not married, self-supporting, pregnant or with children nor in the military (these cases are considered emancipated and can give consent without parents)

Decisional capacity

- **Capacity:** is a clinical term and may be assessed by physicians.
- **Competence:** is a legal term and can be decided only by a judge.
- To say that a patient has decisional capacity, they must be able to:
    - Understand the relevant information regarding treatment (purpose, risks, benefits).
    - Appreciate the appropriate weight and impact of the decision.
    - Logically manipulate the information to make a decision.
    - Communicate a choice or preference
- For incompetent patients, the judge may appoint a guardian or a conservator who make decisions by substituted judgement (making decisions based on what the patient would most likely have wanted)
- **"Declaration for Mental Health Treatment"**
  Patients can often express their wishes for treatment in advance of losing competence or capacity using a mental health advance directive form

Admission to psychiatric hospital

1. Voluntary admission: patient requests or agrees to be admitted, must be first examined by a psychiatrist to determine if he/she needs hospitalization.
    must have capacity and be competent, may or may not have the right to be discharged upon request.
1. Involuntary admission (a.k.a civil commitment)
    Done by two physicians when patient is potentially harmful to self or others
    After some days, the case is reviewed by an independent board to determine if continued hospitalization is necessary.
    Patients must be given a copy of commitment papers and all their questions about it should be answered by staff
    Patients still have the rights to trial to challenge their hospitalization and have the right to refuse non-urgent medications

Disability

- **Mental impairment:** Any mental or psychological disorder.
- **Mental disability:** Alteration of an individual's capacity to meet personal, social, or occupational demands due to a mental impairment.
- To assess whether an impairment is also a disability, consider four categories:
  - Activities of daily living.
  - Social functioning.
  - Concentration, persistence, and pace.
  - Deterioration or decompensation in work settings.

Competence to stand trial

- **Competence** is a legal term for the capacity to understand, rationally manipulate, and apply information to make a reasoned decision on a specific issue.
- Someone cannot be tried if they are not mentally competent to stand trial.
- If a defendant has significant mental health problems or behaves irrationally in court, his competency to stand trial should be considered.
- Competence to stand trial may change over time

- **To stand trial, a defendant must:**
  - Understand the charges against him or her.
  - Be familiar with the courtroom personnel and procedure.
  - Have the ability to work with an attorney and participate trial.
  - Understand possible consequences

Not guilty by reason of insanity (NGRI)

** Conviction of a crime requires both an **“evil deed” (actus reus)** and **“evil intent” (mens rea).**

- If someone is declared legally insane, they are not criminally responsible for their act.
- NGRI is used in less than 1% of criminal cases.
- It is successful in 26% of cases that continue to use it throughout the trial.
- Those found NGRI often spend the same amount of time (or more) as involuntary psychiatric patients than they would have spent in prison if they were found guilty

Malingering

** **Malingering:** Feigning or exaggerating symptoms for “secondary gain,” including:

- Financial gain (injury lawsuit).
- Avoiding school, work, or other responsibilities.
- Obtaining medications of abuse (opioids, benzodiazepines).
- Avoiding legal consequences

Signs for detecting malingering:

- Atypical presentation.
- “Textbook” description of the illness.
- History of working in the medical field.
- Symptoms that are present only when the patient knows he/she is
- being observed.
- History of substance use or antisocial personality disorder.
- Reluctant to engage in invasive/in-depth testing or treatment

Child and family law

Evaluations for which a child forensic psychiatrist may be needed include:

- Child custody.
- Termination of parental rights.
- Child abuse or neglect.

Past years questions

1- What is the intent to commit a crime or a guilty mind called?

A. Mens rea
B. Haggis
C. Habeus corpus
D. Respondent superior

2- The criminal act should be preceded with which of the following to be considered as a crime ?

A- Mens era
B- substitutaed
C- justice

3- In clinical or forensic evaluations when financial compensation or special benefits may be available, a psychiatrist must consider the diagnosis of :

A. Factitious disorder
B. Malingering .
C. Somatization
D. Hypochondriasis

4- Not included in the 4D's of Negligence in clinical malpractice?

a- Duty
b- Damage
c- Deviation
d- Direct causation
e- Discovery

05

Epilepsy in relation to psychiatry

Epilepsy and psychiatry

- Patients with temporal lobe epilepsy more prone to psychiatric disorders due to disturbances in limbic system (amygdala>> emotions) and personality changes

- Psychiatric disturbances are common in patients with complex partial seizure than GTCS.
- Complex partial seizure involve :
  - Sensory symptoms :hallucinations of any sensory modality ,olfactory(burning rubber odor) visual, auditory, gustatory (metallic or other tastes)
  - Affective symptoms: fear and anxiety although depression .
  - Behavior symptoms :automatisms are common and may include oral or buccal movements such as lip smacking or chewing, picking behavior or prolonged staring
  - Cognitive symptom: Déjá vu (feeling of familiarity) or Jamais vu (feeling of unfamilia

Epilepsy and psychiatry cont.

The causes of psychopathology in epilepsy are Multifactorial:

- Stigma+ over protection by family
- Anti epileptic drugs side effects
- Kindling effect: phenomenon where repeated exposure to sub-threshold electrical or chemical stimuli gradually lowers the threshold for triggering seizures in the brain. This increased sensitivity can lead to more frequent and severe seizures over time.
- Secondary epileptogenesis
- Altered receptor sensitivity
- Age at onset + chronicity

20-30% of patients with epilepsy have psychiatric disturbances

- Depression 11%-80% in epileptic patients VS 4.9 %-17% in general population
- Psychosis 2%-9% in epilepsy patients VS 1% in general population
- GAD 15%-25% in epilepsy patients VS 5.1%-7.2 in general population

Depression in epilepsy cont.

- Depression as an iatrogenic process or Due to anti-epileptic drugs side effects
- Pre-ictal depression
    - Present as a dysphoric mood that precedes a seizure by several hours to days, it becomes more accentuated during the 24 hours prior to the seizure and remits postictally or persists for a few days after the seizure
- Ictal depression
    - Such mood changes typically are brief, The most frequent symptoms include feelings of anhedonia, guilt, and suicidal ideation
- Post-ictal depression
    - Depressive symptoms can outlast the ictus for up to 2 weeks, and, at times, have led patients to suicide.
- Interictal symptoms (Between seizures)

Antiepileptics and psychiatry

- Every AED can cause psychiatric symptoms in patients with epilepsy.
- Phenobarbital can cause depression that may be associated with both suicidal ideation and behavior.
- ** **Primidone, tiagabine, vigabatrin, felbamate and topiramate** are known to cause depressive symptoms.
- AEDs with mood stabilizing properties, such as carbamazepine and valproic acid, have a lower possibility to cause depressive symptoms.

Epilepsy with psychosis 2-9%

DSM-5 criteria for psychotic disorder due to another medical condition include:

- Prominent hallucinations or delusions.
- Symptoms do not occur only during an episode of delirium.
- Evidence from history, physical, or lab data to support another medical cause (i.e., not a primary psychiatric disorder).

Psychosis in epilepsy:

1. Ictal psychosis
2. Post ictal
3. Inter ictal
4. Iatrogenic

- **Ictal psychosis**

Less common

- Seen more in status epilepticus, mimic psychosis
- Common features: Hallucinations, paranoid and grandiose thoughts
- Last Hours to days
- Treatment: Anticonvulsant.

- **Post Ictal psychosis**

Most common.

- Psychosis after seizure, mainly 24h post seizure.
- Last Days to weeks At least 15H and less than 2 months
- No evidence of psychosis in previous 3 months, recent head trauma, recent intoxication.
- Spontaneous recovery in most cases.
- Low dose of antipsychotic is effective.

- **Inter Ictal psychosis**

Not related to seizure occurrence

- More common when seizure infrequent or fully controlled
- Tends to last days to weeks.
- Either chronic or episodic
- EEG normalize during such episodes generating the term (forced normalization)
- Antipsychotic drugs is effective in such cases.

Iatrogenic psychotic disorders

- Expression of a toxic phenomenon that have been reported with most of AEDs .
- Can occur following the discontinuation of AEDs
- Acute withdrawal of BNZ is well known to result in acute psychotic episodes

Epilepsy and personality changes

- Personality changes in patients with epilepsy are very important and can greatly impact a person's daily activities and quality of lif
- Commonly seen in uncontrolled epilepsy , and more in Temporal lobe epilepsy.
- These feelings may be present most of the time, or appear just before, during, or after a seizure
- What causes such changes to emotions and behavior? psychosocial circumstances, medication, and seizures effects

** • **Geschwind syndrome: characteristic personality changes in temporal lobe epilepsy (Circumstantiality, hypergraphia, hyposexuality, hyper religiosity, hyper morality, deepened emotional and cognitive response)**

Past years questions

1- the most common presentation of affective disorders among patient with epilepsy?

interictal depression

2- the percentage for depression occurrence in epilepsy patient with more than one seizures per month: 21%

3- all true about Geschwind syndrome except:

a- hypersexuality (note: hyposexuality more common but hyper also occurs)
b- hyper-religiosity
c- circumstantiality
d- Hypergraphia
e- bizarre delusion
F- hyporeligiosity

4- all these anti-epileptic drugs cause depression except?

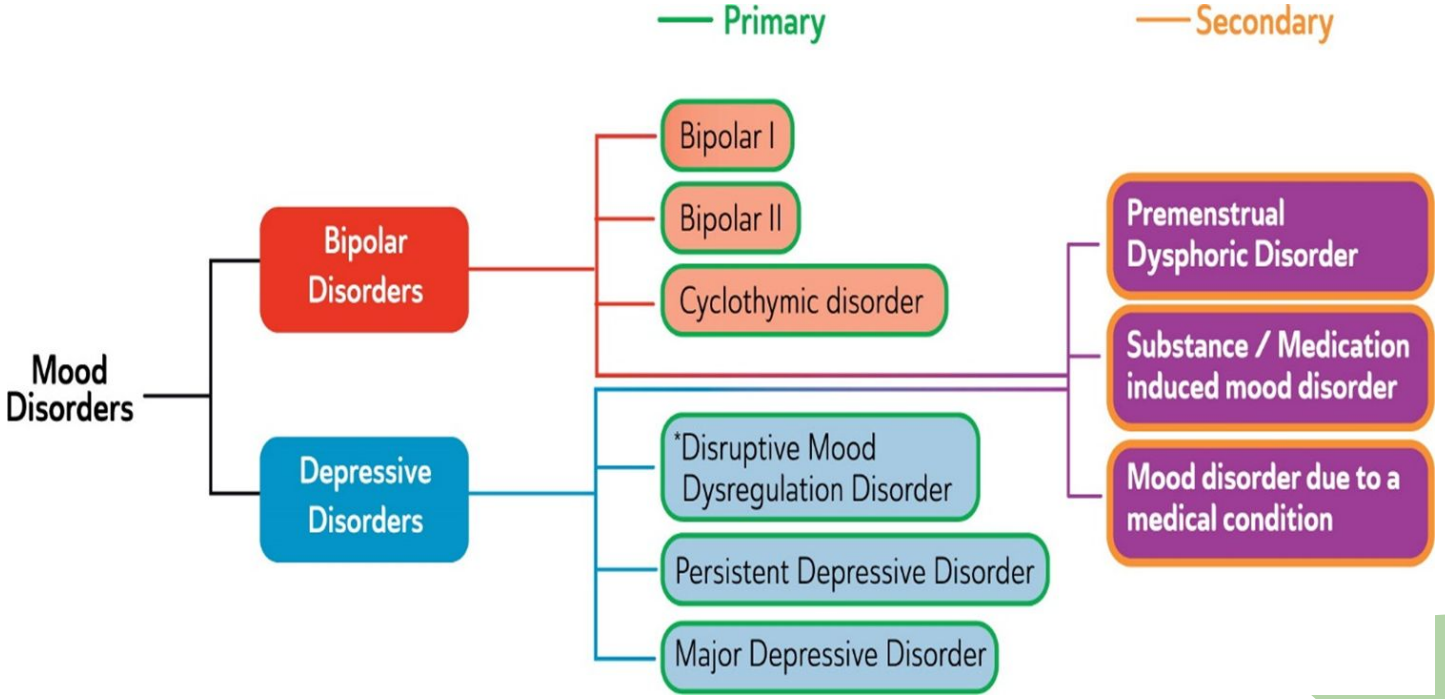
a. phenobarbital
b. Lamotrigine
c. Valproic acid
d. tiagabine
e. vigabatrin
f. topiramate

06

Mood disorders

Mood disorders

Mood disorders are a group of clinical conditions characterized by a loss of that sense of control and a subjective experience of great distress.



Major depressive disorder

DSM-V criteria for diagnosis

A) Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

Note: Do not include symptoms that are clearly attributable to another medical condition.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful). (**Note:** In children and adolescents, can be irritable mood.)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).
3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (**Note:** In children, consider failure to make expected weight gain.)
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

B) The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

C) The episode is not attributable to the physiological effects of a substance or to another medical condition.

– Note: Criteria A-C represent a major depressive episode.

D) The occurrence of the major depressive episode is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.

E) There has never been a manic episode or a hypomanic episode.

Epidemiology of MDD

- Prevalence of MDD: **10-15%**
- **M:F = 1:2**
- Mean age of onset of MDD is **40 years**, with 50% of patients having onset between 20-50 years of age
- No correlation has been found between MDD and socio economic status
- More common in the unemployed (3 times more likely), divorced people
- Patients with OCD, borderline and histrionic personality are at a greater risk of developing MDD
- Lifetime prevalence in the elderly is <10%
- It is known that Depression increases the mortality in patients with other comorbidities such as Diabetes, Stroke & Cardiovascular problems.

Etiology

Precise cause is unknown but there are multiple contributing factors

1) Neurotransmitters:
    - depressed people with impulsive and suicidal behavior have low levels of 5-hydroxyindolacetic acid (5-HIAA), the main metabolite of serotonin in the CSF
    - Increased sensitivity of beta-adrenergic receptors in brain
2) High cortisol
3) Abnormal thyroid axis
4) Psychosocial/life events
5) Genetics
    - First-degree relatives are two to four times more likely to have MDD. Concordance rate for monozygotic twins is <40%, and 10–20% for dizygotic twins

** Risk factors for depression in women

- 3 or more children under the age of 14 at home
- Not working outside home
- Lack of confiding relationships
- Loss of mother by death or separation before the age of 11 years

Risk factors for suicide and risk assessment

**

Nonmodifiable Risk Factors	Modifiable Risk Factors
• Older men • Past suicide attempt • History of self-harm behaviour • Being a sexual minority • Family history of suicide • History of legal problems	Symptoms and life events • Active suicidal ideation • Hopelessness • Psychotic symptoms • Anxiety • Impulsivity • Stressful life events such as financial stress (e.g., bankruptcy) and victimization Comorbid conditions • Substance use disorders (especially alcohol use disorder) • Posttraumatic stress disorder • Comorbid personality disorders (especially cluster B personality disorders) • Chronic painful medical conditions (e.g., migraine headaches, arthritis) • Cancer

most imp.

Letter	Meaning	Number of Points Assigned
S	Sex: male	1
A	Age: < 19 or > 45 years	1
D	Depression or hopelessness	2
P	Previous attempts or psychiatric care	1
E	Excessive alcohol or drug use	1
R	Rational thinking loss	2
S	Separated/divorced/widowed	1
O	Organized or serious attempt	2
N	No social supports	1
S	Stated future intent	2

Score (Level of Risk)

- 0-4=Low
- 5-6=Medium
- 7-10=High

Prognosis

- Untreated, depressive episodes are **self-limiting** but last from 6 to 12 months.
- Generally, episodes occur more frequently as the disorder progresses.
  The risk of a subsequent major depressive episode is 50–60% within the first 2 years after the first episode.

• **Up to 15% of patients with MDD eventually commit suicide.

- Approximately 60–70% of patients show a significant response to antidepressants.
  Combined treatment with both an antidepressant and psychotherapy produce a significantly ↑ response for MDD.

** **Good prognostic factors**

- Abrupt or acute onset
- Severe depression
- Typical clinical features
- Well adjusted premorbid personality
- Good response to treatment

** **Poor prognostic factors**

- Double depression
- Comorbid physical disease, personality disorders or alcohol dependence
- Chronic ongoing stress
- Poor drug compliance
- Marked mood incongruent features

Treatment

- **Hospitalization**: Indicated if patient at risk of suicide, homicide or unable to care for him/herself
- **Pharmacotherapy:**
  - **Antidepressants:**
    - **SSRI**: Inhibit reuptake of serotonin to increase conc. of serotonin in brain.
      - Safer and better tolerated than other. S.E. include headache, GI disturbance, sexual dysfunction, and rebound anxiety
      - Examples: Fluoxetine (Prozac), Escitalopram (Purlex), and Sertraline (Zoloft)
    - **SNRI:** inhibit reuptake of both serotonin and norepinephrine
      - Examples: Venlafaxine (EffexorR) and Dulooxetine (CymbaltaR)
    - **Tricyclic antidepressants (TCA)**
      - Lethal in overdose due to cardiac arrhythmias (aggravates prolonged QTc)
      - S.E.: sedation, weight gain, orthostatic hypotension, and anticholinergic effects
    - **Monoamine oxidase inhibitors (MAOI):** used for refractory depression
      - Risk of hypertensive crisis when used with sympathomimetics or ingestion of tyramine rich foods + risk of serotonin syndrome when used with SSRIs
      - most common S.E is orthostatic hypotension
    - **Novel agents**
      - a2-adrenergic receptor antagonist: Mirtazapine (RemeronR)
      - Dopamine-norepinephrine reuptake inhibitor: Bupropion (WellbutrinR)

Treatment cont.

Adjunct medications:

- **Atypical (second-generation) antipsychotics** along with antidepressants are first-line treatment in patients with MDD with psychotic features. In addition, they may also be prescribed in patients with treatment resistant/refractory MDD without psychotic features.
- **Triiodothyronine (T3), levothyroxine (T4), and lithium** have demonstrated some benefit when augmenting antidepressants in treatment refractory MDD.

Psychotherapy

- Cognitive-behavioral therapy (CBT), interpersonal psychotherapy, supportive therapy, psychodynamic psychotherapy, problem-solving therapy, and family/couples therapy have all demonstrated benefit in treating MDD.
  - No one is better than the other
  - CBT and **interpersonal therapy** are selected as initial treatment **
  - Used alone or in combination with pharmacotherapy
  - Early dropout is common

Electroconvulsive therapy

- Indicated if the patient is unresponsive to pharmacotherapy, if patient cannot tolerate pharmacotherapy (pregnancy, etc.), or if rapid reduction of symptoms is desired (e.g., immediate suicide risk, refusal to eat/drink, catatonia).
- ECT is **extremely safe** (primary risk is from anesthesia) and may be used alone or in combination with pharmacotherapy.
- ECT is often performed by premedication with atropine, followed by general anesthesia and administration of a muscle relaxant (typically succinylcholine). A generalized seizure is then induced by passing a current of electricity across the brain (either bilateral or unilateral); the seizure should last between 30 and 60 seconds, and no longer than 90 seconds.
- 6–12 treatments are administered over a 2- to 3-week period, but significant improvement is sometimes noted after the first several treatments.
- Retrograde and anterograde amnesia are common side effects, which usually resolve within 6 months.
- Other common but transient side effects: headache, nausea, muscle soreness.

Mania and hypomania

Manic episode

A. Mood is persistently and abnormally elevated, irritable, or expansive for ≥1 week. Either psychosis or severe social impairment is present.

B. Three of the following are present during the episode (four if irritability only):

- Grandiose or inflated self regard
- Decreased need for sleep
- Loquacious, pressured speech
- Flight of ideas, racing thoughts
- Distractible
- Agitation, purposeful hyperactivity
- Increased pursuit of potentially self-destructive pleasures

C. Symptoms are not substance induced or due to delirium

Hypomanic episode

A. Mood is persistently and abnormally elevated, irritable, or expansive for ≥4 days

B. Three of the following are present during the episode (four if irritability only):

- Grandiose or inflated self regard
- Decreased need for sleep
- Loquacious, pressured speech
- Flight of ideas, racing thoughts
- Distractible
- Agitation, purposeful hyperactivity
- Increased pursuit of potentially self-destructive pleasures

C. Symptoms represent a clear, uncharacteristic, socially disruptive change in behavior

D. Resulting impairment is not overly disruptive nor associated with psychosis

Mania	Hypomania
- Lasts at least 7 days	- Lasts at least 4 days
- Causes severe impairment in social or occupational functioning	- No marked impairment in social or occupational functioning
- Usually necessitates hospitalization to prevent harm to self or others	- Does not require hospitalization
- May have psychotic features	- No psychotic feature

Bipolar I diagnosis

A. Criteria have been met for at least one manic episode .

B. The occurrence of the manic and major depressive episode(s) is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder,or other specified or unspecified schizophrenia spectrum and other psychotic disorder.

Bipolar II diagnosis

A. Criteria have been met for at least one hypomanic episode **and** at least one major depressive episode

B. There has **never** been a manic episode.

C. The occurrence of the hypomanic episode(s) and major depressive episode(s) is not better explained by schizoaffective disorder, schizophrenia schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorder.

D. The symptoms of depression or the unpredictability caused by frequent alternation between periods of depression and hypomania causes clinically significant distress or impairment.

Bipolar vs unipolar depression

** **Predictors of a Bipolar Process rather than a Unipolar one**

- Early age of onset
- Psychotic depression before the age of 25 years
- Postpartum depression, especially with psychotic features
- Rapid onset & offset of depressive episodes of short duration (<3 months)
- Recurrent depression (more than 5 episodes)
- Depression with marked psychomotor retardation
- Seasonality
- Bipolar family history
- Hypomania associated with antidepressants
- Repeated (at least 3 times) loss of efficacy of antidepressants after initial response

Epidemiology

- Prevalence of BAD: 1-2%
- Lifetime prevalence of BAD in first degree relative: 4-18%
- MDD in first degree relative: 9-25%
- BAD has equal M:F ratio
- Manic episodes are more common in men
- Depressive episodes are more common in females
- Mean age of onset of BAD is 30 years , the age of onset of BAD can be as early as 6 years of age up to 50 years of age
- Average patient has 9 relapses during his lifetime
- Bipolar I disorder is more common in single or divorced people , this may reflect the early onset of the disorder
- A higher than average incidence is found in the upper socio economic groups

Etiology

- Biological, environmental, psychosocial, and genetic factors are all important.
- First-degree relatives of patients with bipolar disorder are 10 times more likely to develop the illness.
- Concordance rates for monozygotic twins are 40–70%, and rates for dizygotic twins range from 5% to 25%
- Bipolar I has the highest genetic link of all major psychiatric disorders.

** Schneiderian first rank symptoms

•Schneiderian first rank symptoms occur in 15-20% episodes of mania (have shorter duration, changing in content, improve rapidly)

1. **Audible thoughts** (voices speaking out his thoughts aloud).
2. **Voices arguing** (Referring to the patient in 3rd person)
3. **Voices commenting** on one's actions.
4. **Thought withdrawal**
5. **Thought insertion**
6. **Thought broadcasting**
7. **Made volition**.
8. **Made affect**
9. **Made impulse**
10. **Somatic passivity** (experiencing externally controlled body changes)
11. **Delusional perception** (a real percept elaborated in a delusional way)

Treatment of bipolar disorders

Acute mania

•Atypical antipsychotics: Olanzapine, Risperidone, Quetiapine, Ziprasidone, Aripiprazole.

•Typical (Depot): Haldol, Chlorpromazine.

•Mood stabilizers: Lithium, Valproate, Carbamazepine

Maintenance

•Lithium (gold standard)

•Valproate

•Carbamazepine

•Lamotrigine

It is generally clinically appropriate to initiate prophylactic treatment:

(1) after a single manic episode that was associated with significant risk and adverse consequences;

(2) in the case of bipolar I illness, two or more acute episodes; or

(3) in the case of bipolar II illness, significant functional impairment, frequent episodes or significant risk of suicide

Other treatments

Psychotherapy:

- Supportive psychotherapy, family therapy, group therapy
- (may prolong remission once the acute manic episode has been controlled).

ECT:

- Works well in treatment of manic episodes.
- Some patients require more treatments (up to 20) than for depression.
- Especially effective for refractory or life-threatening acute mania or depression.

Dysthymia (Persistent Depressive Disorder)

Patients with persistent depressive disorder (dysthymia) have chronic depression most of the time, and they may have discrete major depressive episodes.

•Subclinical depressive disorder , with chronicity for **at least 2 years** (1 year in children + adolescents) and an insidious onset often in childhood or adolescence

•Early onset (more common) - before the age of 21 , late - after 21

•Prevalence: 5-6% of the population

•More common in women

** •Depression on top of Dysthymia - <u>double depression</u>

** **DSM-5 Criteria for Persistent Depressive Disorder (Dysthymia)**

A. Depressed mood for most of the day, for more days than not, as indicated by either subjective account or observation by others, for at least 2 years. (In children, mood can be irritable and duration must be at least 1 year.)

B. Presence, while depressed, of two or more of the following:

1. Poor appetite or overeating
2. Insomnia or hypersomnia
3. Low energy or fatigue
4. Low self-esteem
5. Poor concentration or difficulty making decisions
6. Feelings of hopelessness

Treatment of dysthymia

■ Combination treatment with psychotherapy and pharmacotherapy is more efficacious than either alone.

■ Cognitive therapy, interpersonal therapy, and insight-oriented psychotherapy are the most effective.

■ Antidepressants found to be beneficial include SSRIs, SNRIs, novel antidepressants (e.g., bupropion , mirtazapine), TCAs, and MAOIs.

Cyclothymia

Cyclothymic disorder is symptomatically a mild form of Bipolar II disorder (Alternating periods of hypomania and periods with mild-to-moderate depressive symptoms).

Epidemiology

•Prevalence: 1%

•Cyclothymic disorder may coexists with borderline personality

•M:F = 1:1

•30% of patients with Cyclothymia have a family history of Bipolar type I

•30% of patients with Cyclothymia will go on to develop major mood disorder

•Onset usually between the ages 15 - 25

Diagnosis and DSM-5 Criteria

■ Numerous periods with hypomanic symptoms (but not a full hypomanic episode) and periods with depressive symptoms (but not full MDE) for at least 2 years.

■ The person must never have been symptom free for >2 months during those 2 years.

■ No history of major depressive episode, hypomania, or manic episode.

Course and Prognosis

Chronic course; approximately one-third of patients eventually develop Bipolar I/II disorder.

Treatment

Anti-manic agents (mood stabilizers or/with second-generation antipsychotics) as are used to treat Bipolar disorder.

Past years questions

1- good prognostic factor for MDD

a- Double depression
b- Co-morbid physical disease, personality disorders or alcohol dependence
c- Chronic ongoing stress
d- Poor drug compliance
e- Severe depression

2- a patient with depression who was treated with fluxitene and then after 2 weeks developed mania. What is the diagnosis?

a-bipolar type 1
b-bipolar type 2
c-MDD
d-shizoaffective disorder

3- which of the following not consider a prediction of bipolar disorder:

A. psychotic depression before 25 year
B. rapid onset and offset
C. psychosis after 25
D. seasonality
E. bipolar family history

4- which of the following not from Schneider symptoms:

A. thought insertion
B. made volition
C. referring to the pt in 3ed person
D. voice speaking out of his thought loudly
E.cognitive

5- double depression is one of the following:

dysthymic patient develop major depression.

Past years questions

6- All of the following Risk factors for depression in women except:

A-3 or more children under the age of 14 at home
B-Low socioeconomic state
C-Not working outside home
D-Lack of confiding relationships
E-Loss of mother by death or separation before the age of 11 years

7- a pregnant women suffering from depression with suicidal ideation what's the treatment of choice?

A- ECT
B- Lithium
C- SSRI

8- the percentage of patients with MDD eventually commit suicide: 15%

9- not in DSM5 criteria for depression:

a- Amenorrhea
b- anhedonia
c- change in appetite

10- Most prominent symptom seen in Mania that is not in schizophrenia?

Flight of ideas

11- The most common symptom for mania is?

A- Pressure of speech
B- Poverty of sleep
C- Mutism

12- Sleep disorder in mania?

A- Insomnia
B- Hypersomina
C- Decreased need for sleep

Past years questions

13- Which is not a symptom of hypomania:

Grandiose delusions
Flight of ideas
Distractibility
Inflated self esteem
Decreased need for sleep

14- which of these does not happen in mania

a-distractibility
b-grandiosity
c-pressured speech
d-anhedonia
e-impulsive

15- Delusion of grandiosity associated with ? mania

16- Which of the following is the single most important factor predicting Suicide risk?

a. Recent life event
b. Family history of suicide
c. Past history of suicidal attempt
d. Recent discharge from hospital

17- All following are not risk factors for suicide EXCEPT:

A- Divorced male
B- Married female
C- Young age

18- Non modifiable suicidal risk factor?

Homosexuality

Past years questions

19- A 32 year old female is incapacitated by recurrent panic attacks, she feels low and doesn't leave her home, she lost pleasure in leisure activities and feels guilty about not being a good mother to her 12 y.o son, what is the most likely diagnosis?

- depressive disorder
- agoraphobia
- panic disorder
- generalised anxiety disorder

20- One of the following isn't at the DSM-5 Diagnostic Criteria symptoms of the Persistent Depressive Disorder

-Psychomotor retardation

07

Anxiety disorders

Anxiety disorders intro

- Anxiety disorders are characterized by excessive or inappropriate fear or anxiety.
  - **Fear** is manifested by a transient increase in sympathetic activity ("fight or flight" physiological response, thoughts, feelings, behaviors) in a situation perceived to be dangerous or threatening.
  - By contrast, **anxiety** involves apprehension regarding a future threat
- Anxiety disorders are caused by a combination of genetic, biological, environmental, and psychosocial factors.
- Most common form of psychopathology.
- ** More frequently seen in women compared to men, approximately **2:1 ratio**

TABLE 5-1. Signs and Symptoms of Anxiety

Constitutional	Fatigue, diaphoresis, shivering
Cardiac	Chest pain, palpitations, tachycardia, hypertension
Pulmonary	Shortness of breath, hyperventilation
Neurologic/ musculoskeletal	Vertigo, light-headedness, paresthesias, tremors, insomnia, muscle tension
Gastrointestinal	Abdominal discomfort, anorexia, nausea, emesis, diarrhea, constipation

Anxiety disorders

- Generalized Anxiety Disorder (GAD).
- Panic disorder.
- Agoraphobia.
- Specific Phobias/Social anxiety Disorder.
- Selective mutism.
- Separation Anxiety Disorder.
- Anxiety due to substance use/withdrawal
- Anxiety due to medical condition

discussed in next lecture

not discussed

Generalised anxiety disorder (GAD)

Generalized anxiety is the most common studied subtype and commonly described as a sensation of persistent worry and apprehension about common day problems and events, associated with symptoms involving the chest / abdomen, mental state symptoms.

Symptoms include:

- **Autonomic arousal symptoms:** Palpitation/HR, Sweating, Trembling/Shaking, Dry mouth
- **Symptoms involving chest/abdomen:** Difficulty breathing, Choking sensation, Chest pain, Nausea/ stomach churning.
- **Mental symptoms:** Giddiness / fainting, Derealisation or depersonalisation, Fear of losing control, Fear of dying or "going crazy".
- **General symptoms:** Hot flushes/cold chills, Numbness/tingling, Muscle tension/ aches, Restlessness, Feelings of keyed up, on the edge, Lump in the throat.
- **Other symptoms:** Exaggerated responses to minor surprises, Easily being startled, Persistent irritability, Poor sleep (initial insomnia, night terrors, waking and feeling unrefreshed), Poor concentration, Mind goes blank.

GAD Mnemonic
Worry WARTS
Wound up, **w**orn-out
Absent-minded
Restless
Tense
Sleepless

GAD cont.

DSM-V diagnostic criteria

- Excessive, anxiety/worry about various daily events/activities > 6 months so at least 90 or more days out of 180 .
- Difficulty controlling the worry.
- Associated > 3 symptoms: restlessness, fatigue, impaired concentration, irritability, muscle tension, insomnia.
- Symptoms are not caused by the direct effects of a substance, or another mental disorder or medical condition.
- Symptoms cause significant social or occupational dysfunction

Epidemiology/etiology

- Lifetime prevalence: 5–9%.
- GAD rates higher in women compared to men (2:1).
- One-third of risk for developing GAD is genetic.

GAD course, prognosis, treatment

Course and prognosis

- Symptoms of worry begin in childhood.
- Median age of onset of GAD: 30 years.
- Course is **chronic**, with waxing and waning symptoms.
- Rates of full remission are low.
- GAD is highly comorbid with other anxiety and depressive disorders.

Treatment

The most effective treatment approach combines psychotherapy and pharmacotherapy:

- CBT.
- SSRIs (e.g., sertraline, citalopram) or SNRIs (e.g., venlafaxine).
- Can also consider a short-term course of benzodiazepines or augmentation with buspirone.
- Much less commonly used medications are TCAs and MAOIs.

Panic attacks

Panic attacks are a type of fear response involving an abrupt surge of intense anxiety which may be triggered or occur spontaneously.

It peaks within minutes and usually resolves within half an hour.

The DSM-5 characterized panic attack as the sudden onset of at least four of the following thirteen symptoms:

Physical symptoms:

1. Palpitations
2. Sweating
3. Tremors
4. Difficulties breathing
5. Choking sensations
6. Chest pain or discomfort
7. Abdominal discomfort
8. Dizziness
9. Feeling hot or cold

Mental Symptoms:

10. Derealization
11. Depersonalization
12. Feelings of losing control and going crazy
13. Feelings of death

** - Must do thyroid function test to exclude thyroid disease

Panic disorder

- Panic disorder is characterized by spontaneous, recurrent panic attacks.
- These attacks occur suddenly, *out of the blue*. Patients may also experience some panic attacks with a clear trigger.
- The frequency of attacks ranges from multiple times per day to a few monthly.
- Patients develop debilitating anticipatory anxiety about having future attacks—"fear of the fear."

Diagnosis and DSM-5 Criteria

■ Recurrent, unexpected panic attacks without an identifiable trigger.

■ One or more of panic attacks followed by ≥1 month of continuous worry about experiencing subsequent attacks or their consequences, and/or a maladaptive change in behaviors (e.g., avoidance of possible triggers).

■ Not caused by the direct effects of a substance, another mental disorder, or another medical condition.

Panic disorder

Epidemiology:

Lifetime prevalence is 4%
Female:male ratio is 2:1.
Median age of onset is 20-24 years old.

Course and prognosis:

It has a chronic course, relapses are common with discontinuation of medication.
Only a minority of patients has full remission of symptoms.
Up to 65% of patients have major depression.

Treatment

Combination of CBT and Pharmacotherapy = most effective

■ First-line: SSRIs (e.g., sertraline, citalopram, escitalopram). If above options are not effective, can try TCAs (e.g., clomipramine, imipramine).

** Selective mutism

Is a rare condition characterized by **failure to speak in specific situations for at least 1 month**, despite the intact ability to comprehend and use language.

- Onset typically starts during childhood.
- The majority of them suffer particularly from social anxiety.

DSM-V diagnostic criteria

- They may remain completely silent, whisper, or use non-verbal communication (writing – gesturing).
- Consistent failure to speak in select social situations (e.g., school) despite speech ability in other scenarios.
- Mutism is not due to a language difficulty or a communication disorder.
- Symptoms cause significant impairment in academic, occupational, or social functioning.
- Symptoms last >1 month (extending beyond 1st month of school).

Treatment

■■ Psychotherapy: CBT, family therapy.
■■ Medications: SSRIs (especially with comorbid social anxiety disorder).

Separation anxiety

Diagnosis and DSM-5 Criteria

Excessive and developmentally inappropriate fear/anxiety regarding separation from attachment figures, with at least three of the following:

- Separation from attachment figures leads to extreme distress.
- Excessive worry about loss of or harm to attachment figures.
- Excessive worry about experiencing an event that leads to separation from attachment figures.
- Reluctance to leave home, or attend school or work.
- Reluctance to be alone.
- Reluctance to sleep alone or away from home.
- Complaints of physical symptoms when separated from major attachment figures.
- Nightmares of separation and refusal to sleep without proximity to attachment figure.
- Lasts for ≥4 weeks in children/adolescents and ≥6 months in adults.
- Symptoms cause significant social, academic, or occupational dysfunction.
- Symptoms not due to another mental disorder.

Treatment

- Psychotherapy: CBT, family therapy.
- Medications: SSRIs can be effective as an adjunct to therapy

Past years questions

1- The least duration required for diagnosis of generalized anxiety disorder?

6 months

2- in which one of these disorders do you need to rule out thyroid disease by thyroid function testing :-

a-social anxiety disorder
b-specific phobia
c-panic attack
d-generalized anxiety disorder
e-selective mutism

3- Which of the following statements about gender differences in anxiety is TRUE?

A. Women are twice as likely as men to have anxiety disorders
B. Women and men are at equal risk of having anxiety disorders.
C. Men are twice as likely as women to have anxiety disorders.
D. Men have higher rates of anxiety before age 20 and lower rates of anxiety after age

4- The key difference between panic attack and panic disorder?

A- Panic attack is characterized by spontaneous, recurrent panic attacks.
B- Panic attacks can be experienced with other psychiatric disorders and medical conditions
C- Panic disorder cannot occur multiple times per day

5- A child is quiet in school for a few months, parents say that in the house, he is quite talkative, diagnosis?

Selective mutism

08

Phobias

Specific phobia

- **Phobia** is an excessive fear of a specific object, circumstance, or situation.
- A **specific phobia** is a strong, persisting fear of an object or situation
    - may result from the pairing of a specific object or situation with the emotions of fear and panic , either by having a strong emotional experience, by observation of the reaction of an other (a parent) or information transfer (being taught about the dangers)
- The diagnosis of specific phobia requires the development of intense anxiety, even to the point of panic, when exposed to the feared object.
- Epidemiology:
    - Approximately 5 to 10 percent of the US population is estimated to have Phobia

**
    - Most common anxiety disorder

**
    - Specific phobia is the <u>most common mental disorder among women</u>
    - Specific phobia is the second most common among men, second only to substance-related disorders.
    - The rates of specific phobias in women were double those of men, although the ratio is closer to 1 to 1 for the fear of blood, injection, or injury type.

Specific phobia cont.

Diagnostic Criteria

A. Marked fear or anxiety about a specific object or situation (e.g., flying, heights, animals, receiving an injection, seeing blood).

Note: In children, the fear or anxiety may be expressed by crying, tantrums, freezing, or clinging.

B. The phobic object or situation almost always provokes immediate fear or anxiety.
C. The phobic object or situation is actively avoided or endured with intense fear or anxiety.
D. The fear or anxiety is out of proportion to the actual danger posed by the specific object or situation and to the sociocultural context.
E. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
F. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
G. The disturbance is not better explained by the symptoms of another mental disorder, including fear, anxiety, and avoidance of situations associated with panic-like symptoms or other incapacitating symptoms (as in agoraphobia); objects or situations related to obsessions (as in obsessive-compulsive disorder); reminders of traumatic events (as in posttraumatic stress disorder); separation from home or attachment figures (as in separation anxiety disorder); or social situations (as in social anxiety disorder).

Type of phobia	Example	Associated characteristics
Animal type	Snakes, Spiders	begins during childhood
Environmental	Storms, heights, water	begins during childhood
Blood, injection, injury	Blood, injection, injury or other invasive medical procedures	Run in families possible bradycardia and fainting
Situational	public transport, tunnels, elevators, flying, driving, closed spaces	begins during childhood Early adulthood peak
other (anything that doesn't fit the other four)	choking, Illness, clowns, fear of getting a phobia (phobophobia), number 13 (triskaidekaphobia)	Early adulthood peak

Phobia vs normal fear

Unlike normative fear, phobic fear :

- Is excessive and out of proportion to situational demands
- Cannot be alleviated with rational explanation
- Is out of voluntary control
- Leads to situational avoidance
- Is maladaptive and persistent over time
- Is not age or stage-specific

** Examples of phobia

- ***Acrophobia*** Fear of heights.
- ***Triskaidekaphobia*** Fear of number 13
- ***Arachnophobia*** Fear of Spiders
- ***Ailurophobia*** Fear of cats
- ***Hydrophobia*** Fear of water
- ***Claustrophobia*** Fear of closed spaces
- ***Cynophobia*** Fear of dogs
- ***Mysophobia*** Fear of dirt and germs
- ***Pyrophobia*** Fear of fire
- ***Xenophobia*** Fear of strangers
- ***Zoophobia*** Fear of animals

** Treatment

- Behavior Therapy
  - The most studied and most effective treatment
  - The key aspects of successful treatment are
    - Patient's commitment to treatment
    - Clearly identified problems and objectives
    - Available alternative strategies for coping with the feelings
  - The most common behavioral treatment techniques is **systematic desensitization**
- Systematic desensitization
  - In this method, the patient is exposed serially to a predetermined list of anxiety-provoking stimuli graded in a hierarchy from the least to the most frightening.
  - Through the use of antianxiety drugs, hypnosis, and instruction in muscle relaxation, patients are taught how to induce in themselves both mental and physical repose. After they have mastered the techniques, patients are taught to use them to induce relaxation in the face of each anxiety-provoking stimulus.
  - As they become desensitized to each stimulus in the scale, the patients move up to the next stimulus until, ultimately, what previously produced the most anxiety no longer elicits the painful affect

Treatment cont.

- **Intensive exposure (Flooding)**
- **Insight-Oriented Psychotherapy** : increase the patient's development of insight into psychological conflicts that, if unresolved, can manifest as symptomatic behavior
- **Virtual Therapy** (using computer screens or Virtual reality)
- **Hypnosis**
- **Supportive and family therapy** (useful in helping the patient during other treatment, also help the family understand the nature of the patients problem)

** Agoraphobia

- Refers to a **fear of or anxiety regarding places from which escape might be difficult mainly public places**. It can be the most disabling of the phobias because it can significantly interfere with a person's ability to function in work and social situations outside the home.
- 75% - 50% of affected patients have panic disorders as well
- onset is unknown but in many cases it follows a traumatic event
- Patients with agoraphobia rigidly avoid situations in which it would be difficult to obtain help. They prefer to be accompanied by a friend or a family member

Treatment:

- **Benzodiazepine** : the most rapid onset against panic,
  - The major reservations is the potential for dependence, cognitive impairment, and abuse
- **SSRIs** (reduce and prevent relapse in various forms of anxiety)
- **TCAs**
- **Cognitive Behavioral Therapy (CBT)**

DSM 5 DSM DISORDER CRITERIA SUMMARY
Agoraphobia

Features of agoraphobia include the following:

A. Marked fear or anxiety about two or more of the following: public transportation, open spaces, enclosed places, standing in line or being in a crowd, being outside the home alone.
B. The individual fears or avoids these situations due to thoughts that escape might be difficult or help might not be available in the event of developing panic-like symptoms or other incapacitating or embarrassing symptoms.
C. The agoraphobic situations almost always provoke fear or anxiety.
D. The agoraphobic situations are actively avoided, require the presence of a companion, or are endured with intense fear or anxiety.
E. The fear or anxiety is out of proportion to the actual danger posed by the agoraphobic situations, and to the sociocultural context.
F. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
G. The fear, anxiety, or avoidance causes clinically significant distress or impairment in important areas of functioning.
H. If another medical condition is present, the fear, anxiety, or avoidance is clearly excessive.
I. The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder.

Social anxiety

- **The fear of social situations in general**, including situations that involve scrutiny or contact with strangers.
- The fear is of **embarrassing themselves in social situations** (i.e., social gatherings, oral presentations, meeting new people).
- They may have specific fears about performing specific activities such as eating or speaking in front of others, or they may experience a vague, nonspecific fear of "embarrassing oneself." In either case, the fear in social anxiety disorder is of the embarrassment, not of the situation itself
- Persons with social anxiety disorder may have a history of other anxiety disorders, mood disorders, substance-related disorders, and bulimia nervosa

Treatment of social anxiety

- **Psychotherapy and pharmacotherapy** are useful in treating social anxiety disorder. Some studies indicate that the use of both pharmacotherapy and psychotherapy produces better results than either therapy alone

- Effective drugs for the treatment of social anxiety disorder include
  - **SSRIs**
  - **Benzodiazepines**
  - **Venlafaxine (SNRI)**
  - **Buspirone**

- The treatment of social anxiety disorder associated with performance situations frequently involves **the use of ß-adrenergic receptor antagonists shortly before exposure**

Past years questions

1- A male is having fear of flying since many years, he drives from one state to another to avoid getting on a plane, your diagnosis?

Specific Phobia

2- a patient who has fear of leaving home and being left alone

a- social anxiety disorder
b- agoraphobia
c- generalized anxiety disorder
d- specific phobia

3- which of these is not used in management of specific phobia ? ECT

4- Regarding phobias one of these doesn't match: mysophobia -> fear of cats

5- Wrong about criteria of phobia: patient is not aware that his fear is out of proportion

6- Most common anxiety disorder ?

A-Social phobia
B-GAD
C- Panic attack
D-Specific Phobia
E- PTSD

7- Mysophobia is? Select one:

a. Fear of dogs
b. Fear of cats
c. Fear of animals
d. Fear of water
e. Fear of dirt

8- Someone not taken care of his appearance and his clothes is dirty which is not DDx ?
social phobia

Past years questions

9- A 24-year-old woman is diagnosed with social phobia. All of the following are effective treatments except:

a. SSRIS
b. Flooding
c. Modeling
d. Systematic desensitization
e. ECT

10- the main cause of fear in social phobia:

a- Embarrassment
b- social and occupational impairment

11- case of girl feels fear when she in a public area , she fell 2 month before and says she fears that no one can help her in public area as she didn't have children...

a- agoraphobia
b- specific phobia
c- social phobia

12- All of the following are DSM 5 diagnostic criteria of specific phobia, except:

- symptoms persist for at least 3 months

13- Case of female fears of social situational including contact with strangers?

-Social phobia

14- the most common Psychiatric disorder in female population?

A. Phobia
B. GAD
C. anxiety disorder
D. somatization

there are a lot of questions asking to match the meaning of each specific phobia so memorise what each phobia means

Past years questions

15- Irritability , poor concentration , sleep problems , All of the following should be considered in the differential diagnosis , EXCEPT ?

A- PTSD
B- Premenstrual dysphoric disorder
C- GAD
D- Social anxiety disorder
E- Depressive disorders

16- All the following of DSM5 criteria for agoraphobia is true except:

-Less than 3 months duration

09

Reaction to stress and adjustment disorder

Stress

- **Stress:** is a state of emotional strain or tension caused by demanding circumstances
- Some people are more sensitive than others and these differences can be attributed to childhood experiences, influence of parents, teachers, religion.
- **Stressor:** Any event or stimulus that causes an individual to experience stress
    - They may be neither positive or negative, but they have positive or negative effects
        - **Internal Stressor** (illness, hormonal change, fear)
        - **External Stressor** (loud noise, cold temperature)
        - **Developmental Stressor**
        - **Situational Stressor**

Types of stress

According to effect

- **Eustress (good stress)**: motivates you to move into action to get things accomplished; happens in fun and exciting situations.
- **Distress (bad stress):** most common form of stress; something we all go through in our daily lives and often we don't even notice it happening.

According to time

> Acute stress: is the most common type of stress , it comes on suddenly and lasts for a short time (3 days - a month)

Results in emotional distress, muscle tension, jaw ache, upset stomach, rapid heartbeat .

> Episodic Stress: is a type of stress that happens frequently to people overloaded with responsibilities and schedules.

Results in acute stress symptoms, irritability, unintended hostility, relationship problems

> Chronic stress: is caused by long-term exposure to stressors, such as a horrible job, a critical boss, a chronic illness, or relationship conflict. ongoing stress resulting from long-term

Results in emotional pressure ; fight or flight response without recovery time acute & episodic stress symptoms, heart disease, adverse health effects

Response to stress

1- Adrenaline and noradrenaline: increase HR, RR, Stroke volume, and depth of breathing. vasoconstriction to skin vessels and vasodilatation to muscle and main organs. Bronchioles dilatation, pupils dilatation, Increase brain blood flow to increase sight.

2- Cortisol: increase blood pressure, Increase lipolysis, gluconeogenesis and glycogenolysis

3- Aldosterone increase plasma volume by increasing water renal reabsorption and decreasing perspiration

Signs and symptoms of stress

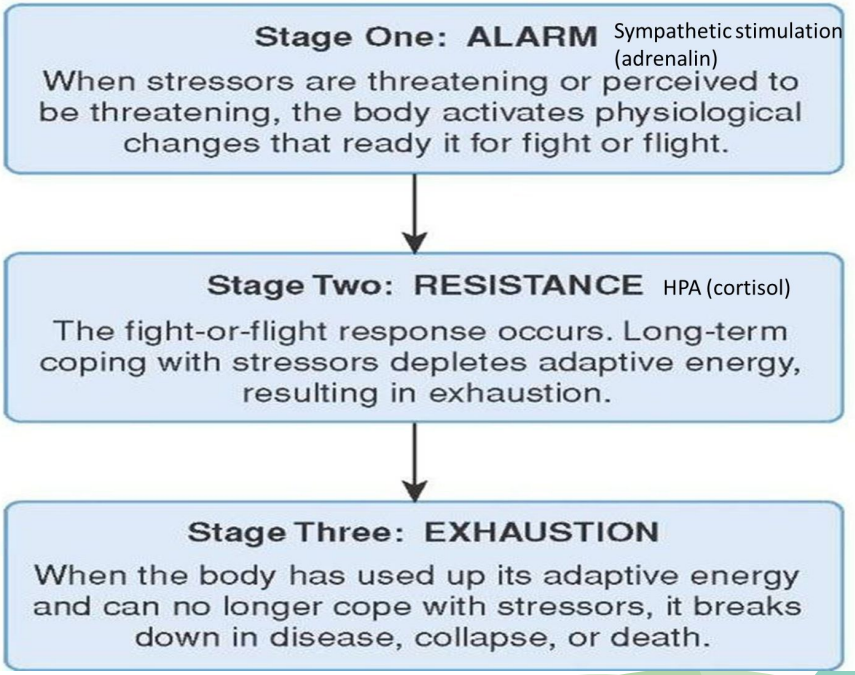
Physical	*Mental*		*Behavioral*
• Muscle tension	• Irritability	**	• Overeating/lack of eating
• Trouble sleeping	• Sadness		• Alcohol or drug use
• Headaches	• Shame		• Withdrawal
• Elevated blood pressure	• Mood swings		• Arguing or picking fights
• Weakened immune system	• Feelings of failure		• Declining work performance
• Digestive issues	• Cynicism		• Poor time management
• Rapid breathing	• Excessive worry		• Clumsiness

General adaptation syndrome

developed by Hans Selye, Physiologic responses of the whole body to stressors
Involves the **Autonomic Nervous System , and Endocrine System**

Occurs with the **release of adaptive hormones** and subsequent changes in the WHOLE body

There are three stages: **alarm, resistance, and exhaustion**



Stress control

The most important point is to recognize the source of negative stress.

Stress control, ABC strategy

A = Awareness (what causes your stress?

B = Balance (there is a fine line between positive and negative stress, how much can you cope with before it becomes negative ?)

C = Control (what can you do to help yourself?)

Stress management

1- Plan daily relaxation program

2- Establish a regular pattern of exercise

3- Study assertive techniques. Learn to say "no"

4- Learn to accept failures

5- Accept what cannot be changed

6- Develop collegial support

7- Participate in professional organization

8- Seek counseling

PTSD and ASD

Posttraumatic stress disorder (PTSD): is characterized by the development of multiple symptoms after exposure to one or more traumatic events, the symptoms last for at least a month and may occur immediately after the trauma or with delayed expression.

Acute stress disorder (ASD): is diagnosed in patients who experience a major traumatic event and suffer from similar symptoms as PTSD but ***for a shorter duration***. The onset of symptoms occurs within 1 month of the traumatic event and symptoms last for less than 1 month.

Posttraumatic Stress Disorder	Acute Stress Disorder
Trauma occurred at any time in past	Trauma occurred <1 month ago
Symptoms last >1 month	Symptoms last <1 month

Epidemiology/ Etiology of PTSD

- Higher prevalence in women, most likely due to greater risk of exposure to traumatic events, particularly **rape** and other forms of interpersonal violence.
- Exposure to prior trauma, especially during childhood, is a risk factor for developing PTSD

Course and prognosis

- Usually the symptoms begin within 3 months after the trauma.
- Symptoms may manifest after a delayed expression.
- Fifty percent of patients with PTSD have complete recovery within 3 months.
- Symptoms tend to diminish with older age.
- 80% of patients with PTSD have a comorbid mental disorder (e.g., MDD, bipolar disorder, anxiety disorder, substance use disorder

DSM-5 criteria for PTSD

Diagnosis and DSM-5 Criteria

- Exposure to actual or threatened death, serious injury, or sexual violence by directly experiencing or witnessing the trauma.
- Recurrent intrusions of re-experiencing the event via memories, nightmares, or dissociative reactions (e.g., flashbacks); intense distress at exposure to cues relating to the trauma; or physiological reactions to cues relating to the trauma.
- Active avoidance of triggering stimuli (e.g., memories, feelings, people, places, objects) associated with the trauma.
- At least two of the following negative cognitions/mood: dissociative amnesia, negative feelings of self/others/world, self-blame, negative emotions (e.g., fear, horror, anger, guilt), anhedonia, feelings of detachment/estrangement, inability to experience positive emotions.
- At least two of the following symptoms of increased arousal/reactivity: hypervigilance, exaggerated startle response, irritability/angry outbursts, impaired concentration, insomnia.
- Symptoms not caused by the direct effects of a substance or another medical condition.
- Symptoms result in significant impairment in social or occupational functioning.
- The presentation differs in children <7 years of age.

Treatment of PTSD

Pharmacological

- First-line antidepressants: SSRIs (e.g., sertraline, citalopram) or SNRIs (e.g., venlafaxine).
- Prazosin, Alpha receptor antagonist, targets nightmares a hypervigilance.
- May augment with atypical (second-generation) antipsychotics in severe cases.

Use PrazoSiN in PTSD to Stop Nightmares

Psychotherapy

- Specialized forms of CBT (e.g., exposure therapy, cognitive processing therapy).
- Supportive and psychodynamic therapy.
- Couples/family therapy

Adjustment disorders

Adjustment disorders occur when behavioral or emotional symptoms develop after a **non-life-threatening, stressful life event** (e.g., divorce, death of a loved one, or loss of a job).

Diagnosis and DSM-5 Criteria

1. Development of emotional or behavioral symptoms within 3 months in response to an identifiable stressful life event. These symptoms produce either:
    - Excessive distress in relation to the event.
    - Significant impairment in daily functioning.
2. The symptoms are not those of normal bereavement.
3. Symptoms resolve within 6 months after stressor has terminated.
4. The stress-related disturbance does not meet criteria for another mental disorder.

Subtypes: Based on a predominance of either depressed mood, anxiety, mixed anxiety and depression, disturbance of conduct (such as aggression), or mixed disturbance of emotions and conduct.

Adjustment disorders cont.

Etiology

■■ Triggered by psychosocial factors.

Prognosis

May be chronic if the stressor is chronic or recurrent.

Treatment

■■ Supportive psychotherapy.
■■ Group therapy.
■■ If necessary, pharmacotherapy can target associated symptoms (insomnia, anxiety, or depression).

Past years questions

1- not an intrusive symptom in dsm-5 criteria of PTSD

A- Persistent inability to to experience positive emotion
B- Memories
C- Flashbacks

2- PTSD occurs most commonly in?

sexual assault

3- Behavioral symptom of stress?

A- Rage
B- Sleep pattern changes
C- Appetite changes
D- Palpitation
E- Headache

4- The following are true for post-traumatic stress disorder (ptsd) except:

A-flashbacks
B-anhedonia
C-seeking reminders of the trauma
D-good response to medications

5- A person had an RTA 3 weeks ago, that caused death of his friend, the patient is feeling sad, anhedonic and started having nightmares & flashbacks about the accident, Your Diagnosis?

A- Post-traumatic stress disorder
B- Adjustment Disorder
C- Acute Stress Disorder

6- the stressor of adjustment disorder happens within :-

a- 1 month
b- 3 months
c- 6 months

7- A criteria of adjustment disorder:

causes significant impairment

8- Difference between PTSD and acute stress disorder: Time

Past years questions

9- One of the following is adjustment disorder?

A. Job loss
B. Relative death
C. rape
D. None of above
E. All of above

10- A 22 years old patient have got abroad job opportunities know he Can't sleep well, feeling worried about travelling to a new country without knowing its language and circumstances, feeling on edge.. Since 2 months.. He's probably suffering from?

A. Generalized anxiety disorder
B. Adjustment disorder with depression
C. Adjustment disorder with anxiety
D. Phobia

11- Which of the following is considered adjustment disorder?

A) psychosis
B) mixed depression and anxiety
C) intermittent explosive
D) bipolar

12- About adjustment disorder:

A- should remit within 6 months
B- is often inappropriately diagnosed/overdiagnosed by psychiatrists,
C- often involves daily life activities not rare catastrophic events
D- could lower the subthreshold for other disorders
E- all of the above

Past years questions

13- Which of the following does not occur in PTSD?

- Hypervigilance
- avoidance of triggers
- nightmares
- flashbacks
- compulsions

14- Sign in child with PTSD:

bed wetting

15- One of the following is not subtypes of adjustment disorder?

-adjustment disorder with depressed mood
-adjustment disorder with bipolar features
-adjustment disorder with anxiety
-adjustment disorder with dissociation
-None of the above

16- Treatment for adjustment disorder?

- supportive counseling and psychotherapy

17- Treatment of acute stress?

A) Psychotherapy

10

Somatic symptoms and related disorders

1) Somatic symptom disorder

- It's the major diagnostic class, the diagnosis is made on the basis of positive symptoms and signs (Distressing somatic symptoms plus abnormal thoughts, feelings, and behaviors in response to these symptoms)
- The main distinctive characteristic of somatic symptom disorder is not the somatic symptoms per se but instead the way the pt. present and interpret them.
- Patients with somatic symptom disorder present with at least one (and often multiple) physical symptom. They frequently seek treatment from many doctors, often resulting in extensive lab work, diagnostic procedures, hospitalizations, and/or surgeries.
- **Diagnostic DSM-5 criteria**
  - **One or more somatic symptoms** (may be predominantly pain) that are **distressing or result in significant disruption.**
  - **Excessive thoughts, feelings, or behaviors** related to the somatic symptoms or associated health concerns.
  - Lasts **at least 6 months**.

Epidemiology

Incidence in females likely greater than males.
Prevalence in general adult population: **5–7%.**

Risk factors:

1. Older age
2. Fewer years of education
3. Low socioeconomic status
4. Unemployment
5. History of childhood sexual abuse

Treatment and prognosis

- The course tends to be **chronic and debilitating**. Symptoms may periodically improve and then worsen under stress.
- The patient should have regularly scheduled visits with a single primary care physician, who should minimize unnecessary medical workups and treatments.
- Address psychological issues slowly. Patients will likely resist referral to a mental health professional.
- The treatment is mainly **psychotherapy**

2) Conversion disorder

- A mental condition in which a person complains from at least one neurological symptom (sensory or motor) e.g. blindness, paralysis. And it **cannot be fully explained by a neurological condition**
- Which means Patients “convert” psychological distress or conflicts to neurological symptoms.
- Surprisingly, **patients are often calm and unconcerned** (*la belle indifference*) when describing their symptoms.
- **Diagnostic DSM-5 criteria**
  - At least **one** symptom of altered voluntary motor or sensory function.
  - Evidence of incompatibility between the symptom and recognized neurological or medical conditions.
  - Not better explained by another medical or mental disorder.
  - Causes significant distress or impairment in social or occupational functioning or warrants medical evaluation.
  - **Common symptoms:** Paralysis, weakness, blindness, mutism, sensory complaints (paresthesias), seizures, globus sensation (globus hystericus or sensation of lump in throat).

Epidemiology

- Two to three times **more common in women** than men.
- **Onset at any age**, but more often in adolescence or early adulthood.
- High incidence of comorbid neurological, depressive, or anxiety disorders.

Treatment and prognosis

- The primary treatment is education about the illness. **Cognitive Behavioral therapy (CBT), with or without physical therapy**, can be used if education alone is not effective.
- While patients often spontaneously recover, the prognosis is poor: symptoms may persist, recur, or worsen in 40–66% of patients.

3) Illness anxiety disorder

- **Illness anxiety disorder (hypochondriasis)** is preoccupation with and fear of having a serious illness, despite medical evaluation and reassurance.
- Diagnostic DSM-5 criteria
  - Preoccupation with having or acquiring a serious illness.
  - Somatic symptoms are not present, or if present, are mild in intensity.
  - High level of anxiety about health.
  - Performs excessive health-related behaviors or exhibits maladaptive behaviors.
  - Persists for at least 6 months.
  - Not better explained by another mental disorder (such as somatic symptom disorder).

Epidemiology

- Men are affected as often as women.
- Average age of onset: 20–30.
- Approximately 67% have a coexisting major mental disorder.

Illness anxiety disorder is the only somatic symptom-related disorder that doesn't likely have a higher frequency in women

Treatment and prognosis

■ Regularly scheduled visits with one primary care physician.
■ **Psychotherapy** (primarily CBT).
■ Comorbid anxiety and depressive disorders should be treated with selective serotonin reuptake inhibitors (SSRIs) or other appropriate psychotropic medications.

■ **Chronic but episodic**—symptoms may wax and wane periodically.
■ Can result in significant disability.
■ Up to 60% of patients improve significantly.
■ Factors predicting better prognosis include fewer somatic symptoms, shorter duration of illness, and absence of childhood physical punishment.

4) Psychological Factors Affecting Other Medical Conditions

- Is a disorder that is diagnosed when a general medical condition is adversely affected by psychological or behavioral factors (e.g. distress, coping styles, maladaptive health behaviors).
- Examples include anxiety worsening asthma, denial of need for treatment for acute chest pain, and manipulating insulin doses in order to lose weight.
- **Diagnostic DSM-5 criteria**
  - A medical symptom or condition (other than mental disorder) is present.
  - Psychological or behavioral factors adversely affect the medical condition in at least one way, such as influencing the course or treatment, constituting an additional health risk factor, influencing the underlying pathophysiology, precipitating, or exacerbating symptoms or necessitating medical attention.
  - Psychological or behavioral factors not better explained by another mental disorder.

Epidemiology

■ Prevalence and gender differences are unclear.
■ Can occur across the lifespan.

Treatment and Prognosis

■ Treatment includes education and frequent contact with a primary care physician.
■ **SSRIs and/or psychotherapy (especially CBT)** should be used to treat underlying anxiety or depression.

5) Factitious disorder

- Patients intentionally produce symptoms of a psychological or physical illness because of a desire to assume the sick role, **not for external rewards.**
- Münchhausen syndrome is another, older name for factitious disorder with predominantly physical complaints.
- Münchhausen syndrome by proxy is intentionally producing symptoms in someone else who is under one's care (usually one's children).

Diagnostic DSM-5 criteria

- Falsification of physical or psychological signs or symptoms, or induction of injury or disease, associated with identified deception.
- The deceptive behavior is evident even in the absence of obvious external rewards (such as in malingering).
- Behavior is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder.
- Individual can present him/herself, or another individual (as in factitious disorder imposed on another).

- Commonly feigned symptoms:
  - Psychiatric—hallucinations, depression
  - Medical—fever (by heating the thermometer), infection, hypoglycemia, abdominal pain, seizures, and hematuria

Epidemiology

- May be at least 1% of hospitalized patients.
- More common in women.
- Higher incidence in hospital and health care workers (who have learned how to feign symptoms).
- Associated with personality disorders.
- Many patients have a history of illness and hospitalization, as well as childhood physical or sexual abuse.

Treatment and prognosis

- Collect collateral information from medical treaters and family. Collaborate with primary care physician and treatment team to avoid unnecessary procedures.
- Patients may require confrontation in a nonthreatening manner; however, patients who are confronted may leave against medical advice and seek hospitalization elsewhere.
- Repeated and long-term hospitalizations are common.

6) Malingering

- Patients intentionally produce or feign symptoms **for external rewards.**
- Common external motivations include avoiding the police, receiving room and board, obtaining narcotics, and receiving monetary compensation.
- Note that malingering is not considered to be a mental illness

Presentation

- Patients usually present with multiple vague complaints that do not conform to a known medical condition.
- They often have a long medical history with many hospital stays.
- They are generally uncooperative and refuse to accept a good prognosis even after extensive medical evaluation.
- Their symptoms improve once their desired objective is obtained.

Epidemiology

- Not uncommon in hospitalized patients
- Significantly more common in men than women

Past years questions

1- A 39- year-old man comes to the office due to concerns about having pancreatic cancer after a coworker died of the disease 6 months ago. The patient has no epigastric pain, jaundice, or weight loss. However, he worries constantly because in researching the illness he read that it may not have obvious symptoms in early stages and can be rapidly fatal. The patient saw another physician 2 months ago, who performed a physical examination, laboratory evaluation, and abdominal CT scan. The results were normal and the physician reassured the patient that he did not have cancer. However, the patient reports that he has noticed occasional stomach noises after eating and would like to have additional testing done. Which of the following is the most likely diagnosis?

A- Adjustment disorder with anxiety
B- Conversion disorder
C- Delusional disorder (somatic subtype)
D- Factitious disorder
E- Generalized anxiety disorder
F- Illness anxiety disorder

2- A person has an episode of seizure lasting for 3 to 5 minutes, he has no postictal state of confusion after the episode, incompatibility between the symptoms and the seizure, what is the diagnosis?

A- Factitious disorder
B- Conversion disorder
C- Malingering

3- To diagnose somatic symptoms disorder the duration must be?

At least 6 months

4- In which of the following disorders does the individual have the motivation to assume the sick role in the absence of any secondary gain? Select one:

a Malingering
b. Factitious disorder
e Somatic symptom disorder

Past years questions

5- What is the key difference between illness anxiety disorder and somatic symptom disorder? Select one:

a. The presence of an associated medical condition
b. Whether they are a diagnosis of exclusion
c. Predominance of somatic symptoms
d. Presence of neurological deficits
e. Number of symptoms

6- What is the key difference between illness anxiety disorder and somatic symptom disorder?

A- The presence of an associated medical condition
B- Whether they are a diagnosis of exclusion
C- Somatic symptom disorder need treatment rather than investigation
D- Presence of neurological deficits
E- Number of symptoms

7- According to DSM-5. how many somatic symptoms (distressing or disruptive to daily life) are required for the diagnosis of somatic symptom disorder? Select one:

a. One
b. Two
C. Three

8- female patient who was admitted for exacerbation of asthma, suddenly she developed nonproductive cough and a fever of 39. The nurse saw the patient dipping the thermometer in hot cup of liquid, possible dx?

Factitious disorder

9- What is the difference between Factitious Disorder & Malingering?

Secondary gain

Past years questions

10- Which of the following most closely describes a person who may have a factitious disorder?

a. Iman sees visions and talks to people who aren't there.
b. Fatmah starves herself and is convinced she is overweight
c. Fadi pretends to be sick in order to avoid coming to the exam he didn't study for
d. Hanan tricks the doctors to believe she is ill by injecting herself by insulin

11- All of the following are true about illness anxiety disorder except?

A. More common in female than male
B. preoccupied of acquired a serious illness
C. high level of anxiety about health
D. somatic symptom are not present
E. persist at least 6 month

12- False about Factitious Disorder :

A. more common in men
B. it can be intentional
C. the gain is primary gain
D. Faking symptoms such as hyperthermia
E. falsification of injury or disease

13- A man pretend sickness intentionally without secondary gain?

Factitious disorder

14- 65 years old female came to the clinic that reported she has skin cancer and the doctor make all test & labs to confirm but the result have no abnormal findings which type of disease the patient suffers from?

A- Adjustment disorder with anxiety
B- Conversion disorder
C- Delusional disorder (somatic subtype)
D- Factitious disorder
E- Generalized anxiety disorder
F- Illness anxiety disorder

Past years questions

15- case about a child that has conflicting parents who want to have a divorce then the child suddenly develops blindness but seems calm and indifferent to it?

conversion disorder

16- pt has seizure attack and EEG was negative and conflicting with his wife?

conversion disorder

17- true about conversion disorder?

Neurological symptom

18- One of the following symptoms not considered in conversion syndrome?

Pain

19- Pts came to emergency with left side paralysis, low socioeconomic status, Dx?

Conversion disorder

20- Which of the following correctly describes difference between somatic symptoms disorder and illness anxiety disorder?

Somatic disorder patients request treatment and symptomatic relief

11

OCD

Obsessive compulsive disorder

- **Definition**: OCD is a common form of anxiety disorder characterized by intrusive thoughts that produce uneasiness, apprehension, fear & worry; followed by repetitive behaviors aimed at reducing the associated anxiety; or by a combination of such obsessions and compulsions.
- OCD is characterized by **anxiety-provoking ideas, images or impulses (obsessions) and by urges-compulsions to do something that will lesser their anxiety.**

- **Obsessions**: *Recurrent and persistent* thoughts, urges, images or impulses that are experienced, at some time during the disturbance, as *intrusive and unwanted*, and that in most individuals *cause marked anxiety or distress*.
  - The individual attempts to ignore or suppress such thoughts, urges, or images, or to neutralize them with some other thought or action (i.e., by performing a compulsion)
- **Compulsion**: *Repetitive* behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly.
  - The behaviors or mental acts are aimed at preventing or reducing anxiety or distress, or preventing some dreaded event or situation; however, these behaviors or mental acts are not connected in a realistic way with what they are designed to neutralize or prevent, or are clearly excessive.

Note: Young children may not be able to articulate the aims of these behaviors or mental acts.

Epidemiology of OCD

- Affects 2-3% of the general population (this number is according to Kaplan)
- OCD is the 4th most common psychiatric diagnosis following: Phobias, substance related disorders, MDD
- Among adults: M=F , but among adolescents boys > girls
- Mean age of onset is 20 years of age
- Men have earlier onset (19 years of age), women slightly later (mean age of 22 at onset)
- Two thirds of patients have the onset of symptoms before the age of 25
- Fewer than 15% of patients have onset after the age of 35
- Single persons are more likely to be affected with OCD , than married
- OCD occurs less often among people of African origin.

Comorbidity with OCD:

- 67% of patients with OCD have MDD
- 25% of OCD patients have social phobia
- 5-7% of OCD patients have Tourette syndrome
- 20-30% of patients with OCD have history of tics
- Other comorbidities with OCD include: alcohol use disorder, eating disorders, specific phobia, GAD, panic disorder, personality disorder

Etiology of OCD

1. Neurotransmitters
   a. studies suggest that dysregulation of serotonin is involved in symptom formation of obsessions and compulsions
   b. Data shows that serotonergic drugs are more effective in treating OCD
   c. Less evidence exists for the dysfunction of the noradrenergic system
   d. There is a positive link between Group A beta hemolytic streptococcal infection
2. Brain imaging studies
   a. Neuro imaging implicates altered function in the circuitry between the Orbitofrontal cortex, Caudate and the Thalamus
   b. Increased activity (metabolism + blood flow) in the frontal lobes and the basal ganglia (the corticostriatal pathways not the amygdala pathway)
   c. CT and MRI found BILATERALLY SMALLER CAUDATES IN OCD PATIENTS
3. Genetics
   a. Relatives have 3 to 5 folds higher probability of having OCD
   b. The following conditions are more common in families of patients with OCD: GAD, TIC disorders, Body dysmorphic disorder , hypochondriasis , eating disorders and habits such as nail biting
4. Behavioral factors
   a. Obsessions are conditioned stimuli: a neutral stimulus is paired with anxiety producing event
   b. Compulsions are established when a person discovers that a certain action reduces anxiety attached to an obsessional thought
   c. Only 15-35% of patients with OCD have had premorbid obsessional traits
   d. OCD may be precipitated by a number of environmental stressors especially those involving pregnancy, childbirth or parental care of children

DSM-5 diagnostic criteria

A. Presence of obsessions, compulsions, or both:

B. The obsessions or compulsions are **time-consuming** (e.g., take more than 1 hour per day) or/and **cause clinically significant distress or impairment** in social, occupational, or other important areas of functioning.

C. The obsessive-compulsive symptoms are **not attributable to the physiological effects of a substance** (e.g., a drug of abuse, a medication) or another medical condition.

D. The disturbance is **not better explained by the symptoms of another mental disorder, e.g.**

- Excessive worries, as in generalized anxiety disorder
- Preoccupation with appearance, as in body dysmorphic disorder
- Difficulty discarding or parting with possessions, as in hoarding disorder
- Hair pulling, as in trichotillomania [hair-pulling disorder]
- Skin picking, as in excoriation [skin-picking] disorder
- Stereotypies, as in stereotypic movement disorder
- Ritualized eating behavior, as in eating disorders
- Preoccupation with substances or gambling, as in substance-related and addictive disorders
- Preoccupation with having an illness, as in illness anxiety disorder
- Sexual urges or fantasies, as in paraphilic disorders
- Impulses, as in disruptive, impulse-control, and conduct disorders
- Guilty ruminations, as in major depressive disorder
- Thought insertion or delusional preoccupations, as in schizophrenia spectrum and other psychotic disorders
- Repetitive patterns of behavior, as in autism spectrum disorder).

Patterns of symptoms

- The most common pattern is an **obsession of contamination** (45% of adults), followed by **washing** or accompanied by **compulsive avoidance of the contaminated object**
- **Pathological doubt:** is the 2nd most common pattern , an obsessional doubt is followed by the compulsion of checking (63%)
- **Intrusive thoughts:** are the 3rd most common pattern, obsessional thoughts without compulsions
  - Usually thoughts of aggressive or sexual act
  - Suicidal thoughts may also be obsessive
- **Symmetry:** 4th most common pattern, can lead to a compulsion of slowness

- New onset OCD **after the age of 30**, should raise questions about potential neurological contribution to the disorder (Sydenham's chorea, Huntington's disease etc..)
- Two thirds of patients with Tourette disorder meet the criteria for OCD

Questions used to elicit obsessions and compulsions

- Do you worry about contamination with dirt even when you have already washed?
- Do you have awful thoughts entering your mind despite trying hard to keep them out?
- Do you repeatedly have to check things that you have already done (stoves , lights , taps , etc.)?
- Do you find that you have to arrange, touch or count things many times over?

Course and prognosis

- Onset: Sudden in >50% of OCD patients
- Precipitating factors: like pregnancy, sexual problem or death of a relative present in 50-70% of patients.
- Patients tend to keep their symptoms a secret and delay 5-10 years before coming to psychiatric attention
- Course: Some patients have fluctuating course, others have a constant course
- Improvement:
  - 20-30% of patients have significant improvement
  - 40-50% have moderate improvement
  - 20-40% remain ill or their symptoms worsen
- Two thirds of patients with OCD have depression, and suicide is a risk for all OCD patients
- Prognosis:
  - **Poor prognostic factors:** yielding to compulsions, bizarre compulsions, childhood onset, the need for hospitalization, the presence of schizotypal personality disorder
  - **Good prognostic factors:** good social and occupational adjustment, the presence of precipitating event, the episodic nature of symptoms
- Suicidal ideation in 50%, attempts in 25% of patients with OCD.

Treatment

- Behavioral and pharmacological treatment
- Placebo response is only = 5%
- Initial response of pharmacotherapy is generally seen after 4-6 weeks , 8-16 weeks are required to obtain maximal therapeutic effect
- SSRI that are FDA approved for OCD: Fluoxetine, fluvoxamine, paroxetine, sertraline, citalopram
- First FDA approved drug for OCD: Clomipramine, it should be increased gradually over 2-3 weeks, to avoid GI disturbances, orthostatic hypotension, sedation, and anticholinergic side effects
- Augmenting drugs: lithium , valproate or carbamazepine
- Other drugs (not FDA approved for OCD): Venlafaxine, Buspirone, tryptamine, and clonazepam
- Adding atypical antipsychotic such as Risperidone or Aripiprazole has helped in some cases

Past years questions

1- Obsessions are:

A. Impulse
B. Words
C. Images
D. Thoughts
E. All of the above

2- Taxi driver have thoughts that he runs over a child when drive thru the road , and can't relieve these thoughts until he go back and check the road, Dx:

OCD

3- Which drug is FDA approved for OCD?

A- fluvoxamine
B- venlafaxine
C- clozapine

4- Poor prognosis in OCD?

Yielding to compulsions

5- Not FDA approved for OCD treatment :

A- Venlafaxine
B- Clozapine
**more than one possible answer so memorise the drugs that are FDA approved

6- Treatment approved by FDA for OCD:

clomipramine

7- OCD is sometimes associated with:

Sydenham Chorea

8- Good prognosis for OCD?

late onset

9- Not poor prognosis in OCD?

Episodic symptoms

10- Best description for OCD?

A) decrease eye contact
B) Elevated mood
C) Recurrent repetitive behaviors to reduce stress

Past years questions

11- Postpartum woman with thoughts of hurting her baby and she knows it is wrong so remove every harmful object from her kitchen (so she couldn't cook) and start ordering fast food, What is the diagnosis:

a. OCD.*
b. OCPD
c. Delusion

5- Not FDA approved for OCD treatment :

A- Venlafaxine
B- Clozapine
**more than one possible answer so memorise the drugs that are FDA approved

6- Treatment approved by FDA for OCD:

clomipramine

7- OCD is sometimes associated with:

Sydenham Chorea

8- Good prognosis for OCD?

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9- Not poor prognosis in OCD?

Episodic symptoms

10- Best description for OCD?

A) decrease eye contact
B) Elevated mood
C) Recurrent repetitive behaviors to reduce stress

12

Schizophrenia

Definition and diagnostic criteria

Delusions / Hallucinations / Disorganized Thinking/ Disorganized Behavior / Negative Symptoms

+

Significant Social or Occupational deterioration

+

Period of One Month

A. The presence of at least two of the following five items, each present for a clinically significant portion of time during a 1-month period (or less if successfully treated), at least one of these must be 1), 2), or 3):

1. **Delusions.**
2. **Hallucinations.**
3. **Disorganized speech.**
4. **Grossly disorganized or catatonic behavior.**
5. **Negative symptoms.**

B. Must cause significant social or occupational functional deterioration.
C. Continuous signs of the disturbance persist for a period of at least 6 months, which must include at least 1 month of symptoms (or less if successfully treated); prodromal symptoms often precede the active phase, and residual symptoms may follow it.
D. Schizoaffective disorder and depressive or bipolar disorder with psychotic features have been ruled out.
E. The disturbance is not attributable to the physiological effects of a substance.
F. If there is a history of autism spectrum disorder or a communication disorder of childhood onset, the additional diagnosis of schizophrenia is made only if prominent delusions or hallucinations, in addition to the other required symptoms or schizophrenia, are also present for at least 1 month (or less if successfully treated).

Symptoms of schizophrenia

In general, the symptoms of schizophrenia are broken up into three categories:

- **Positive symptoms:**
  - Hallucinations
  - Delusions
  - Disorganized behavior
  - Disorganized speech.
  - Formal thought disorder

  These tend to respond more robustly to antipsychotic medications.

- **Negative symptoms:**
  - Flat or blunted affect
  - Anhedonia
  - Decreased Emotional Reactivity
  - Poverty of Speech (Alogia)
  - Lack of purposeful actions

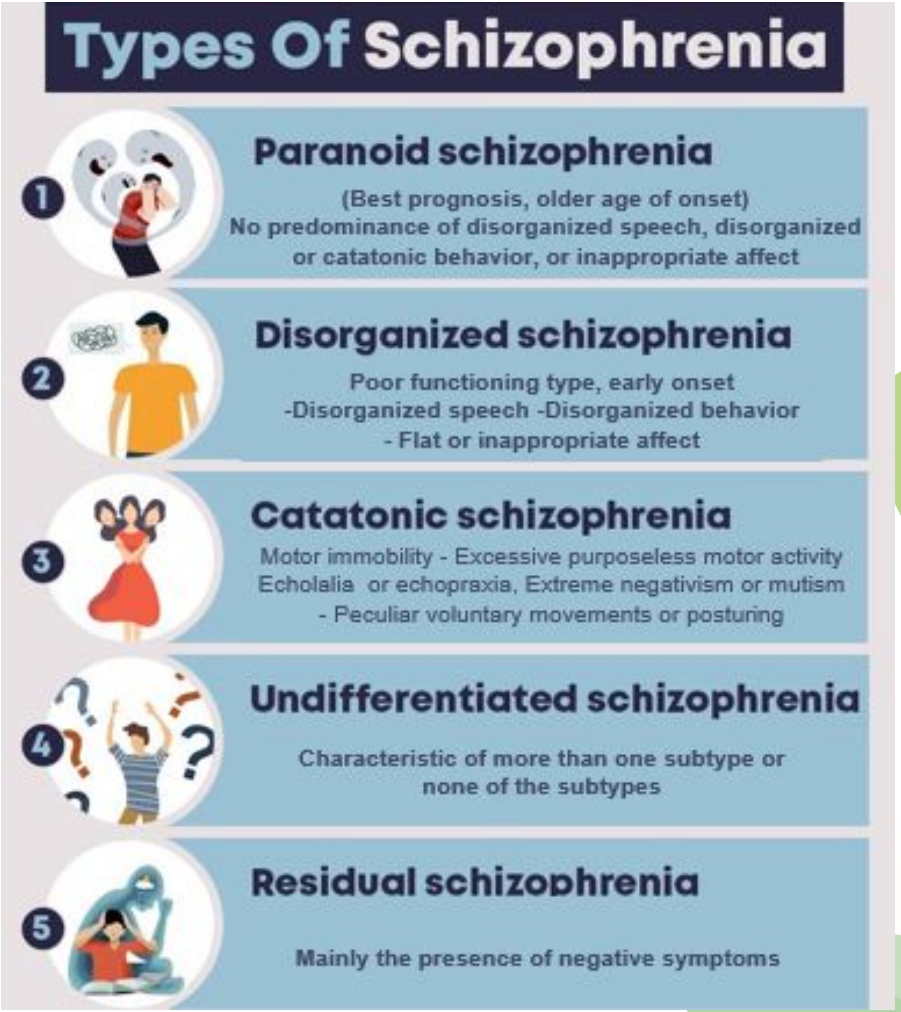
  These symptoms are comparatively more often treatment resistant and contribute significantly to the social isolation and impaired function of schizophrenic patients.

- **Cognitive symptoms:**
  - Slower processing speed, Impairment in declarative and working memory, Abnormalities in sensory processing, Reductions in attention, and Social cognition deficits such as inaccuracy in inferring the intentions of other people.

  These symptoms may lead to poor work and school performance.

Name of disorder based on duration of symptoms

- <1 month—brief psychotic disorder
- 1–6 months—schizophreniform disorder
- >6 months—schizophrenia



Pathophysiology and etiology

Dopamine hypothesis

Though the **exact cause is not known**, it appears to be partly related to increased dopamine activity in certain neuronal tracts. Evidence is that most antipsychotics successful in treating schizophrenia are dopamine receptor antagonists. In addition, cocaine and amphetamines increase dopamine activity and can cause schizophrenia-like symptoms.

- Theorized Dopamine Pathways Affected in Schizophrenia
  - **Prefrontal cortical:** Inadequate dopaminergic activity; responsible for negative symptoms
  - **Mesolimbic:** Excessive dopaminergic activity; responsible for positive symptoms.

Other implicated neurotransmitters

- **Elevated serotonin:** Some of the second-generation (atypical) antipsychotics (e.g., risperidone and clozapine) antagonize serotonin and weakly antagonize dopamine.
- **Elevated norepinephrine**: Long-term use of antipsychotics has been shown to decrease activity of noradrenergic neurons.
- **Low gamma-aminobutyric acid (GABA):** There is lower expression of the enzyme necessary to create GABA in the hippocampus of schizophrenic patients.
- **Low levels of glutamate receptors:** Schizophrenic patients have fewer NMDA receptors; this corresponds to the psychotic symptoms observed with NMDA antagonists like ketamine.

Epidemiology

- Lifetime prevalence: 1% (approximation).
- **Female = Male.**
  - Onset is earlier in men than in women.
    - Peak age of onset in men is 10 to 25 years.
    - Peak age of onset in women is 25 to 35 years.
  - Men are more likely to be impaired by negative symptoms.
  - Women are more likely to have better social functioning.
- Extremely rare onset before age of 10 years or after age of 60 years.
- No race-based differences.
- Persons who develop schizophrenia are more likely to have been born in the winter and early spring and less likely to have been born in late spring and summer.
- Season specific risk factors, such as a virus or a seasonal change in diet.

Prognosis

Good prognostic factors

- Later age of onset
- Good premorbid functioning
- Affective symptoms
- Family history of mood disorder
- Acute onset
- Married
- Good support system
- Positive symptoms

Poor prognostic factors

- Younger age at onset.
- Poor premorbid functioning.
- No precipitating factors.
- Negative symptoms.
- Being single/divorced.
- Family history of schizophrenia.
- Negative symptoms.
- History of perinatal trauma.
- Multiple relapses.
- Longer duration of untreated illness

Treatment

- Antipsychotic medications are the mainstay of the treatment for schizophrenia.
- Antipsychotic medications are effective for preventing relapse in stabilized patients.
- Psychosocial interventions, including psychotherapy, can a augment the clinical improvement.
- Effective non pharmacological treatments include patient and family education, skills training, supported employment, cognitive behavior therapies, and psychotherapies
- Just as pharmacological agents are used to treat presumed chemical imbalances, non-pharmacological strategies must treat non biological issues
- For most individuals, antipsychotic medications control the symptoms while non-pharmacological
- treatments address the impairments in social, vocational, and educational functioning

*more details in antipsychotics lecture

Past years questions

1- 17 years old male,2 years of isolation and hates eating with his family because he believes they put poison on it and associated with deterioration of function:

a- Schizophrenia
b- Delusional disorder
c- Major depressive disorder

2- poor prognosis of schizophrenia:

A) Gradual
B) Married
C) Older age
D) Female

3- loosening of association is present most commonly in:

A. Schizophrenia
B. Bipolar
C. depression with psychotic feature

4- Duration to diagnose schizophrenia :

A. 6 months
B. 1 month
C. less than 6 month

5- a negative sign of schizophrenia?

A. Delusion
B. Hallucinations
C. Alogia
D. Disorganized speech
E. Disorganized behavior

6- all of the following consider negative symptoms of schizophrenia except?

a. Anhedonia
b. affective mood
c. improvement of Thought process
d. lack of motivation

Past years questions

7- combination of symptoms of criteria A that if occur for 1 month are enough to diagnose patient with schizophrenia:

a- Prominent visual and auditory hallucination
b- perceptual and grandiose delusion
c- disorganized speech and emotional difference

8- incorrect thing about schizophrenia:

- equal male to female ratio
- delusions necessary for diagnosis
- lack of insight
- antipsychotics are the main treatment
- auditory hallucinations are the most common type of hallucinations

9- Good prognosis of SCHIZOPHRENIA?

Family history of mood disorder

10- not a DSM 5 criterion of schizophrenia?

Active symptoms at least 6 months

11- 25 years old female diagnosed with schizophrenia at this age and she slowly started to have delusions in the past 3 years, when her husband died, she had more delusions, which of the following predicts a poor outcome in this patient?

Insidious onset

12- Patient think that aliens are tracking him, which pathway is affected?

A- Mesocortical
B- Mesolimbic
C- Tuberoinfundibular
D- Nigrostriatal

13- All of the following are true EXCEPT?

A- Brief psychotic disorder more than 1 month but less than 6 months
B- Schizophreniform disorder more than 1 month but less than 6 months
C- Schizophrenia more than 6 months

Past years questions

14- patient came to the clinic with his family for the first time, and started to imitate your movements and words and was very resistant to your instructions for him to move as you ask, dx:

Schizophrenia- catatonic type

15- Difference between male and female with schizophrenia:

females have later onset and better prognosis.

16- the causative neurotransmitter of positive symptoms in schizophrenia?

Dopamine

17- Gender distribution of schizophrenia:

equal among males and females 1:1

18- which of the following is not a good prognostic factor for schizophrenia

Early age of onset
Long duration of it without treatment
Long first episode
there are a lot of questions like this so memorise the prognostic factors well

19- A typical case scenario for schizophrenia case with the question: what is the time life prevalence of the patient condition :

a. 1%
b. 5%
c. 10%

Past years questions

20- Which of the following are considered good prognostic factors for schizophrenia?
Select one:

a. poor premorbid functioning, no precipitating factors, soft neurological signs
b. Later age of onset, good premorbid functioning, family history of mood disorder, positive symptoms
c. Younger age at onset, being single/ divorced/widowed, family history of schizophrenia, longer duration of untreated illness
d. History of perinatal trauma, multiple relapses
e. Negative symptoms

21- Duration of brief psychotic episode?

Less than one month

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Schizoaffective disorder

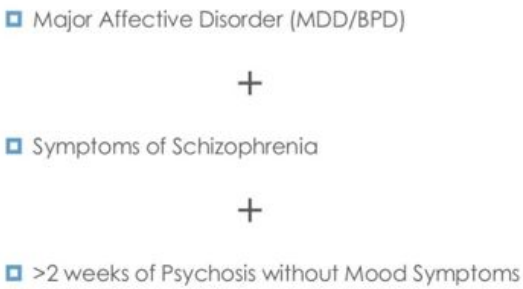
Introduction

- Schizoaffective disorder is a chronic mental health condition characterized primarily by symptoms of schizophrenia, such as hallucinations or delusions, ***and*** symptoms of a mood disorder, such as mania and depression.
- The two types of schizoaffective disorder — both of which include some symptoms of schizophrenia — are:
  - **Bipolar type**, which includes episodes of mania and sometimes major depression
  - **Depressive type**, which includes only major depressive episodes
- Pathophysiology and etiology
  - Neurotransmitter imbalance: Dopamine, Norepinephrine, Serotonin
  - Reduced hippocampal volumes
  - Thalamic and white matter abnormalities
- Epidemiology
  - Lifetime prevalence: 0.5-0.8%, females>males, no race based differences
  - in young patients → mania more common, in Elderly patients → depression more common
  - incidence of suicide: 10%

DSM-V diagnostic criteria

The diagnosis of schizoaffective disorder is made in patients who:

- Meet criteria for either a major depressive or manic episode during which psychotic symptoms consistent with schizophrenia are also met.
- Delusions or hallucinations for 2 weeks **in the absence of mood disorder symptoms** (this criterion is necessary to differentiate schizoaffective disorder from mood disorder with psychotic features).
- Mood symptoms present for a majority of the psychotic illness.
- Symptoms not due to the effects of a substance (drug or medication) or another medical condition.



Prognosis and treatment

Prognosis

- Patients with schizoaffective disorder had different outcomes depending on whether their predominant symptoms were **affective (better prognosis)** or **schizophrenic (worse prognosis).**
- **Worse with** poor premorbid adjustment, slow onset, early onset, predominance of psychotic symptoms, long course, and family history of schizophrenia.

Treatment

- hospitalization if necessary
- Pharmacotherapy →
- Psychotherapy
- life skills training
- Electroconvulsive therapy

- **Depressive Subtype**: SSRI (Sertraline, Fluoxetine) + Antipsychotic (Haloperidol, Resperidone, Paliperidone palmitate, Olanzapine)
- Refractory cases: Clozapine (CBC/week)
- **Manic Subtype**: Mood Stabilizers (Lithium, VA, Carbamazepine)+ Antipsychotic

Past years questions

1- to differentiate Schizoaffective from mood disorder with psychotic features patient must have 2 week of symptoms without manic or depressed episodes, the symptoms are:

a- hallucination and delusion
b- anhedonia and poverty of speech
c- disorganized speech and behavior

2- Female with insomnia, loss of appetite and weight loss of interest for 7 month, to be diagnosed with schizoaffective disorder?

Psychotic symptom for 2 weeks in the absence of Mood disorder symptom

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Delusional disorder

Definition

- Delusions are fixed, false beliefs that remain despite evidence to the contrary and cannot be accounted for by the cultural background of the individual
- They can be categorized as either bizarre or non bizarre.
  - A non bizarre delusion is a false belief that is plausible but is not true. Example: “The neighbors are spying on me by reading my mail.”
  - A bizarre delusion is a false belief that is impossible. Example: “An alien fathered my baby and inserted a microchip in my brain.”
- Delusional disorder occurs more often in middle-aged or older patients (after age 40). Immigrants, the hearing impaired, and those with a family history of schizophrenia are at increased risk.

Delusional types

Patients are further categorized based on the types of delusions they experience:

- **Erotomanic type:** Delusion that another person is in love with the individual.
  - Usually this person is famous, not of the patient's social circle and not attainable. They may attempt to contact the person of the delusion
- **Grandiose type:** Belief that one has special powers beyond those of a normal person.
- **Somatic type:** Physical delusions. Belief that one is infected with a disease or has a certain illness
- **Persecutory type:** Irrational belief that one is being persecuted.
  - Example: "The CIA is after me and tapped my phone."
- **Jealous type:** Delusions of unfaithfulness. (Othello syndrome)
- **Nihilistic delusion:** false belief that one doesn't exist or has become decreased.
  - Reverse of grandiose delusions
- **Delusion of guilt:** Belief that one is guilty or responsible for something.
  - Example: "I am responsible for all the world's wars."
- **Delusion of control:** include made volition, thought insertion, thought withdrawal, and thought broadcasting
- **Mixed type:** More than one of the above.
- **Unspecified type:** Not a specific type as described above.

Diagnosis

To be diagnosed with delusional disorder, the following criteria must be met:

- One or more delusions for **at least 1 month.**
- Does not meet criteria for schizophrenia.
- Functioning in life not significantly impaired, and behavior not obviously bizarre.
- While delusions may be present in both delusional disorder and schizophrenia, there are important differences (see Table 3-1).

TABLE 3-1. Schizophrenia versus Delusional Disorder

Schizophrenia	Delusional Disorder
■ Bizarre or nonbizarre delusions ■ Daily functioning significantly impaired ■ Must have two or more of the following: ■ Delusions ■ Hallucinations ■ Disorganized speech ■ Disorganized behavior ■ Negative symptoms	■ Usually nonbizarre delusions ■ Daily functioning not significantly impaired ■ Does not meet the criteria for schizophrenia, as described in the left column

Differential diagnosis

- **Obsessive-compulsive disorder:** A person who remains convinced that his/her obsessions and compulsions are true convictions, should be given the diagnosis of obsessive-compulsive disorder with absent insight.
- **Schizophreniform and schizophrenia:** This can be differentiated from delusional disorder by the presence of other symptoms of the active phase of schizophrenia.
- **Delirium/major neurocognitive disorder:** Can mimic delusional disorder but distinguished based on the chronology of symptoms.
- **Depression or bipolar disorder:** Delusions occur with mood episodes. A delusional disorder is diagnosed only when the span of delusions exceeds the total duration of mood symptoms.

Prognosis

The prognosis of delusional disorder is better with treatment and medication compliance.

- Almost 50% of patients have a good response to medications.
- more than 20% of patients report a decrease in symptoms .
- less than 20% of patients report minimal to no change in symptoms.

A good prognosis is also related to:

i. higher social and occupational functioning.
ii. early-onset before age 30 years.
iii. female.
iv. sudden onset of symptoms.
iv. short duration.

Delusional disorder is typically a chronic (ongoing) condition, but when properly treated, many people with this disorder can find relief from their symptoms.

Treatment

Difficult to treat, especially given the lack of insight and impairment.
Supportive therapy is often helpful.
1- PSYCHOTHERAPY: A good doctor-patient relationship is a key to treatment success.
2- HOSPITALIZATION: may be needed if the doctor believes that patients are dangerous.
3- ELECTROCONVULSIVE THERAPY
4- COGNITIVE THERAPY: helps the person learn to recognize and change thought patterns and behaviors that lead to troublesome feelings.
5- PHARMACOLOGICAL TREATMENT: Antipsychotic drugs are not generally used but are sometimes effective in reducing symptoms

A long-term treatment goal is to shift the person's focus away from the delusion to a more constructive and gratifying area, although this goal is frequently difficult to achieve.

Past years questions

1- Case of a person who believes that he owned the world what is your diagnosis:

grandiose delusion

2- Duration of delusional disorder?

a- 1 month
b- 2 m
c- 6 m
d- 2 weeks

3- 49 yo banker is referred by her internist due to 2 months of believing that she's in a relationship with a famous singer with no other hallucinations or disorganized speech, this is a case of:

delusional disorder

4- Definition of persecutory delusions:

Irrational belief that one is being persecuted.

5- Child believe that he has power to control people?

Grandiose delusion

6- Fixed false belief that events, remarks are directed at oneself?

Delusion of reference

7- Some one that suspicious about his lover and he is sure, doesn't have psychosis, Dx?

Delusional disorder

8- 28 yrs. old taxi driver with persecutory thoughts for 4 months, but functionally well and medically free, your DX:

delusional disorder.

9- True about delusional disorder?

functioning in life is not significantly impaired

Past years questions

10- A 17-year-old patient has recurrent intrusive thoughts which he perceives to be senseless And involuntary.He starts believing these thoughts are being inserted by his family members Though these are his own thoughts.Which of the following diagnoses must be considered Apart from OCD?

a. Schizophrenia
b. Anankastic personality
c. Depression
d. Schizotypal personality
e. Delusional disorder

11- Pt. think that his neighbor can order him and push him to do things he don't like to do:

delusion of control

12- A 27 y.o. male believes he is being spyed on by his work colleagues, other than that he has normal functioning, he has no substance abuse or other medical condition, what is the diagnosis?

Delusional disorder

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Personality disorders

Definition of personality disorders

Lifelong, persistent, deeply integrated maladaptive behavior and Inner experiences that:

- Characterizes the individual
- Deviates markedly from culturally accepted (accepted normal)
- Onset in adolescence or early adulthood
- Are **ego syntonic**: (acceptable to the ego)
- Are **alloplastic**: (adapt by trying to alter the external environment rather than themselves).
- Manifests in at least two of the following four areas: cognition, affectivity, interpersonal function, or impulse control and gratification need

Cluster	Behavioral description	Personality disorders
A	Odd, eccentric Weird	Paranoid, Schizoid, Schizotypal
B	Dramatic, erratic (Irritable) Wild	Antisocial, Borderline, Histrionic, Narcissistic
C	Anxious, fearful Worried	Avoidant, Dependent, Obsessive-Compulsive

Etiology

Genetics:

- Monozygotic twins reared apart have nearly same personalities.
- **Cluster A:** More common in the biological relatives of patients with schizophrenia than among control groups.
- **Cluster B:** Antisocial personality disorder is associated with alcohol use disorders ; depression is common in family backgrounds of patients with borderline personality disorder; a strong correlation between histrionic and somatization disorders.
- **Cluster C:** Patients with avoidant personality often have high anxiety levels; obsessive-compulsive traits are more common in monozygotic twins than in dizygotic twins – they also show some signs of depression.

Neurotransmitters:

- Low levels of 5-HIAA , a metabolite of serotonin is low in people who are impulsive and aggressive.

Environmental Factors:

- Children with minimal brain damage are at risk for antisocial personality disorder.
- Link between fearful children raised by fearful mothers and avoidant personality disorder.
- Cultures that encourage aggression may contribute to paranoid and antisocial personality disorders.

Cluster A: **Paranoid** personality disorder

A. A **pervasive distrust** and **suspiciousness** of others such that their motives are interpreted as malevolent, **beginning by early adulthood** and present in a variety of contexts, as indicated by **four (or more)** of the following:

1. **Suspects**, without sufficient basis, that others are **exploiting**, **harming**, or **deceiving** him or her.
2. Is preoccupied with **unjustified doubts** about the **loyalty** or **trustworthiness** of friends or associates.
3. Is **reluctant (hesitant) to confide in others** because of unwarranted fear that the information will be used maliciously against him or her.
4. **Reads hidden demeaning or threatening meanings** into benign remarks or events.
5. **Persistently bears grudges** (i.e., is unforgiving of insults, injuries, or slights).
6. **Perceives attacks on his or her character or reputation** that are not apparent to others and is **quick to react angrily** or to counterattack.
7. Has recurrent **suspicions**, without justification, regarding **fidelity of spouse** or sexual partner.

"GET FACT"

5 **G**rudges held for long periods
1 **E**xploitation expected (without a sufficient basis)
2 **T**rustworthiness of others doubted

7 **F**idelity of sexual partner questioned
6 **A**ttacks on character are perceived
3 **C**onfides in others rarely, if at all
4 **T**hreatening meanings read into events

B. Does not occur exclusively during the course of schizophrenia, a bipolar disorder or depressive disorder with psychotic features, or another psychotic disorder and is not attributable to the physiological effects of another medical condition.

Note: If criteria are met prior to the onset of schizophrenia, add "premorbid," i.e., "paranoid personality disorder (premorbid)."

Cluster A: **Schizoid** personality disorder

A. Pervasive pattern of **detachment from social relationships** and a **restricted range of expression of emotions** in interpersonal settings, **beginning by early adulthood** and present in a variety of contexts, as indicated by **four (or more)** of the following:

1. **Neither desires nor enjoys close relationships**, including being part of a family.
2. Almost always **chooses solitary activities**.
3. Has **little, if any, interest in having sexual experiences** with another person.
4. Takes **pleasure in few, if any, activities**.
5. **Lacks close friends** or confidants other than first-degree relatives.
6. Appears **indifferent (careless) to the praise or criticism** of others (Social phobia has severe fear of criticism).
7. Shows **emotional coldness, detachment**, or flattened affectivity.

B. Does not occur exclusively during the course of schizophrenia, a bipolar disorder or depressive disorder with psychotic features, another psychotic disorder, or autism spectrum disorder and is not attributable to the physiological effects of another medical condition.

Note: If criteria are met prior to the onset of schizophrenia, add "premorbid," i.e., "schizoid personality disorder (premorbid)."

"SIR SAFE"

Solitary lifestyle
Indifferent to praise or criticism
Relationships of no interest

Sexual experiences not of interest
Activities not enjoyed
Friends lacking
Emotionally cold and detached

Cluster A: **Schizotypal** personality disorder

A. a pervasive pattern of **social and interpersonal deficits** marked by acute discomfort with, and reduced capacity for, **close relationships** as well as by **cognitive or perceptual distortions** and **eccentricities of behavior**, beginning **by early adulthood** and present in a variety of contexts, as indicated by **five (or more)** of the following:

1. **Ideas of reference** (excluding delusions of reference).
2. **Odd beliefs or magical thinking** that influences behavior and is inconsistent with subcultural norms (e.g., superstitiousness, belief in clairvoyance, **telepathy(**or "**sixth sense**": in children and adolescents, **bizarre fantasies** or preoccupations).
3. **Unusual perceptual experiences**, including **bodily illusions**.
4. **Odd thinking and speech** (e.g., vague, **circumstantia**l, **metaphorical**, **over elaborate**, or **stereotyped**).
5. **Suspiciousness or paranoid ideation**.
6. **Inappropriate or constricted affect**.
7. **Behavior or appearance** that is **odd, eccentric, or peculiar**.
8. **Lack of close friends** or confidants other than first-degree relatives.
9. **Excessive social anxiety** that does not diminish with familiarity and tends to be **associated with paranoid fears** rather than **negative judgments** about self.

"UFO AIDER"

3 **U**nusual perceptions
8 **F**riendless except for family
2,4 **O**dd beliefs, thinking, and speech

6 **A**ffect – inappropriate, constricted
1 **I**deas of reference
5 **D**oubts others – suspicious
7 **E**ccentric – appearance/behavior
9 **R**eluctant in social situations, anxious

B. Does not occur exclusively during the course of schizophrenia, a bipolar disorder or depressive disorde with psychotic features, another psychotic disorder, or autism spectrum disorder.

Note: If criteria are met prior to the onset of schizophrenia, add "premorbid," e.g., "schizotypal personality disorder (premorbid)."

Table 10. Key Differences Among Schizoid, Schizotypal, and Schizophrenia

	Schizoid	Schizotypal	Schizophrenia
Thought Form	Organized	Organized, but vague and circumstantial	Disorganized, tangiental, loosening of associatations
Thought Content	No psychosis	No psychosis, may have ideas of reference, paranoid ideation, odd beliefs and magical thinking	Psychosis, hallucinations
Relationships	Solitary, NO desire for social relationships	Lacks close relationships, INTERESTED in relationships but socially inept	Socially marginalized, but not by choice

Cluster B: **Antisocial** personality disorder

A. A pervasive pattern of **disregard (Ignorance)** for and **violation (Breach) of the rights of others**, occurring **since age 15 years**, as indicated by **three (or more)** of the following :

1. **Failure to conform to social norms** with respect to lawful behaviors, as indicated by repeatedly performing acts that are grounds for arrest.
2. **Deceitfulness**, as indicated by repeated **lying**, use of aliases, or conning others for personal profit or pleasure.
3. **Impulsivity** or failure to plan ahead.
4. **Irritability** and **aggressiveness**, as indicated by repeated physical fights or assaults.
5. **Reckless** disregard for safety of self or others.
6. Consistent **irresponsibility**, as indicated by repeated **failure** to sustain consistent **work** behavior or honor **financial obligations**.
7. **Lack of remorse (Guilt or Regret)**, as indicated by being indifferent to or rationalizing (Justify) having hurt, mistreated, or stolen from another.

B. The individual is at least age 18 years.

C. There is evidence of conduct disorder with onset before age 15 years.

D. The occurrence of antisocial behavior is not exclusively during the course of schizophrenia or bipolar disorder.

"CALLOUS MAN"

Conduct disorder before age 15y;
Current age at least 18y
Antisocial acts; commits acts that are grounds for **A**rrest
Lies frequently
Lacunae – **L**acks a superego
Obligations not honored
Unstable – can't plan ahead
Safety of self and others ignored

Money problems – spouse and children are not supported
Aggressive, **A**ssaultive
Not occurring exclusively during schizophrenia or mania

Cluster B: **Borderline** personality disorder

A pervasive pattern of **instability of interpersonal relationships**, **self-image**, and **affects**, and **marked impulsivity**, beginning by **early adulthood** and present in a variety of contexts, as indicated by **five (or more)** of the following:

1. **Frantic (Mad) efforts to avoid real or imagined abandonment**.
2. A pattern of **unstable and intense interpersonal relationships** characterized by alternating between **extremes of idealization and devaluation**.
3. **Identity disturbance**: markedly and persistently **unstable self-image** or sense of self.
4. **Impulsivity** in at least two areas that are **potentially self-damaging** (e.g., **spending, sex, substance abuse, reckless driving, binge eating**).
5. **Recurrent suicidal behavior**, gestures, or threats, or **self-mutilating behavior**.
6. **Affective instability** due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
7. **Chronic feelings of emptiness**.
8. Inappropriate, **intense anger** or **difficulty controlling anger** (e.g., frequent displays of temper, constant anger, recurrent physical fights).
9. **Transient, stress-related paranoid ideation** or **severe dissociative symptoms.**

"I RAISED A PAIN"

Identity disturbance

Relationships are unstable
Abandonment frantically avoided (whether real or imagined)
Impulsivity
Suicidal gestures (threats, self-mutilation, etc.)
Emptiness
Dissociative symptoms

Affective instability

Paranoid ideation (stress-related and transient)
Anger is poorly controlled
Idealization followed by devaluation
Negativistic (undermine themselves with self-defeating behavior)

Cluster B: **Histrionic** personality disorder

A pervasive pattern of **excessive emotionality and attention seeking**, beginning by **early adulthood** and present in a variety of contexts, as indicated by **five (or more)** of the following:

1. **Uncomfortable** in situations in which he or she is **not the center o attention**.
2. Interaction with others is often characterized by **inappropriate sexually seductive** or provocative **behavior**.
3. Displays rapidly shifting and **shallow expression of emotions**.
4. Consistently uses **physical appearance to draw attention to self**.
5. Has a style of **speech** that is excessively **impressionistic and lacking in detail**.
6. Shows self-dramatization, **theatricality**, and **exaggerated expression of emotion**.
7. **Easily suggestible** (easily influenced by others or circumstances).
8. Considers **relationships to be more intimate than they actually are**.

"I CRAVE SIN"

2 **I**nappropriate behavior – seductive or provocative

1 **C**enter of attention

8 **R**elationships are seen as closer than they really are

4 **A**ppearance is most important

7 **V**ulnerable to others' suggestions

6 **E**motional expression is exaggerated

3 **S**hifting emotions, **S**hallow

5 **I**mpressionistic manner of speaking (lacks detail)

Novelty is craved

Cluster B: **Narcissistic** personality disorder

A pervasive pattern of **grandiosity** (in fantasy or behavior), **need for admiration**, and **lack of empathy**, beginning by **early adulthood** and present in a variety of contexts, as indicated by **five (or more)** of the following:

1. Has a **grandiose sense of self-importance** (e.g., exaggerates achievements and talents, expects to be recognized as superior without commensurate achievements).
2. Is **preoccupied with fantasies of unlimited success**, **power**, **brilliance, beauty**, or **ideal love**.
3. **Believes** that he or she **is "special"** and unique and can only be understood by, or should associate with, other special or high-status people (or institutions).
4. **Requires excessive admiration**.
5. **Has a sense of entitlement (Eligibility)** (i.e., unreasonable expectations of especially favorable treatment or automatic compliance with his or her expectations).
6. Is **interpersonally exploitative** (i.e., takes advantage of others to achieve his or her own ends).
7. **Lacks empathy**: is unwilling to recognize or identify with the feelings and needs of others.
8. Is often **envious of others** or believes that others are envious of him or her.
9. Shows **arrogant, haughty behaviors** or attitudes.

"A FAME GAME"

4 **A**dmiration required in excessive amounts

2 **F**antasizes about unlimited success, brilliance, etc.

9 **A**rrogant

6 **M**anipulative

8 **E**nvious of others

1 **G**randiose sense of importance

3 **A**ssociates with special people

5 **M**e first attitude

7 **E**mpathy lacking for others

Cluster C: **Avoidant** personality disorder

A pervasive pattern of **social inhibition**, **feelings of inadequacy**, and **hypersensitivity to negative evaluation**, beginning by **early adulthood** and present in a variety of contexts, as indicated by **four (or more)** of the following:

1. **Avoids occupational activities** that involve significant interpersonal contact because of **fears of criticism**, **disapproval**, or **rejection**.
2. Is **unwilling to get involved** with people **unless certain of being liked**.
3. Shows **restraint (Restriction) within intimate relationships** because of the **fear of being shamed or ridiculed**.
4. Is **preoccupied** with **being criticized** or **rejected** in social situations.
5. Is **inhibited in new interpersonal situations** because of **feelings of inadequacy**.
6. **Views self as socially inept (Incompetent)**, personally unappealing (not attractive), or **inferior to others**.
7. Is unusually **reluctant to take personal risks or to engage in any new activities** because they may **prove embarrassing**.

"RIDICULE"

3 **R**estrained within relationships
5 **I**nhibited in interpersonal situations
Disapproval expected at work
6 **I**nadequate (view of self)
4 **C**riticism is expected in social situations
2 **U**nwilling to get involved
Longs for attachment to others
7 **E**mbarrassment is the feared emotion

Cluster C: **Dependant** personality disorder

A pervasive and **excessive need to be taken care** of that leads to **submissive (Obedient) and clinging behavior** and **fears of separation**, beginning by **early adulthood** and present in a variety of contexts, as indicated by **five (or more)** of the following:

1. Has **difficulty making everyday decisions without an excessive amount of advice and reassurance** from others.
2. **Needs others to assume responsibility** for most **major areas of his or her life**.
3. Has **difficulty expressing disagreement** with others because of **fear of loss** of **support or approval**.
4. Has **difficulty initiating projects** or doing things on his or her own.
5. **Goes to excessive lengths to obtain nurturance and support** from others, to the point of volunteering to do things that are unpleasant.
6. **Feels uncomfortable or helpless when alone** because of exaggerated **fears of being unable to care for himself** or herself.
7. **Urgently seeks another relationship** as a source of care and support **when a close relationship ends**.
8. **Is unrealistically preoccupied with fears of being left to take care of himself** or herself

"DARN HURT"

3 **D**isagreement is difficult to express
1 **A**dvice – needs excessive input
2 **R**esponsibility for major areas delegated to others
5 **N**urturance – seeks excessive degree from others

6 **H**elpless when alone
8 **U**nrealistically preoccupied with being left to care for self
7 **R**elationships are desperately sought (when an established one ends)
4 **T**asks – has difficultly initiating projects

Cluster C: **Obsessive-compulsive** personality disorder

A pervasive pattern of **preoccupation with orderliness**, **perfectionism**, and mental and **interpersonal control**, at the **expense of flexibility, openness**, **and efficiency**, beginning by **early adulthood** and present in a variety of contexts, as indicated by **four (or more)** of the following:

1. Is **preoccupied with details**, **rules, lists, order, organization**, or schedules to the extent that the major **point of the activity is lost**.
2. Shows **perfectionism that interferes with task completion** (e.g., is unable to complete a project because his or her own overly strict standards are not met).
3. Is **excessively devoted to work** and productivity to the **exclusion of leisure** activities and friendships.
4. Is **overconscientious, scrupulous (Delicate), and inflexible** about **matters of morality**, **ethics**, or **value.**
5. Is **unable to discard worn-out or worthless objects** even when they have **no sentimental value**.
6. Is **reluctant** to delegate tasks or to **work with others** unless they submit to exactly **his or her way of doing things**.
7. Adopts a **miserly spending style toward both self and others**; money is viewed as something to be **hoarded for future catastrophes.**
8. Shows **rigidity and stubbornness.**

"LOW MIRTH"

Leisure activity is minimal
Organizational focus
Work and productivity predominate

Miserly spending habits
Inflexible around morals, values, etc.
Rigidity and stubbornness
Task completion impaired (by perfectionism)
Hoards items – cannot discard them

Treatment

Schizoid	Psychodynamic and/or group therapy
Paranoid	Not likely to seek therapy
Dissocial	Highly unresponsive to any form of treatment Disciplined environment may improve behaviour
Emotionally unstable	Chronic treatment seekers CBT/ DBT (self-harm & suicide)/ group therapy
Histrionic	Psychodynamic/ CBT/ Group therapy
Borderline	DBT
Anankastic (Obsessional)	Psychotherapy: insight-oriented psychodynamic techniques & CBT
Anxious [avoidant]	Psychodynamic / CBT / group therapy, social skills training
Dependent	Psychodynamic and/or CBT and/or group therapy/ assertiveness training

Drugs

Most effective if individually tailored and symptom focused

1. Antipsychotics – cognitive symptoms, impulsivity and intense angry affect
2. Monoamine Oxidase Inhibitors – borderline PD to alleviate abnormal mood
3. Carbamazepine and lithium – episodic behavioural dyscontrol and aggression

Drug treatment and psychotherapy not mutually exclusive and combination may be summative.

Prognosis

Cluster A: no change	Cluster B: varied, some may improve slowly	Cluster C: better outcome
Paranoid • Long-term prognosis usually not encouraging Schizoid • Relapse highly likely at end of treatment	Dissocial • Unremitting course • Early death -accident, homicide or suicide Emotionally unstable • 75–80% attempt or threaten suicide • 8– 10% success Histrionic • Symptoms can last lifetime	Anxious (avoidant) • Lower-functioning persons more likely to drop out of treatment.

Past years questions

1- one of these is not found in schizoid personality disorder?

A. detachment from social relationships
B. restricted range of expression of emotions
C. emotional coldness, detachment
D. Recurrent and intense mood swings

2- True about schizoid personality disorder:

a- Limited emotion and indifference to social relationships
b- failure to confirm social norms
c- failure social rejection
d- delusion of grandiosity

3- A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity ?

Borderline personality disorder

4- How to differentiate between paranoid personality disorder and paranoid schizophrenia delusional disorder?

Pervasive pattern of symptom

5- A person who wears very odd clothes, thinks he is a psychic (clairvoyance, telepathy, superstitiousness), has severe social anxiety, what kind of personality disorder does he have?

Schizotypal personality disorder

6- All are features of antisocial personality except?

a. attempts of self-harm
b. impulsivity
c. lack of remorse

7- A person who wears very odd clothes, thinks he is a psychic (clairvoyance,telepathy, superstitiousness), has severe social anxiety, what kind of personality disorder does he have?

A-schizoid personality disorder
B-Antisocial personality disorder
C-schizotypal personality disorder
D-paranoid personality disorder

Past years questions

8- A female patient presents to the doctor with complains of feeling unloved , lonely and unwanted, she flirts with the doctor and feels angry when the doctor doesn't reciprocate , which personality disorder is the likely diagnosis ?

A-Borderline
B-Avoidant
C-Antisocial
D-Histrionic

9- A 37-year-old lady has an eccentric hobby of preserving animal carcasses found On road side. She has also suspiciousness, magical thinking,and obsessive ruminations though she does not resist them. She has never had a diagnosis of schizophrenia.This description best fits which of the following diagnosis?
Select one:

a. Schizoid personality
b. Schizotypal disorder
c. Paranoid personality

10- Which Personality disorder is considered to be closely associated with bipolar diathesis?

a. Borderline personality disorder
b. Narcissistic personality disorder
c. Antisocial personality

11- Excessive concern with physical appearance ,shallow, labile affect, and egocentricity are a Feature of which of the following?

a. Histrionic personality
b. Narcissistic personality
c. Antisocial personality

12- which one of the personality disorders most likely to benefit from adjuvant pharmacotherapy?

borderline

13- Not a criteria for schizotypal disorder

a-Odd beliefs or magical thinking
b-indifferent to the praise or criticism
c-Suspiciousness or paranoid ideation
d-Inappropriate or constricted affect
e-Lack of close friends

Past years questions

14- Patient has schizotypal personality disorder, what other feature does he have?

- Odd belief and magical thinking
- need admiration
- avoidance of socializing

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Substance abuse disorders

Definition and diagnostic criteria

Definition: A chronic condition in which an uncontrolled pattern of substance use leads to significant physical , psychological, and social impairment or distress, with continued use despite substance-related problems.

Diagnostic criteria:

At least two of the following within a 12-month period:

- Using substance more than originally intended.
- Persistent desire or unsuccessful efforts to cut down on use.
- Significant time spent in obtaining, using, or recovering from substance.
- Craving to use substance.
- Failure to fulfill obligations at work, school, or home.
- Continued use despite social or interpersonal problems due to the substance use.
- Limiting social, occupational, or recreational activities because of substance use.
- Use in dangerous situations (e.g., driving a car).
- Continued use despite subsequent physical or psychological problem (e.g., drinking alcohol despite worsening liver problems).
- Tolerance (needing higher amounts of the substance to achieve the desired effect or experiencing diminished effects when repeating the same dose).
- Withdrawal (a substance-specific syndrome occurring when a patient stops or reduces heavy/prolonged substance use).

Epidemiology

- Sex: ♂ > ♀
- Alcohol and nicotine use are most common.
- In Jordan : Nicotine is the MC type.
- One-year prevalence of any substance use disorder in the United States is approximately 8%.

Psychiatric symptoms

- Mood symptoms are common among persons with substance use disorders.
- Psychotic symptoms may occur with some substances.
- Personality disorders and psychiatric comorbidities (e.g., major depression, anxiety disorders) are common among persons with substance use disorders.
- It is often challenging to decide whether psychiatric symptoms are primary or substance-induced.

Tobacco related disorders

- **Substance**: Nicotine from the tobacco plant (consumed in cigarettes, cigars, pipes, e-cigarettes)
- **Mechanism of action :**
  - stimulates nicotinic receptors in autonomic ganglia ⟶ sympathetic and parasympathetic stimulation
- **Epidemiology:**
  - Approx. 13% of adults in the US smoke cigarettes.
  - Most prevalent cause of preventable morbidity and mortality in the US.
- **Assessment:**
  - Smoking history is measured in pack years, which is used to quantify a person's lifetime exposure to tobacco.

Clinical features :

- **Tobacco intoxication**
  - Euphoria
  - Tachycardia , mild HTN , weight loss
  - Restlessness , anxiety
  - Increased gastrointestinal motility
  - Insomnia
- **Tobacco Withdrawal**
  - Dysphoria , depressed mood.
  - Irritability , frustration, anger , restlessness, anxiety.
  - Insomnia
  - Impaired concentration
  - Increased appetite, weight gain

Tobacco related disorders cont.

Treatment :

- Counseling and support
- **Varenicline** (partial nicotine receptor agonist): reduces positive symptoms and prevents withdrawal.
- **Bupropion**: reduces craving and withdrawal symptoms
- **Nicotine replacement therapy** (inhaler, lozenges, transdermal patch, nasal spray, gum).

Complications :

- COPD
- Cardiovascular disease
- Cancer (e.g., lung cancer)

Alcohol

■ Alcohol **activates gamma-aminobutyric acid (GABA), dopamine, and serotonin receptors** in the central nervous system (CNS). It inhibits glutamate receptor activity and voltage-gated calcium channels. GABA receptors are inhibitory, and glutamate receptors are excitatory; thus, **alcohol is a potent CNS depressant.**

■ Thus, alcohol abuse can produce serious temporary psychological symptoms including depression, anxiety, and psychoses.

■ On Long-term, escalating levels of alcohol consumption can produce tolerance as well as adaptation of the body that cessation of use can precipitate a withdrawal syndrome.

■ Lifetime prevalence of alcohol use disorder in the United States is 5% of women and 12% of men.

Alcohol intoxication

Alcohol intoxication (also called simple drunkenness) according to DSM-5 diagnostic criteria are based on evidence of recent ingestion of ethanol, maladaptive behavior, and at least one of several possible physiological correlates of intoxication.

Signs of Alcohol Intoxication

1. Slurred speech
2. Dizziness
3. incoordination
4. Unsteady gait
5. Nystagmus
6. Impairment in attention or memory
7. Stupor or coma
8. Double vision

Treatment:

- Perform an ABCDE survey to assess hemodynamic and respiratory stability
- Check vital signs and glucose
- Administer naloxone for opioid overdose if co-ingestion is suspected.
- Provide supportive care when appropriate
  - Manage dehydration and hypovolemia .
  - Respiratory support.
  - Prophylactic dose of thiamine supplementation (for Wernicke's).
  - Electrolytes repletion .
- Gastrointestinal evacuation (e.g., gastric lavage, induction of emesis, and charcoal) is not indicated in the treatment of EtOH overdose, except with significant amounts within 30-60 min
- A CT scan of the head may be necessary to rule out subdural hematoma or other brain injury.
- Severely intoxicated patients may require mechanical ventilation with attention to acid–base balance, temperature, and electrolytes while they are recovering

Complications of chronic alcohol use

Wernicke's encephalopathy

An **acute, reversible** condition caused by severe thiamine (vit B1) deficiency, often due to chronic heavy alcohol use.

The classical triad (seen in about a third of patients):

1. Confusion
2. Oculomotor dysfunction (vertical nystagmus is the most common), diplopia .
3. Gait ataxia

Other manifestations :

- Autonomic dysfunction: hypotension, syncope, hypothermia .
- peripheral neuropathy: paresthesia, foot drop, decreased DTR.
- Cardiovascular dysfunction: tachycardia, exertional dyspnea.

Treatment

- Immediate IV administration of high-dose Vit B1
- Thiamine must be administered before IV glucose infusions

Korsakoff syndrome

Chronic thiamine deficiency, especially in patients with alcohol use disorder, frequently progresses to Korsakoff syndrome, which is characterized by :

1. Irreversible personality changes, apathy, indifference.
2. Anterograde and retrograde amnesia, (anterograde is more common than retrograde) .
3. Confabulation, Patients create fabricated memories to fill in the gaps of their memory.

Other manifestations :

- Disorientation to time, place, and person.
- Hallucination.

Treatment :

- Oral thiamine supplementation to prevent further progression to irreversible complications.
- Psychiatric and psychological therapy.
- Memory strengthening exercises and aids.

Alcohol withdrawal

Clinical Presentation

■ Signs and symptoms include insomnia, anxiety, hand tremor, irritability, anorexia, nausea, vomiting, autonomic hyperactivity (diaphoresis, tachycardia, hypertension), psychomotor agitation, fever, seizures, hallucinations, and delirium tremens (DTs)

TABLE 7-3. Alcohol Withdrawal Symptoms

Alcohol withdrawal symptoms usually begin in 6–24 hours after the last drink and may last 2–7 days.
Mild: Irritability, tremor, insomnia.
Moderate: Diaphoresis, hypertension, tachycardia, fever, disorientation.
Severe: Tonic-clonic seizures, DTs, hallucinations.

Delirium tremens

- It is the most severe form of ethanol withdrawal, and it is a medical emergency that can result in significant morbidity and mortality.
- Occurs in 5% of patients .
- **Clinical features :**
  - Altered mental status (confusion)
  - Autonomic hyperactivity (such as tachycardia, diaphoresis, fever, anxiety, insomnia, and hypertension)
  - Perceptual distortions, most frequently visual or tactile hallucinations , and fluctuating levels of psychomotor activity, ranging from hyper excitability to lethargy.
- **Onset**: usually 72–96 hours after cessation of or reduction in alcohol consumption
- **Peak**: 2-5 days .

- Patients with delirium are a danger to themselves and to others, Because of the unpredictability of their behavior, patients may be assaultive or suicidal or may have hallucinations or delusional thoughts.
- Untreated DTs has a mortality rate of 20%.

Treatment of alcohol withdrawal

Minor alcohol withdrawal syndrome may not need pharmacotherapy in all cases. The patient needs *supportive care* in a calm and quiet environment and low lighting . and observation for a period of up to 36 h, after which he is unlikely to develop withdrawal symptoms

Benzodiazepines are the mainstay of management of alcohol withdrawal states, **followed by anticonvulsants**, which may be considered in *mild withdrawal states* due to their advantages of lower sedation and lower chances of dependence .

Moderate to severe alcohol withdrawal syndrome **Without seizures or DT**, patients should be started immediately pharmacological therapy, while monitoring the clinical signs of tachycardia and hypertension

Severe alcohol withdrawal **with seizures**, the occurrence of seizures during the alcohol withdrawal period is indicative of severe alcohol withdrawal. Seizure prophylaxis with lorazepam intravenously must be given to all patients with seizures in the current withdrawal period at presentation

Severe alcohol withdrawal **with DT**, the Treatment is by achieving a calm, but awake state or defined as a sleep from which the patient is easily aroused . done by using intravenous diazepam while closely monitoring the patient during the procedure . Refractory DT can be managed with phenobarbital or adjuvant antipsychotics .

Detoxification is the process of weaning a person from a psychoactive substance by gradually tapering the substance or by substituting it with a cross-tolerant pharmacological agent and tapering it.

Treatment of alcohol withdrawal

First-line treatment

Naltrexone :

Opioid receptor antagonist

Reduces desire and the "high" associated with alcohol.

Will precipitate withdrawal in patients with physical opioid dependence.

Acamprosate :

Thought to modulate glutamate transmission.

Use for relapse prevention in patients who have stopped drinking (post-detoxification).

Major advantage is that it can be used in patients with liver disease.

Contraindicated in severe renal disease.

Side effect as diarrhea

Second-line treatment

Disulfiram :

Blocks the enzyme aldehyde dehydrogenase in the liver, causing aversive reactions to alcohol (flushing, headache, nausea/vomiting, palpitations, shortness of breath) due to catecholamine release

Absolute Contraindication with severe cardiac disease, pregnancy, and psychosis.

Liver function should be monitored.

Best used in highly motivated patients, as medication adherence is an issue.

Topiramate :

Anticonvulsant that potentiates GABA and inhibits glutamate receptors.

Reduces desire for alcohol and decreases alcohol use.

Sedatives: Barbiturates

Phenobarbital, pentobarbital

- Potentiate the effects of GABA by binding to the receptor and increasing duration of chloride channel opening.
- Used in the treatment of epilepsy and as anesthetics
- have a lower margin of safety relative to BZDs.
- They are synergistic in combination with BZDs, respiratory depression can occur.
- they are physiologically addictive if taken in high doses over 1 month
- **Overdose**: respiratory depression
- Abrupt abstinence after chronic use can be life threatening.

Clinical Presentation :

- Signs and symptoms of withdrawal are the same as these of alcohol withdrawal.
- Tonic-clonic seizures may occur and can be **life threatening**.

Treatment :

- Benzodiazepines (stabilize patient, then taper gradually).

Sedatives: Benzodiazepines

Diazepam, oxazepam, lorazepam

- Medical uses (anxiety, alcohol and barbiturates withdrawal)

Classic overdose presentation:

- CNS depression with normal vitals
- Altered mental status
- Slurred speech
- Ataxia
- Rarely cause respiratory depression (safer drugs)

In case of overdose: use **flumazenil**

- Antagonist of benzodiazepine receptor.
- FDA-approved clinical uses for flumazenil include reversal agents for benzodiazepine overdose.
- Overdose has low mortality rate.
- Flumazenil may cause withdrawal seizures in patients with a history of seizures.

Benzodiazepine withdrawal

- Occurs with abrupt cessation in chronic user.
- Timing depends on drug
  Long-acting BZD → longer washout

Presentation:

- Tremors
- Anxiety
- Depressed mood (“dysphoria”)
- Hypersensitivity to sensations (noise, touch)
- Psychosis
- Seizures

Sedatives: Opioids

- Opioid overdose results from the toxic effects of exogenous opioid.
- Deaths related to opioid overdose have been steadily increasing in the United States over the past two decades because of a sharp increase in the prescription of opioid for chronic pain and increasing amounts of illegally manufactured fentanyl.

Common clinical features of opioid overdose include :

- Respiratory depression
- CNS depression
- miosis .

Treatment of suspected opioid overdose requires :

- Airway management and prompt assessment of the need for naloxone to counter opioid induced respiratory depression, which can be fatal. Inpatient admission is indicated for patients with ongoing respiratory depression , overdose from long-acting opioid , or medical complications from an opioid overdose.
- All patients with a non iatrogenic opioid overdose should undergo an assessment for substance use disorder and be discharged with take-home intranasal naloxone .

- **Clinical features**
- **Opioid toxidrome**
- The classic triad consists of:
- Altered mental status (e.g., CNS depression, euphoria)
- **Bilateral miosis (pinpoint pupils)**
- **Opioid-induced respiratory depression**

- **Acute management [6][7]**
- Follow an ABCDE approach .
- Initiate oxygen therapy and airway management as needed.
- Administer naloxone for opioid overdose in patients with opioid-induced respiratory depression.
- **Goal**: restore respiratory drive while avoiding precipitated withdrawal
- **Pharmacology**

  Mechanism of action: competitive μ-opioid receptor antagonist neutralizing opioid agonist effects

  Duration: 20–90 minutes (shorter than most opioids)

Stimulants: Amphetamine

- Potent stimulant by increasing synaptic levels of the biogenic amines, dopamine, norepinephrine and serotonin.
- Amphetamine are FDA-approved for treatment of attention deficit-hyperactivity disorder (ADHD) and narcolepsy .

Symptoms of amphetamine intoxication include :

- Euphoria
- Dilated pupils
- Tachycardia
- Chest Pain

- **Amphetamine withdrawal** can cause prolonged depression.
- **Complications** of their long half-life can cause:
  - ongoing psychosis, even during abstinence ,
- **so treatment** is: sedation and observation with antipsychotics .

Stimulants: Cocaine

- Cocaine blocks the reuptake of dopamine, epinephrine, and norepinephrine from the synaptic cleft, causing its stimulant effect
- **Overdose can cause:**
  - Death secondary to cardiac arrhythmia
  - MI
  - Seizure
  - Respiratory depression.
- **Treatment of cocaine use disorder:**
  - There is no (FDA)-approved pharmacotherapy for cocaine use disorder.
  - Off-label medications are sometimes used as naltrexone .
  - Psychological interventions are the mainstay of treatment.

Cocaine withdrawal

- Abrupt abstinence is <u>not life threatening.</u>
- causes post-intoxication depression .
- Occasionally, these patients can become suicidal.
- With mild-to-moderate cocaine use, withdrawal symptoms <u>resolve within 72 hours</u>; with heavy, chronic use, they may last for 1–2 weeks.
- **<u>Treatment is supportive</u>**, but severe psychiatric symptoms may warrant hospitalization.

Past years questions

1- Alcohol is? GABA agonist

2- Patient brought by his brother to the ER, he had a broad-based gate , on examination he was confused, ocular examination showed nystagmus, what should you ask about?

Alcohol intake

3- what is the first sign in alcohol Toxicity?

A) delirium
B) convulsions
C) nausea and vomiting
D) itching

4- What is the most illicit substance worldwide?

A) cannabis
B) nicotine
C) benzodiazepine
D) opioid

5- withdrawal of one of these substances can lead to a potential death?

A. Alcohol
B. Cocaine
C. Heroin

6- alcohol withdrawal is related to one of these neurotransmitters?

A. Dopamine
B. Norepinephrine
C. GABA

7- tactile hallucinations are most common with?

A. alcohol withdrawal
B. Bipolar disorder
C. Schizophrenia
D. drug intoxication

Past years questions

8- 50 year old man who has schizophrenia and he is alcoholism, came with hallucinations and delusion, what should not be included in the differential diagnosis?

A- Schizophrenia
B- Alcohol dependence
C- Substance induced psychotic features
D- Borderline personality disorder with psychotic features

9- 82 year old alcoholic, came to ER with loss of consciousness and was hospitalized for the management of pneumonia, he was still confused, agitated and ataxic with ocular problems (difficulty looking upward and downward) , what is your diagnosis?

Wernicke encephalopathy

10- A drug used for alcohol dependence?

A- Acamprosate or Naltrexone
B- flumazenil
C- clozapine
D- clonidine
E- naloxone

11- Naltrexone used in treatment of alcohol abuse by?

Reduce desire or craving and the high associated with alcohol

12- Which of the following is most useful in differentiating between schizophrenia and alcohol withdrawal delirium?

Level of consciousness

13- Opioid antagonist used in alcohol use disorder:

naltrexone.

Past years questions

14- Cocaine Mechanism of action:

Dopamine release

15- Tactile hallucination occurs in which of the following?

Cocaine psychosis

16- Appearance of symptoms after stopping chronic use of substance is called?

Withdrawal

17- All of the following are cns depressants except?

- cocaine
- sleeping pills
- tranquiliser

18- Neurotransmitter involved in benzodiazepine withdrawal :

GABA

19- Tolerance is defined as:

Increasing the dosage to re-amplify the drug's effects is called

20- True about substance use disorders?

Liver cirrhosis

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Impulse control disorders

Definition

- Impulse control disorders (ICDs) are characterized by problems in the self-regulation of emotions and behaviors (that violate the rights of others and/or conflict with societal norms).
- ICDs are not caused by another mental disorder, medical condition, or substance use. ICD is a big differential diagnosis

- CORE QUALITIES OF THE ICD;
  - Repetitive or compulsive engagement in behavior despite adverse consequences.
  - Little control over the negative behavior.
  - Anxiety or craving experienced prior to engagement in impulsive behavior.
  - Relief or satisfaction during or after completion of the behavior.

- TYPES OF IMPULSE CONTROL DISORDERS:

  1-Intermittent explosive disorder

  2-Kleptomania

  3-Pyromania

  4-Gambling disorder

  5-Trichotillomania

Intermittent explosive disorder

DSM-5 diagnosis and criteria

Either:

- Frequent verbal/physical outbursts (that do not result in physical damage to people, animals, or property) twice weekly for 3 months

Or:

- Rare (more than three times per year) outbursts resulting in physical damage to others, animals, or property.
- Outbursts and aggression are grossly out of proportion to the triggering event or stressor.
- Outbursts are not premeditated and not committed to obtain a desired reward
- Aggressive outbursts cause either marked distress or impairment in occupational/interpersonal functioning, or are associated with financial/legal consequences.
- Aggression is not better explained by another mental disorder, medical condition, or due to the effects of a substance (drug or medication).

Definition: Recurrent behavioral outbursts resulting in verbal and/or physical aggression against people or property.

■ More common in men than women.
■ Onset usually in late childhood or adolescence.
■ May be episodic, but course is generally chronic and persistent.

DIFFERENTIAL DIAGNOSIS

Medical: Brain tumours, endocrine disorders, degenerative disorders
Psychiatric: Antisocial personality disorder, Borderline personality disorder, schizophrenia, substance intoxication

TREATMENT

■ Treatment involves use of SSRIs, anticonvulsants, or lithium.
■ CBT (cognitive behavioral therapy)often used in combination with medications.
■ Group therapy and/or family therapy may be useful to create behavior plans to help manage episodes

KLEPTOMANIA (AN IMPULSE TO STEAL)

DIAGNOSIS AND DSM-5 CRITERIA

● Failure to resist **uncontrollable urges to steal** objects that are not needed for personal use or monetary value.
● Increasing internal tension immediately prior to the theft.
● Pleasure or relief is experienced while stealing; however, those with the disorder often report intense guilt and depression.
● Stealing is not committed to express anger/vengeance and does not occur in response to a delusion or hallucination.
● Objects stolen are typically given or thrown away, returned, or hoarded.

- Three times more common in women than men, though rare in the general population.
- illness usually begins in adolescence and course is episodic
- Higher incidence of comorbid mood disorders, eating disorders (especially bulimia nervosa), anxiety disorders, substance use disorders, and personality disorders.
- Higher risk of OCD and substance use disorders in family members
- 65% of patients with kleptomania suffer from bulimia nervosa.

Treatment

- may include CBT (including systematic desensitization and aversive conditioning) and SSRIs.
- There is also some anecdotal evidence for the use of naltrexone, which blocks reward pathways mediated by block endogenous opioids.

PYROMANIA

DIAGNOSIS AND DSM-5 CRITERIA

■ At least two episodes of deliberate fire setting.
■ Tension or arousal experienced before the act; pleasure, gratification, or relief experienced when setting fires or witnessing/participating in their aftermath.
■ Fascination with, interest in, curiosity about, or attraction to fire and contexts.
■ Purpose of fire setting is not for monetary gain, for expression of anger or vengeance, to conceal criminal activity, or as an expression of sociopolitical ideology. It is not in response to a hallucination, delusion, or impaired judgment (intoxication, neurocognitive disorder).
■ Fire setting is not better explained by conduct disorder, a manic episode, or antisocial personality disorder.
■ Must rule out arson. (criminal act/set fires with CRIMINAL intent

- **Definition:** Pyromania is the impulse to start fires, typically with feelings of gratification or relief afterward
- Rare disorder but much more common in men.
- Most begin to set fires in adolescence or early adulthood.
- High comorbidity with mood disorders, substance use disorders, gambling disorder, and conduct disorder.
- Episodes are episodic and wax and wane in frequency.

Presenting symptoms :

▪ Many watch fires in their neighborhood and/or set off fire alarms.
▪ Lack remorse for the consequences of their action and show resentment toward authority figures.
▪ May become sexually aroused by the fire.

TREATMENT

no standard treatment, **CBT, SSRIs, mood stabilizers, and antipsychotics** have all been used. Because no treatment has been proven to be beneficial, incarceration may be indicated.

Past years questions

1- patient have impulsive and aggressive outbursts that cause damage?

a. Intermittent explosive disorder
b. pyromania
c. kleptomaniac
d. general anxiety disorder

2- age for diagnosis of intermittent explosive disorder

a- childhood.
b- adolescents
c- middle age
d- early adulthood
e- late adulthood

3- the time needed to diagnose intermittent explosive disorder?

Twice a week for 3 months

4- Not a differential diagnosis for Intermittent Explosive Disorder?

a. Schizophrenia
b. Schizoid personality disorder
c. Antisocial personality disorder
d. Alcohol intoxication

5- Regarding intermittent explosive disorder all of the following statements are false except:

a. Frequent verbal/physical outburst 3 times weekly for 2 months
b. Outbursts and aggression are grossly out of proportion to the trigger or stressor
c. Outbursts are premeditated and committed to obtain a desired reward
d. Aggression is usually associated with drug and/or alcohol intake
e. Aggressive outbursts don't cause marked impairment in occupational/interpersonal functioning

Past years questions

6- Failure to resist uncontrollable urges to steal objects that are not needed for personal use or monetary value?

Kleptomania

7- which of the following is related to Kleptomania:

A. done for personal rewards
B. childhood or early adolescent onset

8- A woman is referred by her lawyer to establish the diagnosis of kleptomania after arrested for shoplifting. Which of the following does not suggest this diagnosis?
Select one:

a. The stolen items are useless for her.
b. This is the first episode of shoplifting in her whole life.
c. She committed shoplifting for many times but she was not caught
d. She consulted psychiatrist for compulsive stealing
e. She threw away the stolen items immediately

9- pyromania categorized in DSM 5 criteria of:

A. impulse control, conduct
B.GAD
C. phobia
D. panic attack

10- In kleptomania, a person feels tension that is only relieved after stealing, what is this called psychologically?

Aversive conditioning
Behavioural desensitisation
Classic conditioning

18

Elimination disorders

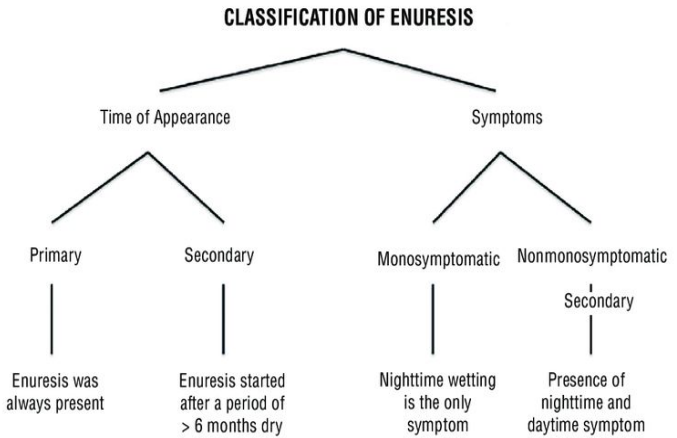
Definition

Disorders characterized by developmentally inappropriate elimination of urine or feces
Though typically involuntary, this may be intentional.
includes: 1. Enuresis 2. Encopresis

- Most children have achieved bowel and bladder continence by age 4 & 5

1- Enuresis: The act of Involuntary urination; either during the day (diurnal) or at night (nocturnal)
Nocturnal enuresis is 2-3 times more common than diurnal enuresis
Primary Enuresis : never gained urine continence
Secondary Enuresis , This type may be caused by psychological factors or an underlying medical condition.
Day time symptoms:

- Urgency
- Hesitancy
- Frequency
- Leakage
- Sensation of incomplete avoiding



Enuresis

Diagnostic Criteria

1. Recurrent urination into clothes or bed-wetting.
2. Occurs two times per week for at least 3 consecutive months OR result in clinical distress or marked impairment in social.
3. At least 5 years old developmentally.
4. Not due to a substance (e.g., diuretic) or another medical condition (e.g., UTI, neurogenic bladder, diabetes , spina bifida, seizure disorder).

ask about :

1- If other family members have had enuresis
2- How often your child urinates during the day
3- How much your child drinks in the evening
4- If your child have had recent stress in their life

Assessment:

1) History : The most important step
 Child's Age Onset of Symptoms (Primary/Secondary) Timing (Nocturnal/Diurnal/Both) Frequency Family History Developmental History
2) 48-hour frequency/ volume chart
3) physical examination:
It is essential that organic causes of incontinence are ruled out. A full pediatric and neurological exam is recommended.
4) Psychiatric assessment:
done by using a short screening questionnaire such as the SSIPPE first and a long questionnaire next such as the CBCL

Consults
 Pediatric Urology
-Ultrasound of Genitourinary system -Voiding Cystourethrogram (These modalities may help reveal underlying abnormalities such as detrusor hypertrophy and over activity and they may also demonstrate bladder are flexia and urinary retention)
 Pediatric Neurology EEG; underlying seizure
 Sleep Study Obstructive Sleep Apnea

Treatment of enuresis

Treatment of enuresis:

-Education - Watchful Waiting - Non-pharmacological Management - Pharmacological Management - Therapeutic Interventions

Non-Pharmacological Interventions :

First line treatment Behavioral Modification:

1. Scheduled voiding times
2. Nighttime fluids restriction
3. Using waterproof bed covers
4- Bladder-Volume Alarm
5- Star Chart System
6- Nightlifting
7- Timed Night Awakening
8- Bladder Training Exercises/Overlearning

Indications for pharmacological interventions:

1) Lack of motivation in the children
2) Family overwhelmed by demands such as a work situation, cramped housing,
3) Short-term dryness is required , e.g., for school outings

Pharmacological Interventions

I. Desmopressin

One starts with the low dosage of one pill 0.2mg in the evening for two weeks. If the child is dry or a marked reduction of wet nights is documented one stays with this dosage . Otherwise, medication is increased up to 0.4mg.

II. Imipramine

A low dose of 10mg to 25mg in the evening is often sufficient.

NOTE: Due to high risk for cardiac arrhythmias even with therapeutic doses, a detailed family history, ECG before and during treatment and blood tests are recommended.

III. Oxybutynin (antispasmodics)

IV. TCAs

V. NSAIDs(Indomethacin)

Additional Treatments :

This type of intervention can significantly address secondary enuresis which may be triggered by a psychological stressor

- Cognitive Behavioral Therapy
- Psychodynamic Psychotherapy
- Biofeedback: This is a form of pelvic floor physical therapy

Encopresis

Defined as the repeated passage of feces in inappropriate places. The voiding is typically regarded as involuntary although it may be volitional.

1. Primary Encopresis

due to Delayed Physical Maturation □ Inappropriate Toilet Training

2. Secondary Encopresis

Birth of sibling □ Parental Divorce □ Abuse □ Autism / Psychosis

3. Retentive Encopresis

encopresis with constipation and overflow incontinence (Large Stools and Painful Defecation)

4. Non-retentive encopresis

encopresis without constipation and overflow incontinence

DSM-v Diagnostic Criteria

Recurrent defecation into inappropriate places (e.g., clothes, floor)

- Occurs at least one time per month for at least 3 months.
- At least 4 years old developmentally.
- Not due to a substance (e.g., laxatives) or another medical condition (e.g., hypothyroidism, anal fissure, spina bifida) except via a constipation related mechanism.

Assessment

The **history** should focus on these items:
1. Developmental history.
2. Recent Stressors.
3. Mental Health -anxiety, depression, MR, Autism, ODD,CD
4. Current Medications.
5. Previous Surgeries.
6. Past Medical History.
7. Family History.
8. Previous Treatment for encopresis.

Physical Examination
1. Abdominal pain/distention
2. Height/Weight
3. Neurological Examination
4. Skin Examination
5. Rectal Examination
6. Stool Collection: parasites
7. Blood Testing: TSH hypothyroidism
8. Rectal Biopsy/Barium Enema
9. Abdominal XRAY

Treatment

Advice/Education

- Dietary Changes (foods high in fiber) □ Increase Fluid Intake □ Make Toilet Training Non-Threatening □ Make Toilet Accessible □ Regular Bathroom Times

Nonpharmacological

- CBT
- Psychodynamic Psychotherapy

Pharmacological Intervention

- Laxatives
- Mineral Oil
- Stool Softeners

Past years questions

1- In DSM-V criteria for enuresis, what is the duration needed for diagnosis?

2 times a week for 3 Months

2- Age for enuresis diagnosis?

A) 5 years
B) 3 years
C) 4 years
D) 7 years

3- First line pharmacological treatment for enuresis:

Desmopressin

4- At which age we can start the diagnosis of Encopresis?

4 years

5- Child voluntary hold his stool due to painful defecation?

retentive encopresis

6- All of the following are present in DSM5 criteria of encopresis except?

A. Chronological age >4 years
B. Event occur at least once a month for 3 months
C. Repeated passage of feces in inappropriate places
D. The condition is not attributable to medical condition or substance
E. it occur only during sleep

7- Encopresis ?

A- At least 4 years old developmentally
B- Repeatedly passes feces into an inappropriate places
C- Happens at least once a month for 3 months
D-all of above

8- One of the following is key diagnostic criteria of DSM-V for Encopresis?

- Impaired Social interaction
-occurs one time per week for 3 month

9- Least recognized encopresis chronic constipation type? – Retentive encopresis

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Autism spectrum disorders

ASDs

A group of disorders characterized by abnormalities in communication and social interaction and by restricted repetitive activities and interests. • Usually development is abnormal from infancy, and most cases are manifested before the age of 5 years.

ASDs:

1) Autism
2) Asperger's disorder
3) Childhood disintegrative disorder
4) Not otherwise specified (PDD-NOS)
5) Rett syndrome

ASD

Autism is a childhood-onset disorder characterized by 3 types of deficits:
1. Social deficits 2. Communication impairment 3. Rigid ritualistic interests

1- Social deficit

at least **two** of the following:

a) Marked impairment in nonverbal behaviors, such as eye-to-eye contact, facial expression, body postures, and gestures to regulate social interaction
b) Failure to develop peer relationships appropriate to developmental age
c) A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest)
d) Lack of social or emotional reciprocity

2- Communication impairment

At least one of the following:

a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
b) In individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
c) Stereotyped and repetitive use of language or idiosyncratic language
d) Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level

3- RITUALISTIC INTEREST **at least one** of the following:

a) Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
b) Apparently inflexible adherence to specific, nonfunctional routines or rituals
c) Stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting or complex whole-body movements)
d) Persistent preoccupation with **parts** of objects

ASD

Epidemiology

- The 4:1 ratio of diagnosis in males: females.
- Symptoms typically recognized between 12 and 24 months old but varies based on severity.

Risk factors and possible etiology

1. ASD has a strong genetic basis. The heritability of ASD in the population is around 90%.
2. Fragile X syndrome = most common known single gene cause of ASD.
3. Birth defects, including cerebral palsy, gestational age less than 35 weeks, and Prenatal neurological insults (e.g., infections, drugs), advanced paternal age, and low birth weight.
4. Association with epilepsy
5. Maternal use of valproate in pregnancy.
6. Socioeconomic status

Treatment

There is no cure for autism, but various treatments are used to help manage symptoms and improve basic social, communicative, and cognitive skills:

1) Early and Intensive Behavioural Intervention EIBI)
2) Social Skills Training.
3) Behavioural therapy.
4) Cognitive-Behavioral Therapy
5) Low-dose atypical antipsychotic medications (e.g., risperidone, aripiprazole) may help reduce disruptive behavior, aggression, and irritability.

ASPERGER SYNDROME (AS)

Mild autism
• Usual onset : before two years old with long term duration
• It is neurodevelopmental disorder characterized by significant difficulties in social interaction and non-verbal communication, along with restricted and repetitive patterns of behavior and interest.
• Differs from other forms of ASD by relatively unimpaired language and intelligence

RETT SYNDROME

- Rett's disorder (or Rett's syndrome) is a rare X-linked condition that occurs almost exclusively in girls.
- After a period of normal development in the first months of life, head growth slows and over the next 2 years there is arrest of cognitive development and loss of purposive skilled hand movements.
- Stereotyped movements develop, with hand-clapping and hand-wringing movements.
- Ataxia of the legs and trunk may develop.
- Interest in the social environment diminishes in the first few years of the disorder, but may increase again later.
- Expressive and receptive language development is severely impaired and there is psychomotor retardation.
- Some patients develop severe intellectual disability.

CHILDHOOD DISINTEGRATIVE DISORDER (CDD)

• Also known as HELLERS SYNDROME and DISINTEGRATIVE PSYCHOSIS .
• Usual onset 3 – 4 years of age .
• a rare condition that begins after a period of normal development usually lasting for more than 2 years. It is unclear how far this is distinct from childhood autism and hence it is included in the DSM-5 under ASD.
• There is a marked loss of cognitive functions, abnormalities of social behavior and communication, and unfavorable outcome
• The child loses motor skills and bowel or bladder control.
• The condition may arrest after a time, or progress to a severe neurological condition with worsening symptoms

PDD –NOS

• The term atypical autism denotes a residual category for pervasive developmental disorders that resemble ASD but do not meet the diagnostic criteria for any of the syndromes within this group

Past years questions

1- Regarding signs & symptoms of Autism one of the following is incorrect :
Select one:

a. Simple motor stereotypes
b. Lining up toys or flipping objects
c. Apparent indifference to changes of routine
d. Rigid thinking patterns
e. Idiosyncratic phrases

2- The following are true about the etiology of Autism except:
Select one:

a. Higher concordance among MZ twins.
b. Increased rate of perinatal complications.
c. Decreased brain serotonin levels
d. Condition is 50 times more frequent in the siblings of affected persons

3- A 6-year- old boy who is having difficulty in school and avoids interaction with his classmates and others, who notice him making odd repetitive movements with his hands. What is the most likely diagnosis?

A . Autism.
B . Selective mutism.
C . Childhood schizophrenia.

4- All of the following are early signs of Autism EXCEPT:

a. Prefers to play alone
b. Hypoactive
c. Delay in speech development
d. Rejecting cuddles
e. Sleep problems

Past years questions

5- ASD in children is characterized by all of the following except? Select one:

a. Visual Hallucinations
b. Repetitive behaviors
c. Restrictive interests
d. Impairments is social communication
e. Inability to interact with peers

6- Which of the following is not ASD criteria?

A) marked impairment in nonverbal behaviors.
B) stereotyped and repetitive motor mannerisms.
C) persistent preoccupation with parts of objects
D) answer without permission

7- Wrong about ASD:

appropriate and emotionally congruent reactions

8- Which of the following is incorrect about asperger syndrome?

- marked impairment in language and intelligence
- repetitive behavior

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ADHD

Definition

ADHD is a chronic condition characterized by persistent inattention, hyperactivity, and impulsivity inconsistent with the patient's developmental stage.

ADHD subcategories
A. Predominantly inattentive type
B. Predominantly hyperactive type
C. Combined type

The etiology of ADHD is multifactorial and may include:
• Genetic factors: ↑ rate in first-degree relatives of affected individuals
• Environmental factors: Low birth weight, smoking during pregnancy, childhood abuse/neglect, neurotoxin/alcohol exposure

Epidemiology
- Four times more common in males
- Most cases among children 6 to 12 years old
- Symptoms persist to adulthood up to 2/3 of cases

Symptoms

Inattentive Symptoms

• Fails to give close attention to details or makes careless mistakes.
• Does not appear to listen.
• Struggles to follow through on instructions.
• Has difficulty with organization.
• Avoids or dislikes tasks requiring a lot of thinking.
• Loses things
• Is easily distracted.
• Is forgetful in daily activities.

Hyperactivity Symptoms

• Fidgets with hands or feet or squirms in chair.
• Has difficulty remaining seated.
• Runs about or climbs excessively in childhood.
• Difficulty engaging in activities quietly.
• Talks excessively.
• Blurts out answers before questions have been completed.
• Difficulty waiting or taking turns.
• Interrupts or intrudes upon others.

Diagnostic Criteria

- Frequent symptoms of hyperactivity/impulsivity
- Present in more than one setting (school/home)
- Persist for at least six months
- Present before age of 12
- Impairs social/school functioning
- Excessive for developmental level of the child

Prognosis

• Stable through adolescence.
• Many continue to have symptoms as adults (inattentive > hyperactive) .
• High incidence of comorbid oppositional defiant disorder, conduct disorder(CD), and specific learning disorder.

Treatment

Behavioural interventions (rewards, time out) - Behavioural therapy - Stimulants

- Atomoxetine (Selective norepinephrine re-uptake inhibitor)

Considered a non-stimulant treatment for ADHD
May have less insomnia, loss of appetite
No direct effects on dopamine systems in CNS
Dopamine effects may cause euphoria (abuse potential)
Common side effects:

- GI distress / Headaches
- Sedation
- Black box warning about suicidal ideation

It may take 2 weeks to see any results, it is taken daily, and you should taper it down when discontinuing it.

- Alpha-2 agonists

- Clonidine: Old, rarely used hypertension drug
Key side effect: sedation
- Guanfacine
Major effects: Increases prefrontal cortical activity & Regulate attention and behaviour
Common side effects:

- GI Distress/ Headaches
- Lowered HR & BP
- Sedation (seen more in Clonidine so may be used to help with insomnia).

- **Stimulants**

1. Increase CNS dopamine and norepinephrine activity
2. Improve ADHD symptoms

- Methylphenidate (Ritalin)
- Amphetamine (Adderall)
- Dexmethylphenidate (Focalin)

- Adverse Effects

Loss of appetite , Weight loss , Insomnia , Abuse potential

Past years questions

1- poor prognostic factor in ADHD?

Late identification

2- Guanfacine which is used in treatment of ADHD acts as?

alpha-2 – agonist

3- True about ADHD?

Most commonly comorbid with depression and conduct disorder

4- Second line treatment of choice for kids with ADHD: Select one:

a Methylphenidate
b. Ritalin
c. Atomoxetine
d. Diazepam
e. Risperidone

5- Which of the following is not a common comorbidity in children with ADHD? Select one:

a Oppositional defiant disorder
b Eating disorders
c. Conduct disorder.
d. Specific learning disability
e. Anxiety disorders

6- All of the following are inattentive symptoms of ADHD except:

a Difficulty remembering daily activities
b. Difficulty to follow through instructions
c. Difficulty with organization
d. Difficulty waiting or taking turns
e. Difficulty sustaining attention

7- Stimulants are useful in ADHD.The symptom that best responds to stimulant Is

a. Insomnia
b. Hyperactivity
c. Inattention

Past years questions

8- In which of the following ways does the hyperactivity component of ADHD typically manifest in adults?
Select one:

a. Motor tics
b. Pressured speech
c. Restlessness

9- A 9-year-old boy is referred to you for evaluation after increasingly disruptive behavior in school. The boy will make a disruptive sounds or shout out in the class. They describe him as polite and neat but restless and jumpy, which is the most likely diagnosis ?

A . Obsessive-compulsive disorder.
B . Attention-deficit hyperactivity disorder.
C . Oppositional defiant disorder.

10- which of these is not a side effect of methylphenidate

a-weight loss
b-anorexia
c-lethargy
d-insomnia

11- Wrong about methylphenidate?

Weight gain

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Learning disorders

DEFINITION

- Group of neurological disorders that result from the problem of storing, processing and producing information. And difficulty acquiring .school skills or academic skills.
- Children with learning disabilities are not dumb or lazy . Infect, they usually have average or above average intelligence. Their brains just process information's differently.

- Learning disorder is a diagnostic term. A psychiatric diagnoses a person with a learning disorder based on a list of symptoms.
- Learning disability is a legal, social term. A public school identifies a student with a learning disability.

- Specific learning disorders are neurodevelopmental disorders that are typically diagnosed in early school-aged children, although may not be recognized until adulthood. They are characterized by a persistent impairment in at least one of three major areas: reading, written .expression, and/or math

DYSLEXIA

Difficulty learning reading

- most common learning disability
- Reading impairment is characterized by
  - ✔ difficulty in recognizing words
  - ✔ Slow and inaccurate reading
  - ✔ poor comprehension
  - ✔ difficulties with spelling

- They may often gravitate to other mediums of expression such as pictures, video, or audio
- It is often comorbid with other disorders in children, particularly, ADHD

There is a disruption in the systems in the back.

- To compensate, they activate systems in the FRONT of the brain on the left AND right side.

Different parts of the brain are used while reading

- Neuro-typical readers use all three areas together to read.
- Readers with dyslexia rely more on the front of the brain.
- Neuro-typical readers use the left side while reading.
- Readers with dyslexia rely more on the right side of the brain

DYSGRAPHIA

Difficulty learning to write

- Symptoms in a child with dysgraphia:

1) Difficulty in writing letters
2) Trouble in spacing letters correctly on the page
3) Difficulty in writing in a straight line
4) Difficulty holding and controlling a pencil or other writing tool

- All dyslexics have dysgraphia but not the opposite

DYSCALCULIA

Difficulty understanding numbers and doing mathematical calculations

Symptoms in children with dyscalculia:

1) Difficulty reading analog clocks
2) Difficulty finding what number is larger
3) Difficulty in multiplication, subtraction, addition and division tables
4) Difficulty with time, directions, recalling schedules and sequences of events

DYPRAXIA

- Developmental co-ordination disorder (DCD), also known as dyspraxia, is a condition affecting physical co-ordination. It causes a child to perform less well than expected in daily activities for their age, and appear to move clumsily.
- It can affect your co-ordination skills – such as tasks requiring balance, playing sports or learning to drive a car. Dyspraxia can also affect your fine motor skills, such as writing or using small objects.
- Children with verbal dyspraxia have problems with coordinating their muscle to produce speech sounds and words. They have difficulties in producing clear, fluent speech or saying certain words or sentences. Children with verbal dyspraxia might speak slowly

VISUAL PROCESSING DISORDERS

• The inability to differentiate between foreground and background as well as similar looking numbers ,letters, shapes , object s and symbols.

- **AUDITORY PROCESSING DISORDER**

• Trouble distinguishing similar sounds or confusing the sequence of spoken or heard sounds.

NONVERBAL LEARNING DISABILITIES

• The inability to recall the names or words for common objects.

General information about learning disorder

- Learning disorders are among the most frequently diagnosed developmental disorders in childhood.
- Prevalence in school age children: 5–15%
- Males are two times more affected than females
- Commonly co-occurs with other neurodevelopmental disorders, such as ADHD(in one third of patients), communication disorders, developmental coordination disorder, autistic spectrum disorder Also comorbid with other mental disorders, including anxiety, depressive, and bipolar disorders

DSM5 CRITERIA FOR DIAGNOSIS

A) Difficulties learning and using academic skills, as indicated by the presence of at least one of the following symptoms that have persisted for at least 6 months, despite the provision of interventions that target those difficulties:

1- Inaccurate or slow and effortful word reading (e.g. - reads single words aloud incorrectly or slowly and hesitantly, frequently guesses words, has difficulty sounding out words).

2- Difficulty understanding the meaning of what is read (e.g. - may read text accurately but not understand the sequence, relationships, inferences, or deeper meanings of what is read).

3- Difficulties with spelling (e.g. - may add, omit, or substitute vowels or consonants).

4- Difficulties with written expression (e.g. - makes multiple grammatical or punctuation errors within sentences; employs poor paragraph organization; written expression of ideas lacks clarity).

5- Difficulties mastering number sense, number facts, or calculation (e.g. - has poor understanding of numbers, their magnitude, and relationships; counts on fingers to add single digit numbers instead of recalling the math fact as peers do).

6- Difficulties with mathematical reasoning (e.g. - has severe difficulty applying mathematical concepts, facts, or procedures to solve quantitative problems).

- B) The affected academic skills are substantially and quantifiably below those expected for the individual's chronological age, and cause significant interference with academic or occupational performance or with activities of daily living.
- C) The learning difficulties begin during school-age years but may not become fully manifest until the demands for those affected academic skills exceed the individual's limited capacities (e.g. - as in timed tests, reading or writing lengthy complex reports for a tight deadline, excessively heavy academic loads).
- D) The learning difficulties are not better accounted for by intellectual disabilities, sensory (visual or auditory) disorders, other mental or neurological disorders, psychosocial adversity, lack of proficiency in the language of academic instruction, or inadequate educational instruction.

Differential diagnosis

• Normal variation in academic attainment.
• Intellectual disability.
• Neurological or sensory disorders.
• ADHD.
• Psychotic disorder.

• SLD is lifelong, but the course and clinical expression is variable. Depending on the range and severity of the disability , comorbidities and available support system and intervention.

The earlier the diagnosis for SLD, the better the prognosis

TREATMENT

- Intense educational interventions (special classrooms, remedials, or Systematic individualized education tailored to child's specific needs "1 to 1 tutoring") and behavioral techniques.
- Some tips:
  - Slow down instructions
  - Keep eye contact to make sure the student is engaged
  - Know your student and build rapport
  - Practice small games before playing on a larger scale
  - Peering partners may be affective
  - BE PATIENT

Past years questions

1- Deficits in counting and calculations and solving math problems?

Dyscalculia

2- Learning disorders are most commonly associated with which of following disorders?

A .Attention deficit hyperactivity disorder.
B .Bipolar disorder
C .Tourette disorder
D .Asperger disorder

3- Difficulty recognizing words with slow inaccurate reading is called:

Dyslexia

4- A child with dyscalculia find difficulty in?

A. Reading
B. Writing
C. Mathematics
D. intellectual function
E . memory

5- Definition of dyspraxia?

a condition affecting physical coordination. It causes a child to perform less well than expected in daily activities for their age

6- child has difficulties with understanding spoken and written:

- dysgraphia
- dyspraxia
- phonological processing disorder

7- Learning disorders can affect academic performance, give an example of a specific learning disorder associated with reading?

Dyslexia

8- The most common learning disability

Dyslexia

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Dementia

Definition and criteria of dementia

A syndrome which is characterized by Definition by an **acquired** global impairment of intellect, memory, and personality, but **without impairment of consciousness** and at least one of the following cognitive disturbances:

• Aphasia, which is deterioration of language function & the person is unable to communicate effectively with others.

• Apraxia, which is the loss of ability to execute or carry out skilled movement and gestures, despite having the physical ability and desire to perform them.

• Agnosia, (also known as primary visual agnosia, monomodal visual amnesia, and visual amnesia) is a neurological disorder characterized by an inability to recognize and identify objects or persons using one or more of the senses.

• Executive dysfunction, which is the inability to think abstractly and to plan, initiate, sequence, monitor and stop complex behavior & disruption a person's ability to manage their own thoughts, emotions and actions. Also commonly seen in : addictions, behavioral disorders, brain development disorders and mood disorders.

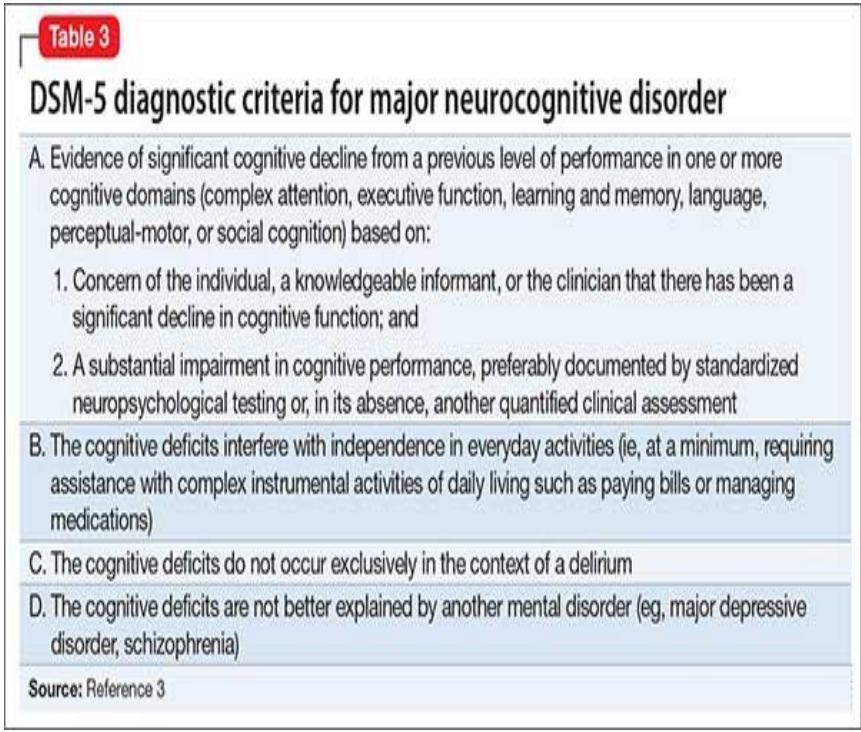

Table 3

DSM-5 diagnostic criteria for major neurocognitive disorder

A. Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on: 1. Concern of the individual, a knowledgeable informant, or the clinician that there has been a significant decline in cognitive function; and 2. A substantial impairment in cognitive performance, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment
B. The cognitive deficits interfere with independence in everyday activities (ie, at a minimum, requiring assistance with complex instrumental activities of daily living such as paying bills or managing medications)
C. The cognitive deficits do not occur exclusively in the context of a delirium
D. The cognitive deficits are not better explained by another mental disorder (eg, major depressive disorder, schizophrenia)

Source: Reference 3

Common symptoms

- Memory impairment is the prominent early sign of dementia. Patients have difficulty learning new material and forget previously learned material.
- Initially recent memory is impaired, for example, forgetting where certain objects were placed or that food is cooking on the stove.
- In later stages, dementia affects remote memory; patients forget the names of their adult children, their life-long occupations, even their names.
- Patients may also exhibit :
    - Aphasia usually begins with the inability to name familiar objects or people then progresses to speech that becomes vague or empty with excessive use of terms such as “it” or “thing.”
    - Echolalia (echoing what is heard) or
    - Palilalia (repeating words or sounds over and over)
    - Apraxia may cause patients to lose the ability to perform routine self-care activities such as dressing or cooking.
- Agnosia is frustrating for patients: they may look at a table and chairs but are unable to name them.
- Disturbances in executive functioning are evident as patients lose the ability to learn new material to solve problems, or carry out daily activities such as meal planning or budgeting Patients with dementia also may underestimate the risks associated with activities or overestimate their ability to function in certain situations.

Common clinical features

- Cognitive impairment
- History of personality change
- Hallucinations and delusions - often paranoid (20–40%) and poorly systematized
- Anxiety and/or depression - in 50%
- Neurological features
- Emotional lability
- Sundowning syndrome

Onset and Clinical Course of Dementia

- the course of dementia is usually progressive. Dementia often is described in 3 stages:

- Mild: Forgetfulness is the hallmark of beginning mild dementia.

- Moderate: Confusion is apparent along with progressive memory loss.

- Severe: Personality and emotional changes occur.

Sundowning

- Around 20% of people diagnosed with Dementia, it's a state of confusion occurring in the late afternoon and lasting into the night characterized by the emergence or increment of neuropsychiatric symptoms such as agitation, confusion, anxiety, and aggressiveness.
- Behaviors associated with sundowning include: Pacing, Rocking in a chair, Wandering, Violence, Shadowing (This is when the individual follows their caregiver very closely, everywhere they go), Crying, Insomnia, Yelling.
- there isn't one specific cause of sundown syndrome, researchers suggest several possible causes or triggers:
    - End-of-day activity
    - Fatigue
    - Low light
    - Sensory impairment.
    - Internal imbalance
    - Winter

Most common types of dementia

- Progressive Dementia : get worse over time.
- Types of dementias that worsen and aren't reversible Progressive dementias include:

1. Alzheimer's disease

- Progressive brain disorder that has a gradual onset but causes an increasing decline in functioning.
- Risk of Alzheimer's disease increases with age,
- (more common in women)
- Average duration from onset of symptoms to death is 8 to 10 years.
- Dementia of the Alzheimer's type especially with late onset (after 65 years of age) may have a genetic component.
- Neuroimaging : Medial temporal lobe atrophy, Amyloid PET positivity, hypometabolism in parieto-temporal regions

2. Vascular dementia (Stroke,TIA).

- Has symptoms similar to those of Alzheimer's, but onset is typical abrupt followed by rapid changes in functioning.
- Neuroimaging : CT scan and MRI usually shows multiple vascular lesions of the cerebral cortex and subcortical structures resulting from the decreased blood supply to the brain.
- (more common in men)
- Common features : -Confusion, restlessness & agitation -Low attention & concentration -Loss of bowel & bladder control -Personality changes -Depression -Unsteady gait

3. Lewy Body Dementia

- Common form of dementia in the elderly (~20% of new diagnoses of dementia in hospital and 4% of new community cases).
- Age of onset: 50 – 80 yrs. ♂ > ♀ .
- Neuroimaging :(SPECT) or PET imaging. Not 100% diagnostic, but can show reduced dopamine transporter uptake in the brain which with a proper history & examination can be very helpful in diagnosis.
- Presents with: -fluctuating cognitive performance and consciousness -Parkinsonism -complex hallucinations -significant depressive symptoms (~40%) -recurrent falls/syncope -antipsychotic sensitivity (~60%).
- The mean survival time/rate of cognitive decline is similar to Alzheimer's disease (but rapid deterioration over 1- 2 yrs does occur)

4. Pick's disease (Frontotemporal Dementia)

- is a degenerative brain disease that particularly affects the frontal and temporal lobes and results in a clinical picture similar to that of Alzheimer's, but personality and behavioral changes are more prominent early in the disease .
- Onset is most commonly 50 to 60 years of age; death occurs in 2 to 5 years.
- Neuroimaging : Frontal and temporal lobe atrophy on magnetic resonance imaging (MRI), with relative preservation of posterior areas

5. Mixed dementia.

- Autopsy studies of the brains of people age 80 and older who had dementia indicate that many had a combination of several causes. \
- People with mixed dementia can have Alzheimer's disease, vascular dementia and Lewy body dementia. Studies are ongoing to determine how having mixed dementia affects symptoms and treatments.

Other disorders linked to dementia

1. Creutzfeldt-Jakob disease

- Is a human prion disease.
- It is a neurodegenerative disorder with characteristic clinical and diagnostic features.
- This disease is rapidly progressive and always fatal.
- Infection with this disease leads to death usually within 1 year of onset of illness.
- May be inherited, sporadic, or acquired.
- Neuroimaging : An MRI of a CJD patient usually demonstrates hyperintense signal changes in the striatum or thalamus.
- Symptoms include: - Personality changes - Altered vision (blurry/blindness) - Insomnia - Aphasia - Loss of coordination or abnormal movements ataxia that usually progresses rapidly (a few months). - Myoclonus

2. Huntington's disease

- Is an inherited, dominant gene disease that primarily involves: -Emotional instability -Chorea -Anxiety -Profound cognitive impairment -Insomnia -Depression
- The disease begins in the late 30s or early 40s and may last 10 to 20 years or more before death.
- Neuroimaging: atrophy of the corpus striatum involving the caudate and putamen is seen. This change generally proceeds from medial to lateral and dorsal to ventral. Better appreciated on MRI than on CT.

3. Parkinson’s disease Dementia

- Is a slowly progressive neurologic condition.
- It results from loss of neurons of the basal ganglia.
- Characterized by a decline in thinking and reasoning skills that develops in some people living with Parkinson's at least a year after diagnosis.
- Neuroimaging: Specific brain MRI findings include atrophy of the midbrain with enlargement of the third ventricle, tegmental atrophy and an abnormal superior profile of the midbrain, signal increase in the midbrain and in the inferior olives, as well as frontal and temporal lobe atrophy.
- Symptoms include: - Resting tremor -masklike facial expression - Cogwheel rigidity - Bradykinesia - Postural instability - Depression and/or Anxiety - Mild cognitive impairment

4.Traumatic brain injury (TBI).

- This condition is most often caused by repetitive head trauma. Boxers, football players or soldiers.
- Dementia symptoms depend on the part of the brain that's injured.
- TBI can cause: -depression -explosiveness -memory loss - Aphasia & impaired speech. - Bradykinesia - Tremors and rigidity.
- Symptoms might not appear until years after the trauma.

Risk Factors

- Non-modifiable :

- Age. The risk of dementia rises as you age.
- Family history. Having a family history of dementia puts you at greater risk of developing the condition
- Down syndrome. By middle age, many people with Down syndrome develop early-onset Alzheimer's disease.

- Modifiable :

- Diet and exercise. - Alcohol - Cardiovascular diseases - Depression - Head trauma - Sleep problems - Low levels of vitamins B6, B12 & D - Sleeping pills & other Rx that worsen memory

Treatment

- Whenever possible, the underlying cause of dementia is identified so that treatment can be instituted.
- Improvement of cerebral blood flow may arrest the progress of vascular dementia in some people Patients with dementia demonstrate a broad range of behaviors that can be treated symptomatically.
- Doses of medications are one-half to two-thirds lower than usually prescribed

Non-specific Treatment

- Antidepressants are effective for significant depressive symptoms.
- Antipsychotics such as haloperidol (Haldol), Olanzapine (Zyprexa), Risperidone (Risperdal) & Quetiapine (Seroquel) may be used to manage psychotic symptoms of delusions, hallucinations, or paranoia.
- Mood Stabizers : Lithium carbonate, Carbamazepine (Tegretol), and Valproic Acid (Depakene) help to stabilize affective lability and to diminish aggressive outbursts.
- Benzodiazepines are used cautiously because: -They may cause delirium and can worsen already compromised cognitive abilities. -The may cause respiratory arrest -They may cause addiction

Specific Treatment

- Acetylcholinesterase inhibitors (AChEIs) were the first drugs to be licensed for the treatment of dementia. They act by enhancing ACh at cholinergic synapses in the CNS and, in this way, may cause mild clinical improvements in cognitive, functional, and behavioral symptoms, reducing time spent in full nursing care. They are recommended as first-line agents in the treatment of mild ~ moderate dementia.

Acetylcholinesterase inhibitors

Donepezil

- Piperidine derivative
  - gastrointestinal tract absorbed, with liver metabolism;
  - long half-life (70hrs);
  - highly selective (acts centrally only)
  - Problems: GI side effects at high dose; bradycardia; GI bleeding (rare); contraindicated in asthma.
  - Benefits: selective, therefore low side effects; no liver toxicity; predictable kinetics; narrow dose range;
  - Dose: 5–10mg/day in one dose.

Rivastigmine

- short half-life (12hrs)
- inhibits acetylcholinesterase and butyrylcholinesterase in CNS.
- Problems GI side effects; twice daily dosage.
- Benefits: not metabolized by the liver and least likely to cause drug–drug interactions.
- Dose: start with 1.5mg twice daily (bd); increase to 3–6mg bd—now available in a modified-release oncedaily (od) form or 24hr patch [thought to be helpful in reducing gastrointestinal (GI) side effects]

Galantamine

- Selectively inhibits acetylcholinesterase and acts as an allosteric ligand at nicotinic ACh receptors;
  - metabolized in the liver;
  - short half-life (5hrs);
  - selective.
  - Problems: twice daily dosage.
  - Dose: 4–12mg bd.

Other drugs

Memantine

- A partial NMDA receptor antagonist that may protect neurons from glutamate-mediated excitotoxicity.
- Trials show benefits of memantine augmentation with donepezil.
- A study showed mild benefit in moderate to severe dementia.

Past years questions

1- Not present in lewy body dementia:
blindness

2- How to differentiate between delirium and dementia?
A) level of consciousness OR fluctuating consciousness
B) age
C) behavior

3- All of the following are drugs of dementia, except:
- donepezil
- rivastigmine
- guanfacine
- galantamine
- memantine

4- Old patient presented with fluctuating cognitive performance and consciousness, parkinsonism, complex hallucinations, recurrent falls and syncope ,what is the type of dementia?
Lewy bodies

5- Drug not used specifically for the treatment of dementia?
Olanzapine
Donepezil
Rivastigmine
Memantine

6- Which of the following is Not associated with Dementia?
Loss of Consciousness

7- What is the most common problem in individuals with dementia?
Select one:
a. delusions
b. boredom
c. agitation
d. apathy
e. disinhibition

8- Not acetylcholine esterase inhibitor used in treatment of dementia?
memantine

Past years questions

9- Clinical features of dementia, one is false

1) disorientation
2) emotional lability
3) memory impairment
4) personality disturbance in the late stage

10- Which one of the following suggests dementia rather than delirium

a) LOC
b) recent or immediate memory is normal
c) days to weeks
d) progressive

11- Features of dementia are predominantly characterized by one of the following

a. Memory disturbance
b. Acute onset
c. Hallucinations
d. Over eating

12- 82 years old pt come with confusion, agitated , restlessness in evening . One of the following is not an appropriate in treatment?

- calendar on the wall
-haloperidol
-support from family
-diazepam at night
-bright light

13- One of the following is not in traumatic brain injury?

- Hyperkinetic
- insomnia
- Memory loss

14- Which of the following is an NMDA antagonist?

Memantine

15- All are true about sundowning except?

Lethargy

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Delirium

Delirium

Definition of delirium

- Defined as the acute onset of fluctuating cognitive impairment and a disturbance of consciousness. Delirium is a syndrome, not a disease.
- Delirium has a sudden onset (hours or days), a brief and fluctuating course, and rapid improvement when the causative factor is identified and eliminated.
- Physicians must recognize delirium to identify and treat the underlying cause and to avert the development of delirium-related complications such as accidental injury because of the patient's clouded consciousness.
- Delirium is characterized by an acute decline in both the level of consciousness and cognition with particular impairment in attention that develop over a short time. A life threatening, yet potentially reversible disorder of the central nervous system (CNS),delirium often involves perceptual disturbances, Abnormalities of mood, behavior and psychomotor activity, and sleep cycle impairment.

DSM-5 Criteria for Delirium

- 1. Disturbance in attention and awareness.
  2. Disturbance in an additional cognitive domain.
- 3. Develops acutely over hours to days, represents a change from baseline, and tends to fluctuate.
- 4. Not better accounted for by another neurocognitive disorder.
- 5. Not occurring during a coma.
- 6. Evidence from history, physical, or labs that the disturbance is a direct consequence of another medical condition, substance intoxication/withdrawal, exposure to toxin

Clinical features

- Clinical features are often present and may be prominent.
  - They can include disorganization of thought processes (ranging from mild tangentiality to frank incoherence)
  - perceptual disturbances such as illusions and hallucinations
  - psychomotor hyperactivity and hypoactivity
  - disruption of the sleep wake cycle (often manifested as fragmented sleep at night, with or without daytime drowsiness)
  - mood alterations (from subtle irritability to obvious dysphoria, anxiety, or even euphoria)
  - Other manifestations of altered neurological function (autonomic hyperactivity or instability, and dysarthria).
- Delirium is a common disorder, with most incidence and prevalence rates reported in elderly (M.C)

Risk factors: • Advanced age. • polypharmacy • Preexisting cognitive impairment or depression. • history of delirium. • Alcohol use. • Severe or terminal illness. • Impaired mobility. • Hearing or vision impairment. • Malnutrition. • Male gender.

Types and categories of delirium

Types of delirium:

- 1. Mixed type: .Psychomotor activity may remain stable at baseline or fluctuate rapidly between hyperactivity and hypoactivity. Most common type.
- 2. Hypoactive (“quiet”) type: .Decreased psychomotor activity, ranging from drowsiness to lethargy to stupor. More likely to go undetected. More common in the elderly.
- 3. Hyperactive type (“ICU psychosis”): . Manifests with agitation, mood lability, and uncooperativeness. . Less common, but more easily identified due to its disruptiveness . More common in drug withdrawal or toxicity

Categories of delirium

• Substance intoxication delirium
(alcohol,cocaine,narcotics,digoxin,h2-blocker)

Substance withdrawal delirium
(alcohol , BZD)

• Medication-induced delirium
(Anticholinergic, steroids ,TCA, BZD)

• Delirium due to another medical condition •
(CVA, mass lesion, infections, metabolic causes
)

• Delirium due to multiple etiologies

Investigations

Once delirium is diagnosed, blood glucose, pulse oximetry, ABGs, and ECG are done at bedside.

• Labs obtained in delirium workup include:

- CBC with differential
- urinalysis, and urine culture.
- Urine drug screen, a blood alcohol level, therapeutic drug levels (e.g., antiepileptics, digoxin, lithium)
- Hepatic panel
- Thyroid hormone levels } Optional
- Chest x-ray

• Head imaging (head CT or MRI brain), EEG, and lumbar puncture should be performed if focal neurological deficits are present or a cause of delirium cannot be identified with the initial workup.

Treatment

- Identify and treat the underlying cause
- Maintain nutrition, hydration, electrolyte balance, and monitor vitals
- D2 antagonists (Haloperidol is the preferred agent) are indicated for treatment of agitation (low dose)
- Benzodiazepine are avoided unless treating delirium due to alcohol or benzodiazepine withdrawal

Past years questions

1- 70-year-old male in the ICU due to multiple MI and stroke, on EEG there is a low wave in the background, he is confused and disoriented but he is not agitated, what is the diagnosis?

Delirium

2- How to differentiate between delirium and dementia?

A) level of consciousness OR fluctuating consciousness
B) age
C) behavior

3- Incorrect about delirium :

A. Sudden onset
B. Brief an fluctuant course
C. Resolve immediately after defining the underlying cause and treating it
D. Domiprazole is the first line treatment

4- FDA drug approved of delirium ?

Haloperidol

5- An old woman who has symptoms of delirium and is agitated come to ER, best drug of choice?

Haloperidol

6- Wrong about delirium

a- may be chronic
b-decline in both the level of consciousness and cognition
c-impairment in attention
d-hypoactive type more likely to go undetected

7- Variety of clues help distinguish delirium from dementia. Which of these clues is incorrect?

a. Poor short-term memory (delirium); poor working memory and immediate recall (dementia)
b. Fragmented sleep (delirium); sleep-wake reversal (dementia)
c. Fluctuating course (delirium); gradual deterioration (dementia)
d. Acute onset (delirium); insidious onset (dementia)

Past years questions

8- Which of the following is specific about delirium?

Acute onset

9- 72-year-old male in the ICU due to multiple MI and stroke, on EEG there is a low wave in the background, he is confused and disoriented, but he is not agitated, what is the diagnosis?

- Delirium

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Eating disorders

Anorexia Nervosa

- Patients with anorexia nervosa are preoccupied with their weight, their body image, and being thin.

There are two main sub types:

  - Restricting type: Has not regularly engaged in binge-eating or purging behavior; weight loss is achieved through diet, fasting, and/or excessive exercise.
  - Binge-eating/purging type: Eating binges followed by self-induced vomiting, and/or using laxatives, enemas, or diuretics. Some individuals purge after eating small amounts of food without binging.

- The most common age of onset is between 14 and 18 years.
- Anorexia nervosa is estimated to occur in about 0.5 to 1 percent of adolescent girls
- It occurs 10 to 20 times more often in females than in males.
- More common among the upper classes and in developed countries where food is abundant and a thin body ideal is held.

Diagnosis and DSM-V criteria

  - Restriction of energy intake relative to requirements, leading to significant low body weight—defined as less than minimally normal or expected.
  - Intense fear of gaining weight or becoming fat.
  - Repetitive behaviors are carried out to prevent weight gain, despite the already low weight.
  - Distortions in an individual's self perception of body weight or shape (Disturbed body image), associated with the denial of the serious consequences of the current low body weight.

Clinically

Physical manifestations

- Amenorrhea
- Cold intolerance/hypothermia
- Hypotension (especially orthostasic)
- Bradycardia , arrhythmia
- Acute coronary syndrome, cardiomyopathy , mitral valve prolapse
- Constipation
- Lanugo hair, alopecia
- Edema, dehydration –
- Peripheral neuropathy, seizures
- Hypothyroidism
- Osteopenia, osteoporosis.

Laboratory abnormalities:

- Hyponatremia , hypochloremic hypokalemic alkalosis (if vomiting) arrhythmia hypercholesterolemia, leukopenia anemia (normocytic normochromic), elevated blood urea nitrogen (BUN) ↑ growth hormone (GH), ↑ cortisol, reduced gonadotropins (luteinizing hormone [LH], follicle- stimulating hormone [FSH]), reduced sex steroid hormones (estrogen, testosterone) hypothyroidism, hypoglycemia, osteopenia.

DIFFERENTIAL DIAGNOSIS

- Medical conditions: Endocrine disorders (e.g., hypothalamic disease, diabetes mellitus, hyperthyroidism), gastrointestinal illnesses (e.g., malabsorption, inflammatory bowel disease), genetic disorders (e.g., Turner syndrome) cancer, AIDS.
- Psychiatric disorders: Major depression, bulimia, or other mental disorders (such as somatic symptom disorder or schizophrenia).

Complications

- Range of mortality rates from 5 to 18 percent. due to starvation, suicide, or cardiac failure.
- One-third of AN patients may attempt suicide or self harm.
- About half of patients with anorexia nervosa eventually will have the symptoms of bulimia , usually within the first year after the onset of anorexia nervosa .

TREATMENT

- Food is the best medicine!
- Patients may be treated as outpatients unless they are dangerously below ideal body weight (>20–25% below)
- Treatment involves cognitive-behavioral therapy, family therapy ,and supervised weight-gain programs.
- Selective serotonin reuptake inhibitors (SSRIs) have not been effective in the treatment of anorexia nervosa but may be used for comorbid anxiety or depression.
- Little evidence that second-generation antipsychotics can treat preoccupation with weight and food, or independently promote weight gain. (olanzapine)

Bulimia Nervosa

- Episodes of binge eating combined with inappropriate ways of stopping weight gain. Physical discomfort for example, abdominal pain or nausea terminates the binge eating, which is often followed by feelings of guilt, depression, or self disgust. Unlike patients with anorexia nervosa, those with bulimia nervosa typically maintain a normal body weight
- prevalence in young females is 1-4%
- Onset is in late adolescence or early adulthood.
- More common in developed countries.
- High incidence of comorbid mood disorders, anxiety disorders, impulse control disorders, substance use, prior physical/sexual abuse, and ↑ prevalence of borderline personality disorder.
- Better prognosis than anorexia nervosa
- Crude mortality rate is 2% per decade

Diagnosis and DSM-V criteria

- Recurrent episodes of binge eating.
- Recurrent, inappropriate attempts to compensate for overeating and prevent weight gain (such as laxative abuse, vomiting, diuretics, fasting, or excessive exercise).
- The binge eating and compensatory behaviors occur at least once a week for 3 months.
– Self-esteem is affected by self-evaluation of body weight and shape.
- Does not occur exclusively during an episode of anorexia nervosa

PHYSICAL FINDINGS AND MEDICAL COMPLICATIONS

Physical examination findings

- CNS: epilepsy.
- Oral and oesophagus: parotid gland swelling, dental erosions, oesophageal erosions.
- CVS: arrhythmias and cardiac failure leading to sudden death.
- GIT: gastric perforation, gastric/duodenal ulcers, constipation and pancreatitis.
- Muscle weakness
- Russell's sign: abrasions over dorsal part of the hand because fingers are used to induced vomiting.

Laboratory/imaging abnormalities

- FBC: leukopenia and lymphocytosis.
- ↓in K+, Na+, Cl-, ↑bicarbonate
- ↑in serum amylase
- Metabolic acidosis due to laxative use
- Metabolic alkalosis due to repeated vomiting.

TREATMENT

- Most patients with uncomplicated bulimia nervosa do not require hospitalization.
- Both pharmacotherapy and psychotherapy could be considered.
- Pharmacological treatment: antidepressants (SSRIs such as fluoxetine or fluvoxamine) have been shown to be effective in treatment of BN. It would be able to help in reduction of binge eating and also the associated impulsive behavior. (The only FDA approved drug for the treatment of bulimia nervosa is fluoxetine. In addition to reducing binging and purging episodes, fluoxetine might also be useful for the treatment of co-occurring depression and anxiety disorders.)
- Psychological treatment – Both cognitive behavioral therapy (CBT) and interpersonal psychotherapy (IPT) have been used. CBT has been shown to be highly effective for BN.
- Nutritional counseling and education.

Binge-Eating Disorder

- Patients with binge-eating disorder suffer emotional distress over their binge eating, but they do not try to control their weight by purging or restricting calories, as do anorexics or bulimics. Unlike anorexia and bulimia
- Patients with binge-eating disorder are not as fixated on their body shape and weight

- Binge eating disorder is the most common eating disorder.

- Typically begins in adolescence or young adulthood
- Remission rates are higher than for other eating disorders
- Higher rates of psychiatric comorbidities than in obese individuals without binge eating disorder.

Diagnosis and DSM-V criteria

- Recurrent episodes of binge eating (eating an excessive amount of food in a 2-hour period associated with a lack of control), with at least three of the following:
- eating very rapidly, eating until uncomfortably full, eating large amounts when not hungry, eating alone due to embarrassment, and feeling guilty after eating. -Severe distress over binge eating. -Binge eating occurs at least once a week for 3 months.
- -Binge eating is not associated with compensatory behaviors (such as vomiting, laxative use, etc.), and doesn't occur exclusively during the course of anorexia or bulimia

PHYSICAL FINDINGS AND MEDICAL COMPLICATIONS

- Patients are typically obese and suffer from medical problems related to obesity including metabolic syndrome, type II diabetes, and cardiovascular disease.

TREATMENT

- Both pharmacotherapy and psychotherapy could be considered.
- Pharmacological treatment: antidepressants, SSRIs such as fluoxetine.
- Psychological treatment – Both cognitive behavioural therapy (CBT) and interpersonal psychotherapy (IPT)

Past years questions

1- True about history of eating disorder:

50% of bulimia nervosa have history of anorexia nervosa

2- A patient presented to clinic that has Russell sign, normal weight, what is the most likely diagnosis?

bulimia nervosa

3- One is found in anorexia nervosa:

increased BUN

4- Timing for bulimia diagnosis?

A) 2 times/week for one month
B) 1 time/week every month for 3 months
C) 1 time/week for one month

5- Russell sign is diagnostic for?

A) Anorexia nervosa
B) Binge eating
C) Bulimia

6- Patient who has a negative body image and occupied with their weight , she regularly engages in eating binges followed by self inducing vomiting her weight is 48 kg and height is 1.70 cm .what is the diagnosis:-

A- Anorexia nervosa restricting type
B- Anorexia nervosa binge eating/purging type
C- Bulimia nervosa
D- Binge eating disorder

7- Anorexia nervosa:

Restriction of energy relative to requirement, intense fear of becoming fat, distortion in a perception of body weight and shape

8- Difference between binge eating and bulimia Nervosa:

Absence of compensatory behaviors in binge eating

Past years questions

9- A patient with Anorexia Nervosa, binge-eating purging type, she complains of excessive eating followed by VOMITING, what are the expected electrolyte disturbances?

Hypokalemic Hypochloremic Metabolic Alkalosis

10- Which of the following types of disorders has an incidence of 10:1 in female : male ?

A-Sleep disorder
B-Eating disorder
C-Anxiety disorder
D-sexual disorder

11- FDA-approved drug to treat bulimia nervosa:

fluoxetine (pay attention to the eating disorder, anorexia nervosa has no FDA-approved drug to treat it)

12- Which of the following diagnostic criteria for anorexia nervosa has been eliminated in DSM: 5?

A. Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight.
B. Restriction of energy intake relative to requirement, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health.
C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight.
D. Amenorrhea (the absence of at least three consecutive menstrual cycles) in postmenarcheal females

Past years questions

13- Hair character in anorexia nervosa:

Langue hair

14- FDA approved drug for anorexia nervosa?

a. Clozapine
b. Fluoxetine
c. None of the above

15- Wrong statement about anorexia nervosa?

Most commonly affects women aged 20-25

16- Which of the following should be included in a workup for bulimia nervosa?
Select one:

a. Chest radiography
b. Brain MRI
c. Neuropsychological testing
d. Pregnancy test

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Sexual disorders

Normal Sexual Response Cycle

- Desire – sexual fantasies and the desire to have sexual activity.
- Excitement/ Arousal
  - Men – erection , increase size of testicle, tightening of scrotal sac, secretion of a few drops of seminal fluid
  - Women – vaginal lubrication, clitoral erection, labial swelling, elevation of uterus , - contraction and relaxation of specific part in vagina. Both men and women experience nipple erection and increased pulse and blood pressure
- Orgasm
  - The orgasm phase consists of a peaking of sexual pleasure, with the release of sexual tension Men ejaculate and women have contractions of the uterus and lower one third of the vagina.
- Resolution
  - The body back to its resting state After orgasm, men have a refractory period that may last from several minutes to many hours; in that period, they cannot be stimulated to further orgasm. Women do not have a refractory period and are capable of multiple and successive orgasms.

- Dysfunction may occur at one or more of these phases.

Sexual disorders

- Lifelong – present from first sexual experiences
- Acquired – develop after a period of relatively normal sexual function
- Generalized – not limited to certain types of stimulation, situations, or partners
- Situational – only occur with certain types of stimulation, situations, or partners

Factors may be relevant to etiology and/or treatment

1. Partner factors (e.g., partner's sexual problems; partner's health status);
2. Relationship factors (e.g., poor communication; discrepancies in desire for sexual activity);
3. Individual vulnerability factors (e.g., poor body image; history of sexual or emotional abuse), psychiatric comorbidity (e.g., depression, anxiety), or stressors (e.g., job loss, bereavement);
4. Cultural or religious factors (e.g., inhibitions related to prohibitions against sexual activity or pleasure; attitudes toward sexuality);
5. Medical factors relevant to prognosis, course, or treatment.

Type of dysfunctions

- Male hypoactive sexual desire (desire)
- Erectile disorder (excitement)
- Female sexual interest arousal disorder (desire & excitement)
- Female orgasm disorder (orgasm)
- Premature ejaculation (orgasm)
- Delayed ejaculation (orgasm)
- Genito-pelvic pain penetration disorder
- Substance/ med induced

Male Hypoactive Sexual Desire Disorder (Desire)

A. Persistently or recurrently deficient (or absent) sexual/ erotic thoughts or fantasies and desire for sexual activity. The judgement of deficiency is made by the clinician, taking into account factors that affect sexual functioning, such as age and general and sociocultural contexts of the individual's life
B. The symptoms in Criterion A have persisted for a minimum duration of approximately 6 months
C. The symptoms in Criterion A cause clinically significant distress in the individual
D. The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress or other significant stressors and is not attributable to the effects of a substance/ medication or another medical condition

Male Erectile Disorder (Arousal)

A. At least 1 of the 3 following symptoms must be experienced on almost all or all occasions of sexual activity:
    A. Marked difficulty in obtaining an erection during sexual activity
    B. Marked difficulty in maintaining an erection until the completion of sexual activity
    C. Marked decrease in erectile rigidity
B. Symptoms persisted for a minimum duration of approximately 6 months
C. Cause clinically significant distress in individual
D. The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress or other significant stressors and is not attributable to the effects of a substances/ medication or another medical condition

Female Sexual Interest/ Arousal Disorder (Desire & Arousal)

A. Lack of, or significantly reduced, sexual interest/ arousal, as manifested by at least 3 of the following:
   A. Absent/ reduced interest in sexual activity
   B. Absent/ reduced sexual/ erotic thoughts or fantasies
   C. No/ reduced initiation of sexual activity, and typically unreceptive to a partner's attempts to initiate
   D. Absent/ reduced sexual excitement/ pleasure during sexual activity
   E. Absent/ reduced sexual interest/ arousal in response to any internal or external sexual/ erotic cues (eg written, verbal, visual)
   F. Absent/ reduced sexual genital or non genital sensations during sexual activity
B. Persists for a minimum duration of approximately 6 months
C. Cause clinically significant distress in individual
D. The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress (eg partner violence) or other significant stressors and is not attributable to the effects of a substance/ medication or another medical condition

Female Orgasmic Disorder

- Inability to achieve orgasm after a normal excitement phase

I. Presence of either of the following symptoms and experienced on almost all occasions of sexual activity

- Marked delay, marked infrequency, or absence of orgasm
- Markedly reduced intensity of orgasmic sensations

II. Persistent for at least 6 months

III. Cause clinically significant distress

IV. The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress (eg partner violence) or other significant stressors and is not attributable to the effects of a substance/ medication or another medical condition

Genito-pelvic Pain/ Penetration Disorder

A. Persistent or recurrent difficulties with one (or more) of the following
   I. Vaginal penetration during intercourse
   II. Marked vulvo vaginal or pelvic pain during vaginal intercourse or penetration attempts
   III. Marked fear or anxiety about vulvovaginal or pelvic pain in anticipation of, during, or as a result of vaginal penetration
B. Persist for at least 6 months
C. Cause clinically significant distress
D. The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of a severe relationship distress or other significant stressors and is not attributable to the effects of a substance/ medication or another medical condition

Premature Ejaculation

- Ejaculation earlier than desired time.
    - A persistent or recurrent pattern of ejaculation occurring during partnered sexual activity within approximately 1 minutes following vaginal penetration and before the individual wishes it
- Must have been present for at least 6 months and must be experienced on almost all or all occasions of sexual activity
- The symptom in Criterion A causes clinically significant distress
- The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress or other significant stressors and is not attributable to the effects of a substance medication or another medical condition

Delayed Ejaculation

A. Following symptoms must be experiences on almost all/ all occasions of partner sexual activity, and without the individual desiring delay:
    I. Marked delay in ejaculation
    II. Marked infrequency or absence of ejaculation
B. Persist for at least 6 months
C. Cause clinically significant distress
D. The sexual dysfunction is not better explained by a nonsexual mental disorder or as consequence of severe relationship distress or other significant stressors and is not attributable to the effects of a substance/ medication or another medical condition

Substance/Medication-Induced Sexual Dysfunction

A. clinically significant disturbance in sexual function is predominant in the clinical picture
B. There is evidence from the history, physical examination, or laboratory findings of both
C. (1) and (2):
    1. The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication
    2. The involved substance medication is capable of producing the symptoms in criterion A
D. The disturbance is not better explained by a sexual dysfunction that is not substance/ medication induced
E. The disturbance does not occur exclusively during the course of a delirium
F. The disturbance causes clinically significant distress

Differential Diagnosis of Sexual Dysfunction

- General medical condition: Diabetes, atherosclerosis, pelvic adhesions, alcohol neuropathy, traumatic surgical surgery to the lumbar sympathetic ganglia, abdomino peritoneal surgery, or lumbar symphatectomy
- Depression & substance abuse : usage of antidepressants, antipsychotic, alpha symphathetic drug, and opiod drugs
- Abnormal gonadal hormone levels : low estrogen, low testosterone, high progesterone

Pharmacological Therapy

Erectile disorder
- Phosphodiesterase-5 inhibitor (sildenafil)
- Alprostadil injected locally

Premature ejaculation
- SSRIs
- TCAs

Hypoactive sexual desire disorder
- Testosterone (both men and women)
- Estrogen (women only)

Psychotherapy :
- Dual sex therapy
- Behavior therapy
- Hypnosis
- Group therapy
- Analytically oriented psychotherapy

Mechanical therapy

Male erectile disorders
- Vacuum pumps, rings, surgery

Male orgasmic disorder
- Gradual progression from extravaginal ejaculation to intravaginal (masturbation)

Female orgasmic disorder
- Masturbation (sometimes with vibrator)

Premature ejaculation
- Squeezing technique
- Stop-start technique

Dyspareunia, vaginismus
- Gradual desensitization, muscle relaxation, dilators

Important definitions

- Sexual identity is defined as the pattern of a person's biological sexual characteristics: chromosomes, external genitalia, internal genitalia, hormonal composition, gonads, and secondary sexual characteristics.
- Gender identity is defined as the sense of self as being male or female. It may or may not agree with physiological sex or gender role.
- Gender role is the expression of one's gender in society.
- Sexual orientation is the persisting sexual preference for people of the same sex(homosexual) or people of the opposite sex (heterosexual).

Gender dysphoria

- Marked incongruence between an individual's experienced or expressed gender and the gender assigned at birth. It was previously known as gender identity disorder.
- People with this disorder have the subjective feeling that they were born the wrong sex.
- Differential diagnosis
  - Non-conformity to gender role
  - Transvestic disorder
  - Body dysmorphic disorder
  - Schizophrenia and other psychotic disorders

Paraphilic disorders

- Paraphilias are sexual disorder characterized by engagement in unusual sexual activities and/or preoccupation with unusual sexual urges or fantasies
- At least 6 months that cause impairment in daily functioning
- Intense, recurrent and interfere with daily life
- Occasional fantasies are considered normal
- Most paraphilias occur only in men, but sadism, masochism and pedophilia may also occur in women
- The most common paraphilias are pedophilia, voyeurism, and exhibitionism

Paraphilic disorders

Exhibitionism

Diagnostic criteria :

A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving the exposure of one's genitals to an unsuspecting stranger.
B. The person has acted on these sexual urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty.

Voyeurism

Diagnostic criteria:

A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving the act of watching unsuspecting nude individuals (often with binocular) to obtain sexual pleasure.
B. The person has acted on these sexual urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty.

Sadism

Diagnostic criteria:

A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges from hurting or humiliating another.
B. The person has acted on these sexual urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty.

Paraphilic disorders cont.

Masochism

- **Diagnostic criteria:**
  - A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving the act (real, not simulated) of being humiliated, beaten, bound, or otherwise made to suffer.
  - B. The fantasies, sexual urges, or behaviors cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Frotteurism

- **Diagnostic criteria:**
  - A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving touching and rubbing against a non-consenting person.
  - B. The fantasies, sexual urges, or behaviors cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Pedophilia

- **Diagnostic criteria:**
  - A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with a prepubescent child or children (generally age 13 years or younger).
  - B. The person has acted on these sexual urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty.
  - C. The person is at least age 16 years and at least 5 years older than the child or children in Criterion A.

Paraphilic disorders cont.

Fetishism

- **Diagnostic criteria:**
  - A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving the use of nonliving objects (e.g., female undergarments).
  - B. The fantasies, sexual urges, or behaviors cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Transvestic Fetishism

- **Diagnostic criteria:**
  - A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving cross-dressing.
  - B. The fantasies, sexual urges, or behaviors cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Past years questions

1- Case of a female patient that likes to crossdress and wants to undergo sex-change surgery claiming that “she is in the wrong body”

a-transgender
b-gender dysphoria
c-transvestic fetishism
d-frotteurism

2- Which of the following is not paraphilia:

A. homosexual
B. Pedophilia
C. Exhibitionism
D. Voyeurism
E. Fetishism

3- All sexual disorders except drug-induced, criteria for duration should at least be?

A- 1 month
B- 3 months
C- 6 months
D- 8 months

4- A case about a male that obtains sexual pleasure by rubbing his genital area on the body of the opposite sex female

a) sadism.
b) frotteurism
c) fetishism
d) exhibitionism

5- A case about a female whose interest in sexual activities and excitement are decreased, what is the diagnosis?

Female sexual interest arousal disorder

6- The persisting sexual preference for people of the same sex (homosexual) or people of the opposite sex (heterosexual) is?

Sexual orientation

Past years questions

7- Sense of self as being male or female is the definition of?

A- sexual identity
B- gender identity
C- Gender role
D- Sexual orientation

8- Premature ejaculation occur at which stage of sexual cycle?

A- Desire
B- Arousal
C- Excitement
D- Orgasm
E- Resolution

9- Recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving touching and rubbing against a non-consenting person?

Frotteurism

10- Which type of Paraphilias is more common in females?

Sadism

11- Pattern of a person's biological sexual characteristics: chromosomes, external genitalia, internal genitalia, hormonal composition, gonads, and secondary sexual characteristics:

A. gender identity
B. sexual identity
C. gender role
D. sexual orientation

12- Which of the following is defined as the expression of one's gender identity in society?

A. Gender role
B. Gender identity
C. Sexual identity
D. Sexual orientation

13- At which stage of sleep does erection occur, which is useful to differentiate between Primary Erection disorder & Vascular causes?

REM stage

Past years questions

14- What drug to be prescribed to patient complaining of premature ejaculation :

Trazodone
Sertraline

15- SSRI can be used for the treatment of:

premature ejaculation

16- A 24 y.o male likes to crossdress and gets sexual pleasure from it, his relationship with his girlfriend is otherwise normal, what is the type of disorder?

- sexual preference disorder
- sexual orientation disorder
- sexual dysfunction in arousal

17- A case of female patient who wants to have sexual activity, but there are failure of genital organs swelling and lubrication along with the Absence of sexual excitement and pleasure during sexual activity

- Female sexual interest arousal disorder

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Sleep disorders

Sleep Physiology

Stage name	Description	EEG wave	Notes
Awake, eyes open	Alert, active mental concentration	Beta waves (low amplitude, high frequency)	
Awake eyes closed		Alpha waves (increased amplitude, more synchronous)	
N1	Light sleep (easy to wake)	Theta waves	Smallest percentage (5-10%) of sleep time
N2	Deeper sleep	Theta waves + K complexes (sudden rise in amplitude) + sleep spindles (sudden rise in frequency)	Largest percentage (50%) of sleep time Tooth grinding occurs
N3	Deepest non-REM sleep (hardest to wake sleeper from)	Slow delta waves (lowest frequency, highest amplitude)	Sleepwalking, sleep talking, and bed wetting occurs
REM sleep	Rapid eye movement	Low voltage pattern (appears saw-toothed)	Loss of motor tone, dreaming and nightmares Penile/clitoral tumescence occurs

- There are several stages of sleep, and each has unique EEG findings.
- Non-REM sleep (N1, N2, N3)
- REM sleep

- One cycle from NREM to REM about 90 minutes.
- Length of REM increases during cycles
- Length of N3 decreases during cycles

Types of sleep disorders:

1. Primary sleep disorder
    - Dyssomnia: its excessive or altered or insufficient timing of sleep.
    - Parasomnia : abnormal sleep related habits.
2. Secondary sleep disorder

Dyssomnia:

It's defined as having hard time in falling a sleep or remaining a sleep , or excessive day time sleep characterized by abnormality in the amount, quality or timing of sleep

- types of dyssomnia:

1. Insomnia
2. Hypersomnia

Insomnia

Defined as: Having trouble falling asleep, staying asleep, or getting good quality sleep. This happens even if you have the time and the right environment to sleep well. Insomnia can get in the way of your daily activities and may make you feel sleepy during the day.

• Types of insomnia:

1. Acute insomnia: sleep difficulty which is less than 3 months in duration and associated with stress and change in sleep schedule ,usually it resolves spontaneously .
2. Chronic insomnia: sleep difficulty which last from 3 month up to a year and associated with reduced quality of life and increase risk for psychological disorders .

Diagnostic criteria

1) Difficulty initiating/maintaining sleep or early-morning awakening with inability to return to sleep.
2) At least 3 days a week for at least 3 months.
3) Causing significant distress or impairment in normal function of the patient .
4) Happen even if there is adequate opportunity to sleep.
5) Does not occur exclusively during the course of another sleep-wake disorder
6) Its not resulting as physiological effects of a substance or medication.

Treatment of insomnia

Non pharmacotherapy	Pharmacotherapy
* Sleep hygiene measures.	• Benzodiazipine: Estozolam Flurazepam - s.e :dizzness , slurred speech and muscle weakness .
* Cognitive-behavioral therapy (CBT).	* Non-benzodiazepines: Melatonin , zolpidem ,eszopiclone zaleplon :zolpidem causes increased risk of falls and may induce cognitive impairment. suvorexant
* Chronotherapy e.g: (bright light therapy) has evidence supporting its use in treating insomnia by entraining the circadian rhythm.	* Anti-depressant : Trazodone ,amitriptyline ,doxepin Mirtazapine -S.E: sedation, dizziness, and psychomotor impairment.

HYPERSOMNOLENCE DISORDER

- Defined as increased quantity of sleep and reduced quality of wakefulness (sleep drunkenness) and it causes decreased function and alertness after waking up.
- Characterized by:
  - Increased daytime sleepiness.
  - Prolonged nocturnal sleep episodes.
  - Increased irresistible urge to sleep.
- Obstructive sleep apnea (the most common cause).

Diagnostic criteria

1. Excessive sleepiness other than the normal daily 7 h:
   a) Recurrent episodes of sleep during the same day.
   b) Prolonged nonrestorative sleep more than 9h
   c) Difficulty in being fully awake after waking up
2. It should happen more than 3 times a week for more than 3 months.
3. Causing significant impairment in the patient functioning abilities.
4. Does not occur during the course of another sleep-wake disorder.
5. Not being a side effect of some substance or medication .
6. Coexisting mental and medical disorders do not adequately explain the hypersomnolence.

Obstructive sleep apnea

Chronic breathing disorder characterized by repetitive collapse of the upper airways during sleep.

- Features:
  - Excessive day time sleepiness
  - Apneic episodes. - Cessation of breathing.
  - Hypopneic episodes of decreased airflow.
  - Sleep fragmentation.
  - Frequent awaking due to gasping or chocking.
  - Snoring (due to narrowed airways).
  - Non-refreshing sleep or waking up with fatigue.
  - Morning headache.
  - Hypertension.

Treatment :
- Positive airway pressure continuous (CPAP)
- behavioral strategies such as weight loss & exercise.
- Surgery

Narcolepsy

Its excessive sleepiness in daytime and in inappropriate places or time.

- Clinical Symptoms:
  - Cataplexy (sudden brief episode of paralysis due to loss of muscle tone).
  - Excessive sleepiness.
  - Hallucinations.
    - - Hypnagogic hallucination Falling asleep.
    - - Hypnopompic hallucination Waking up (less common)
  - Sleep paralysis.

Diagnostic criteria:

- Recurrent episodes of need to sleep, lapsing into sleep, or napping during the day, occurring at least 3 times per week for at least 3 months , associated with at least one of the following:
  - Cataplexy (brief episodes of sudden bilateral loss of muscle tone, most often associated with intense emotion.
  - Hypocretin deficiency in the CSF.
  - Reduced REM sleep latency on polysomnography.
  - Hallucinations and/or sleep paralysis at the beginning or end of sleep episodes are common (but not necessary for diagnosis in the DSM-5).

Circadian rhythm sleep wake disorders

Recurrent patterns of sleep disruption, due to an alteration of the circadian system or misalignment between the endogenous circadian rhythm and sleep wake schedule required by an individual's environment or schedule

- Types:
  - **Advanced sleep-wake phase disorder** the patient may find it very difficult to stay awake in the early evening and wake up too early in the morning. This can interfere with work, school, or social responsibilities. Usually occur in older age
  - **Delayed sleep-wake phase disorder** The patient may fall asleep later than he would like and find it difficult to wake up on time in the morning which can lead to daytime tiredness or anxiety , usually occur with caffeine and nicotine use , irregular sleep schedule and in puberty.
  - **Shift work disorder** Sleep deprivation secondary to untraditional hours of work
  - **Jet lag disorder Sleep disturbances** (insomnia, hypersomnia) associated with travel across multiple time zones , usually resolve 2-3 days after travel

TREATMENTS

- Non- Pharmacological (Sleep education) educating the patient about the sleep stages and making them develop good sleep habits and regulating their naps.
- Pharmacological - Administration of melatonin in the evening

Parasomnia

Abnormal behaviors, experiences, or physiological events that occur during sleep or sleep-wake transitions.

Symptoms may include abnormal movements, emotions, dreams, and autonomic activity.

- Causes of parasomnia: Stress, Anxiety, Depression, Substance use, Side effect of some medication, Irregular sleep (night shifts), Other sleep disorders (insomnia), Sleep deprivation
- Types of parasomnia:
  - Sleep-walking (it can happen in night sleep or even daytime nap.)
  - Sleep-talking (it involves different forms of talking from mumbling up to full conversations).
  - Sleep-related groaning: usually happen when you exhale slowly and deeply and can be mistaken with snoring
  - Nightmares.(troubling intense dreams that may cause danger and anxiety or fear happening during the REM phase of sleep).
  - Night terrors.(the patient waking up suddenly in a terrified state which can last from 30sec to 5 min and can be associated with sweating or crying usually happening in the NON-REM phase of sleep.)
  - Bedwetting.(mainly with children).

Parasomnia treatment It maybe by using medication, behavioral therapy or lifestyle

Past years questions

1- Sleep complex and K spindle with which stage of sleep?

N2

2- Case of male excessive sleepiness in daytime and sleep in office during doing tasks:

Narcolepsy

3- In which stage sleep walking and talking occur?

A) N1
B) N2
C) N3&4 (3 سؤال مكرر ممكن يكون محدد وحدة فاختاروا)
D) REM

4- True about sleep hygiene:

A. sleep daily at the same specific time
B. Take daily naps as needed
C. Eat large meals at bedtime
D. Exercise right before bedtime

5- Hypocretin insufficiency contributes in the pathophysiology of?

Narcolepsy

6- Definitive treatment of obstructive sleep apnea:

A. nasal continuous positive airway pressure
B. Weight loss
C. theophylline

7- Meaning of sleep latency

time from turning off the lights till N2 stage

8- Which of these disorder does not happen in REM

A-narcolepsy
B-sleep apnea
C-Sleep paralysis
D-Night terror

9- Which of the following is NOT a typical symptom of narcolepsy?
Select one:

a. Hypnagogic hallucinations
b. Hypnopompic hallucinations
c. Sleep paralysis
d. Cataplexy
e. Catalepsy

Past years questions

10- True about rem sleep: loss of muscle tone

11- Longest stage of sleep

Stage 2

12- What neurotransmitter released from hypothalamus regulates sleep-wake cycle?

- Acetylcholine??
- melatonin
- serotonin
- dopamine

13- true about narcolepsy

- sleep paralysis
- cataplexy
- all of the above

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Postpartum disorders

Postpartum disorders

- Postpartum disorder is a psychiatric disorder that occur in the first couple weeks of childbirth
- Postpartum blues very common, up to 80% of pregnancies, PP depression 10%–25% of pregnancies, and PP psychosis (rare but more serious) are 3 of the most common psychiatric disorders experienced in the PP period
- According to the DSM-V, to use the “with peripartum onset” modifier, the onset of symptoms must occur during pregnancy or within 4 weeks PP

- Estrogen can affect the monoaminergic system serotonin and dopamine → Drastic changes in hormone levels are thought to be major contributing factors in PP psychiatric disorders, early PP period is characterized by a marked ↓ in both estrogen and progesterone, Genetic factors may contribute

Risk factors

- Young age (< 25 years)
- Poor social support
- Difficulties with breastfeeding
- Complicated birth
- Women with infants having health problems and/or with infants admitted to the NICU
- History of psychotic illnesses (especially anxiety and depression)
- Family history of psychiatric illnesses
- Previous episode of PP psychiatric disorder
- Stressful life events (during pregnancy and near delivery)
- Childcare stress (e.g., inconsolable crying infant)
- History of sexual abuse and/or domestic violence
- Financial difficulties

Postpartum Blues

- Postpartum (PP) blues: mild depressive symptoms that are transient and self-limiting in the perinatal period
- Symptoms may include:
    1. Feeling guilty and/or overwhelmed (especially about being a mother)
    2. Crying, sadness
    3. Rapid changes in mood and irritability
    4. Anxiety
    5. Poor concentration
    6. Eating too much or too little
    7. Insomnia or frequent awakenings at night

- Symptoms are mild and do not interfere with activities of daily living
- Onset of symptoms: within a couple of days after birth
- Duration of symptoms : lasting up to and no more than 2 weeks
- Does not meet the criteria for major depressive disorder

Management: Resolves spontaneously

Postpartum depression

- PP depression: depressive symptoms beginning within the 1st 12 months following childbirth and lasting for at least 2 weeks.
- There is no single cause of postpartum depression, but genetics, physical changes and emotional issues may play a role
- Having a family history of postpartum depression — especially if it was major — increases the risk of experiencing postpartum depression
- Symptoms
    - Disinterest in self, in child, and in normal activities
    - Feeling isolated, unwanted, or worthless
    - Feeling a sense of shame or guilt about parenting skills
    - Anger outbursts
    - Suicidal ideation or frequent thoughts of death Symptoms are more severe and patients have an inability to cope.
- Onset of symptoms : Up to 1 year after delivery
- Postpartum depression is a clinical diagnosis, which may be assisted by using screening questionnaires and the DSM-5 criteria, as well as excluding any contributory medical conditions: (hypothyroidism)
- DSM-5 criteria for major depressive disorder with peripartum onset
    - Patients must meet at least 5 out of 9 symptoms for ≥ 2 weeks.
    - Depressed mood or anhedonia (reduced pleasure from previously enjoyable habits) must be among the patient's symptoms.
- 1st-line treatments:
    - Mild depression: psychotherapy alone

Postpartum psychosis

- a psychiatric manifestation with abrupt onset after delivery that is characterized by psychotic symptoms

- No clear evidence on what causes postpartum psychosis.
- Risk factors:
  - A family history of mental health problems, particularly a family history of postpartum psychosis
  - A diagnosis of bipolar disorder or schizophrenia
  - A traumatic birth or pregnancy
  - Experienced postpartum psychosis before.

Women can develop postpartum psychosis even without history of mental health problems.

Symptoms:

1. Hallucinations
2. Delusions
3. Thought disorganization
4. Disorganized behaviors
5. Mood symptoms (e.g., mania, depression, or both)
6. Obsession with caring for the infant
7. Severe insomnia or frequent awakenings at night
8. Irritability, anxiety, hyperactivity, and psychomotor agitation
9. Homicidal or violent thoughts related to the infant
10. Suicidal ideation or attempts

A mental health provider can diagnose postpartum psychosis based on your symptoms (either by observation or what patient describe) and a physical and neurological exam

Management of postpartum psychosis

- Postpartum psychosis is considered a psychiatric emergency.
- Hospitalization Especially if there is homicidal or suicidal ideation The patient should be under the care of a psychiatrist (not an obstetrician).
- Ensure safety of the patient and infant.
- Mother should remain hospitalized until stable.
- Mother should not be left alone with the infant. Supervised visits with the infant may be possible.
- Antipsychotics Typically considered 1st-line therapy
    - Best options (expert opinion): older 2nd-generation antipsychotics (start with the following initial doses, with a higher dose given for severe symptoms)
        - Quetiapine once daily, up to twice daily.
        - Risperidone
        - Olanzapine
- Mood stabilizers (used in bipolar disorder):
    - Lithium (if not breastfeeding) twice a day (requires serum monitoring)
    - Valproate (if breastfeeding) once or twice daily.
- Antidepressants are added to antipsychotics in women with: Major depression with psychotic features, Schizoaffective disorder with affective symptoms.

Past years questions

1- Postpartum psychosis is strongly related to:

Bipolar disorder

2- Percentage for postpartum depression is:

10%

3- Which postpartum disorder has 70% prevalence ?

A) maternal blue
B) depression
C) postpartum psychosis

4- The management of postpartum depression and postpartum psychosis?

a. isolation & avoiding
b. know the cause and she go away
c. SSRI
d. seek professional help

5- Most persistent risk factor in postpartum depression?

(primiparity) first pregnancy

6- Sleep disturbance role in postpartum depression:

It is one of the diagnostic criteria

7- First line treatment in moderate to severe postpartum depression ?

SSRI

8- Most common psychiatric condition after giving birth?

Postpartum blues

9- Prevalence of postpartum depression

10-25%

Past years questions

10- Risk factor of postpartum depression?

- good family support
- previous history of depression

11- not a symptom of postpartum depression:

Joyful feelings

12- The main hormone that's responsible for the postpartum depression is

-estrogen

-Oxytocin

-testosterone

-cortisole

-Progesterone

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Antidepressants

Antidepressants

- Are medications that are prescribed to relieve symptoms of depression.
- They aim to correct chemical imbalances of neurotransmitters in the brain (Monoamine hypothesis), in which all work on increasing the level of depleted monoamines in brain that are believed to be responsible for changes in mood and behavior.
- All antidepressants are considered equally effective in treating major depression but differ in safety and side effect profiles
- About 70% of patients with major depression will respond to antidepressant medication.
- Newer ADs should be considered first because of better safety profile and fewer side effects, but older ADs are extremely dangerous when an overdose is ingested.
- Treatment should continue for 6 months to year after favorable response
- No single anti-depressant drug can act before 2-3 weeks, since it takes time to change the chemical abnormalities in a person's brain, which is a huge cause of lack of compliance.

Other uses

Anti-depressants can be used to treat other conditions like

- obsessive-compulsive disorders (OCD)
- childhood enuresis, or bedwetting
- generalized anxiety disorder
- Posttraumatic stress disorder (PTSD)
- Social anxiety disorder

Major categories

The 4 major categories of antidepressants are:

- Monoamine oxidase inhibitors (MAOIs)
- Tricyclic antidepressants (TCAs)
- Selective serotonin reuptake inhibitors (SSRIs)
- Atypical antidepressants

1. Selective Serotonin Reuptake Inhibitors (SSRIs)

Fluoxetine

1. Longest half-life (can be given weekly)
2. Safe in pregnancy, approved for use in children and adolescents.
3. Can elevate levels of antipsychotics, leading to increased side effects.

Sertraline

4. Very few drug interactions
5. SAFEST ONE Also used in adolescents (safe in overdose= fatal sertraline overdose is very rare)

Paroxetine

6. Most serotonin specific,
7. Most activating (stimulant)
8. A potent inhibitor of CYP26 live enzyme, which can lead to several drug–drug interactions.
9. Short half-life leading to withdrawal phenomena if not taken consistently
10. It has a sedative effect Fluvoxamine Currently approved only

Citalopram

1. Few drug–drug interactions.
2. Dose-dependent QTc prolongation

esCitalopram

1. Isomer of citalopram; similar efficacy, fewer side effects, much more expensive.
2. Fewest drug – drug interaction

Vortioxetine

- Effective in cases of MDD SSRI &direct serotonin modulator metabolized primarily by the cytochrome P450 enzyme CYP2D6

Side effects of SSRIs

- Orthostatic hypotension
- Sexual dysfunction
- Serotonin Syndrome (Toxic synergism) when used with MAOIs, TCAs or two SSRIs used together.
- CNS dysfunction (excitation or sedation) Why? Don't know but they become tolerable with time.
- GIT irritation (Most common)
- Arrythmias: but to a less extent than TCAs arrythmias
- Akathisia, Anorexia, weight loss

Note: Have significantly fewer side effects than TCAs and MAOIs due to serotonin selectivity (they do not act on histamine, adrenergic, or muscarinic receptors). S

2. Monoamine oxidase inhibitors

Examples:

- Phenelzine
- Tranylcypromine
- Isocarboxazid

S.E:

- Orthostatic hypotension
- Sexual dysfunction
- Serotonin Syndrome (Toxic synergism)
- CNS excitation(insomnia, irritability, etc.)
- Cheese reaction (Hypertensive Crisis)

- MAOIs are never used as first-line agents because of their severe side effects and the increased safety and tolerability of newer agents.
- However, MAOIs are considered very effective for certain types of refractory depression and depression nonresponsive to other antidepressants.

*Serotonin Syndrome (Toxic synergism):

- Occurs when antidepressants that elevate the level of serotonin are used together, MAOIs with SSRIs or two SSRIs or MAOIs with TCAs ,etc. Which withholds toxic synergistic effect.
- It occurs due to spiking levels of serotonin in brain and peripheral tissue.

- Presentation: Hyperthermia, diaphoresis, diarrhea, tachycardia and even arrythmias, clonus and hyperreflexia which holds high risk of mortality.
- **Autonomic nervous system

Cheese reaction (Hypertensive Crisis) tyramine hypersensitivity

- Occurs when patients who take MAOI ingest yogurt, old cheese, chicken liver, fava beans (tyramine rich foods). *MAOI inhibit the MAO enzyme in the liver which is responsible for digestion of tyramine, tyramine has a sever sympathomimetic effect, it elevates the blood pressure of the patients to a sky-high level which is life threatening.

	Neuroleptic Malignant Syndrome	Serotonin Syndrome
Precipitated by	Dopamine antagonists	Serotoninergic agents
Onset	Variable (1-3 days)	Variable (<1d)
Vital Signs	Hypertension, tachycardia, tachypnea	Hypertension, tachycardia, tachypnea
Temperature	Hyperthermia	Hyperthermia
Mucosa	Sialorrhea	Sialorrhea
Skin	Diaphoresis	Diaphoresis
Mental Status	Delirium	Delirium
Muscles	"Lead pipe" rigidity	Increased tone
Reflexes	Hyporeflexia	Hyperreflexia, clonus
Pupils	Normal	Dilated

3.Tricyclic antidepressants (TCAs)

1. they are rarely used as first-line agents because they have a higher incidence of side effects, require greater monitoring of dosing, and can be lethal in overdose.
2. Patients are usually started on low doses to allow acclimation to the common early anticholinergic side effects before achieving therapeutic doses

Tricyclic Antidepressants

Drugs:

Secondary Amine	Teritary Amine
1. Nortriptyline	1. Amitriptyline
2. Desipramine	2. Clomipramine
3. Protriptyline	3. Doxepin
4. Amoxapine	4. Imipramine
	5. Trimipramine

Mechanism of action:
inhibition of serotonin and norepinephrine reuptake in synaptic cleft → ↑ serotonin and norepinephrine levels

Secondary amines are generally better tolerated than tertiary amines, especially in elderly patients

Indications:
1. Major depressive disorder (third- or fourth-line therapy)
2. Neuropathic pain (e.g., peripheral neuropathy, diabetic neuropathy)
3. Chronic pain (including fibromyalgia)
4. Migraine prophylaxis
5. Clomipramine specifically: OCD
6. Imipramine specifically: nocturnal enuresis (limited use due to side effects)

Side effects:

1. Orthostatic hypotension
2. Cardiotoxicity due to Na^+ channel inhibition in the myocardium
3. Tremor
4. Respiratory depression
5. Hyperpyrexia
6. Anticholinergic symptoms
7. Xerostomia, Mydriasis, Hyperthermia, Dry skin

The three **C**s of tricyclic poisoning: **C**onvulsions, **C**oma, and **C**ardiac conduction abnormalities (prolonged QTC).

Atypical Antidepressant

1. Serotonin/norepinephrin e reuptake inhibitors (SNRIs) Ex) Venlafaxine Atomoxetine
2. Norepinephrine/dopam ine reuptake inhibitors (NDRIs) EX) Bupropion
3. Serotonin antagonist and reuptake inhibitors (SARIs) EX) Nefazodone and trazodone
4. Norepinephrine and serotonin antagonists (NASAs) EX) Mirtazapine

SNRIs:

Venlafaxine

- Venlafaxine main indications are:
  - management of major depressive disorder (MDD), generalized anxiety disorder (GAD), social anxiety disorder (social phobia)
- S.E similar to SSRIs but in addition it can increase BP (do not use in patients with untreated or labile BP) + it also have withdrawal symptoms

Atomoxetine:

- Main indication is (ADHD) but can be used sometimes off-label to treat patients with treatment resistant depression
- S.E: trouble in sleeping , dry mouth, constipation, upset stomach

NDRIs:

Bupropion

- Bupropion main indication: (MDD), seasonal affective disorder (SAD), adult attention deficit hyperactivity disorder (ADHD). and as an aid to smoking cessation, favorable sexual side effect
- S.E are also similar to SSRIs, with increased sweating and increased risk of seizures and psychosis

SARI's:

Nefazodone and trazodone.

- Especially used in MDD and refractory MDD and its also used for the treatment of insomnia and anxiety
- S.E include nausea, dizziness, orthostatic hypotension, cardiac arrhythmias, sedation, and priapism, liver damage (sedation and priapism especially with trazodone).

NASA's:

Mirtazapine

- Useful in the treatment of refractory major depression, especially in patients who need to gain weight
- S.E include sedation, weight gain, dizziness, somnolence (state of being drowsy) , tremor, and agranulocytosis.

- NOTE:
- Any side effects will likely occur during the first 2 weeks, and then gradually wear off. Common effects are nausea and anxiety, but this will depend on the type of drug used, as mentioned above.
- If the side effects are very unpleasant, or if they include thinking about suicide, the doctor should be informed at once

Past years questions

1- SSRIs is safer than TCA and MAOI due to:

A) cause less sexual dysfunction
B) work by inhibition of noradrenaline reuptake
C) less potential for serotonin syndrome
D) best choice for bipolar
E) less sleep disturbance

2- Common side effect of SSRI ?

Dry mouth

3- The most common SSRI side effect?

GI irritation

4- Priapism is caused by which drug?

A- TCA
B- MAOI
C- Nefazodone
D- Trazodone

5- Which drug is not an atypical drug :

a. Venlafaxine
b. Mirtazapine
c. Trazodone
d. Bupropion
e. Escitalopram

6- Safest SSRI in overdose?

Sertraline

7- The least drug cause withdrawal symptoms in SSRI?

Fluoxetine

8- Which of these is not a side effect of SSRI?

a. GI disturbance
b. premature ejaculation
c. Insomnia
d. Sexual dysfunction

Past years questions

9- Which of these SSRIs has withdrawal symptom?

paroxetine

10- Mirtazapine act in which receptor?

A2 – antagonist

11- Not TCA side effect:

a. Sedation
b. weight gain
c. QT prolongation
d. Bradycardia

12- All of these are SSRIs used in treatment of depression except:

a. Fluoxetine
b. Duloxetine
c. Escitalopram

13- Which of the following classes of Antidepressants is NOT preferred due to chances of dangerous interactions & lesser effectiveness?

a. MAOIs
b. SSRIs
c. SNRIs
d TCAs

14- SSRI with longest half-life and active metabolites:

Fluoxetine

15- SSRI that is most serotonin specific:

Paroxetine

16- Which SSRI does not cause sexual dysfunction

All cause sexual dysfunction but the least is escitalopram.

Past years questions

17- One of these drugs is not safe to prescribed with SNRI?

MAO inhibitors

18- Not a side effect of TCA drugs :

a) Urinary retention
b) Sedation
c) Blurred vision
d) Diarrhea
e) insomnia
f) Hyperventilation
g) weight loss (سؤال مكرر كل مرة جوابٍ)

19- Not a side effect of trazodone :

a) Sedation
b) Priapism
c) Seizures
d) Postural hypotension

20- what neurotransmitters antidepressant agents work mainly on?

A. Serotonin and dopamine
B. Norepinephrine
C. dopamine and ach
D. adrenaline and dopamine

21- What neurotransmitter does vortioxetine work on?

a- serotonin receptor modulator
b- serotonin and noradrenaline reuptake inhibitor
c- monoamine oxidase inhibitor

22- All are MAOI side effects except?

a. CNS sedation
b. Orthostatic hypotension
c. Drowsiness

23- All are not considered in Serotonin syndrome except?

Tachycardia

24- Which of these drugs works by increasing the availability of norepinephrine, serotonin, dopamine and tyramine ?

a. Phenelzine
b. Fluoxetine
c. Trazodone

Past years questions

25- Which of the following is a life threatening sign of “serotonin syndrome”?

A. loss of consciousness
B. tachycardia
C. muscle rigidity

26- Which of these is a side effect of TCAs?

a. Seizures
b. Diarrhea
c. Weight loss

27- Tyramine hypersensitivity is considered? MAOI side effect

28- Which of the following TCAs has the least sedative effect

A-Clomipramine
B-nortriptyline
C-desipramine

29- Which of the following antidepressants would be the best choice for a patient concerned about erectile dysfunction ?

A. Bupropion
B. Fluoxetine
C. Desipramine

30- Safest Antidepressant in elderly patients would be :

A. Paroxetine
B. Clomipramine
C. Escitalopram

31- Patient with MDD, complaining of persistent erection for 5 hours, what drug is mostly associated with it?

Trazodone (because it’s a case of priapism)

32- SSRIs are different than other antidepressants in the way they affect the platelets, what is their effect on platelets?

Decrease serotonin levels in platelets

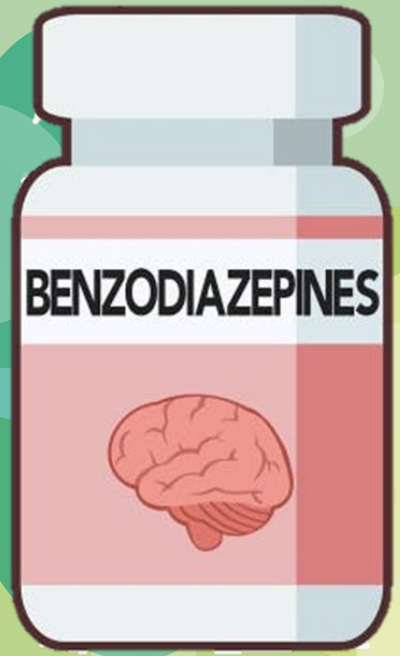
Past years questions

33- Case with the following symptoms (dietary reaction severe headache palpitation hypertensive crisis) what is this SE:

-tyramine reaction

29

Benzodiazepines



Benzodiazepines

- Benzodiazepines are indirect GABAA receptor agonists ; that bind to GABA-A receptors → ↑ affinity of GABA to bind to GABA receptors → ↑ GABA action → ↑ opening frequency of chloride channels → hyperpolarization of the postsynaptic neuronal membrane → ↓ neuronal excitability.

- They are a class of agents that work in the central nervous system and are used for a variety of medical conditions.
- Decreases the duration of N3 phase in REM sleep, thereby reducing the occurrence of sleepwalking and night terrors.

- CLINICAL USES:
  1. Anxiety disorders
  2. Muscle spasm
  3. Seizures (absence seizure - petite mal)
  4. Sleep disorders (insomnia)
  5. Alcohol withdrawal
  6. Anaesthesia induction

Adverse effects

- Anterograde amnesia
- Addictive potential
- Drug tolerance
- Drowsiness, sleepiness, or dizziness (Hangover)
- Rebound insomnia
- Reduced motor coordination
- ↑ Appetite
- Impairment of intellectual function
- Less risk of respiratory depression and coma than barbiturates

Benzodiazepine overdose

- benzodiazepine overdose can lead to:
  - Extreme sedation or drowsiness
  - Confusion and difficulty thinking
  - Slurred speech
  - Hypotonia and hyporeflexia
  - Ataxia
  - Respiratory depression (benzodiazepines have a wider margin of safety than barbiturates and, consequently, a lower risk of coma and respiratory depression)

Antidote: flumazenil

Mechanism of action: competitive antagonism at GABA receptor

Benzodiazepine dependence

- Rebound phenomenon: reemergence of symptoms (e.g., depression, insomnia , and anxiety) that were previously absent or controlled by benzodiazepine therapy when the medication is discontinued for a few days

- Withdrawal symptoms:
- Autonomic nervous system:
  - Sweating, Nausea, vomiting, and anorexia, Hypertension
- Neurological: Seizures• Tremors, Memory impairment
- Psychiatric: Depressive moods, Insomnia ,Withdrawal psychosis with optic and auditory hallucinations

- Treatment : Benzodiazepines (stabilize patient, then taper gradually).

Benzodiazepines contraindications

Contraindications:

- Hypersensitivity to benzodiazepines
- Neuromuscular diseases (e.g., myasthenia gravis): worsening of myasthenic symptoms
- Narrow-angle glaucoma (increase intraocular pressure)
- Respiratory depression (COPD , respiratory failure)
- Drug dependence (alcohol, illicit drug, or prescription medication use)
- Pregnancy (except for the management of eclampsia following unsuccessful magnesium sulfate therapy): ↑ risk of floppy infant syndrome (hypotonia)
- Alcohol use (severe CNS depression, respiratory depression, death)

• In chronic alcoholics or those with liver disease, use benzodiazepines that are not metabolized by the liver. Example: Lorazepam, Oxazepam and Temazepam.

• For benzodiazepine overdose, flumazenil is used to reverse the effects. Do not to induce withdrawal too quickly—this can be life threatening. (Flumazenil = GABA-A receptor antagonist, BZD antidote)

Table 1. Pharmacokinetics of Commonly Prescribed Benzodiazepines[a]			
Benzodiazepine	**Onset of Action[b] (hrs)**	**Half-Life (hrs)[c]**	**FDA Indications[d]**
Short Acting			
Midazolam (Versed, others)	0.5-1.5	3 (1.8-6.4)	Anxiety, induction of general anesthesia, procedural sedation
Triazolam (Halcion, others)	2	2.3 (1.5-5.5)	Insomnia
Intermediate Acting			
Alprazolam (Xanax, Niravam, others)	1-1.5	11.2 (10.6-12.5)	Anxiety, panic disorder
Clonazepam (Klonipin, others)	0.33-0.66	30 (23-40)	Panic disorder, seizure
Lorazepam (Ativan, others)	2	12 (12-14)	Anxiety, insomnia, status epilepticus
Oxazepam (Serax, others)	3	8.2 (5.7-10.9)	Alcohol withdrawal syndrome, anxiety
Temazepam (Restoril, others)	1.2-2.6	8.8 (3.5-18.4)	Insomnia
Long Acting			
Chlordiazepoxide (Librium, others)	2	24 (10-48)	Alcohol withdrawal syndrome, anxiety
Diazepam (Valium, others)	0.5	43 (30-56)	Alcohol withdrawal syndrome, anxiety, sedation, status epilepticus, seizure, refractory seizure, adjunct skeletal muscle spasm
Flurazepam (Dalmane)	0.5-1	74 (50-98)	Insomnia

[a] Renal impairment, hepatic dysfunction and other patient specific conditions may greatly alter values displayed.
[b] Onset of action given as oral dosage form. Values are not exact and may vary based on source.
[c] Elimination half-life given for oral dosage form. Values are not exact and may vary based on source.
[d] FDA indications not all-inclusive. Procedural indications left out intentionally.

Non-BZD hypnotics and anxiolytics

- Hypnotics

Drug	Class/Receptor
Zolpidem	Omega-1 GABA-A agonist ** Used for insomnia
Diphenhydramine	Antihistamine Mild anticholinergic
Ramelteon	Selective melatonin MT1 and MT2 agonist

Anxiolytics

Drug	Class/Receptor
Buspirone (BuSpar)	Partial 5 HT-1A receptor agonist
Hydroxyzine (Atarax)	Antihistamine
Propranolol	Non-selective beta blocker ** Used for anxiety as well as social phobia and panic attacks and treatment of akathisia
Barbiturates	

Past years questions

1- Benzodiazepines are?

GABA agonist

2- Lorazepam is?:

GABA A agonist

3- One of the following is not a side effect of Benzodiazepines?

A. Impairment of intellectual function
B. Reduced motor coordination
C. Drug tolerance
D. Drowsiness, sleepiness, or dizziness
E. Acute dystonia

4- Antidote for Benzodiazepines

Flumazenil

5- Case about clonazepam overdose, which drug would you give?

Flumazenil

6- What neurotransmitter is associated with benzodiazepine withdrawal?

a. Acetylcholine
b. GABA
c Norepinephrine

7- The anxiolytic property of benzodiazepines is related to which of the following receptors?

A. GABA-B
B. GABA- A
C. NMDA

8- benzodiazepines side effects include all except

a. anticholinergic effects
b. drug tolerance
c. drowsiness

Past years questions

9- Medical student complaining of insomnia? -

Zolpidem

10- Beta-blockers are used for?

a. Anxiety
b. Phobia
c. panic
d. all of the above

11- probable contraindication of propranolol in anxiety treatment

- cardiac arrhythmia
- allergy
- asthma

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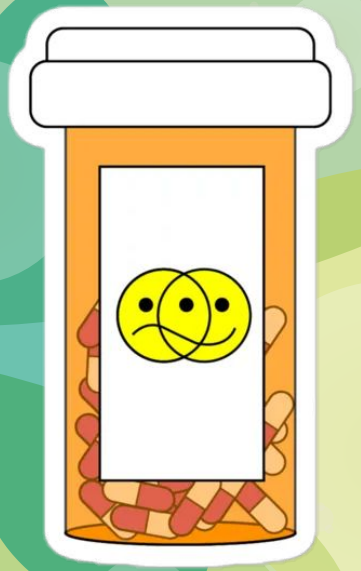
Mood stabilizers



Mood stabilizers

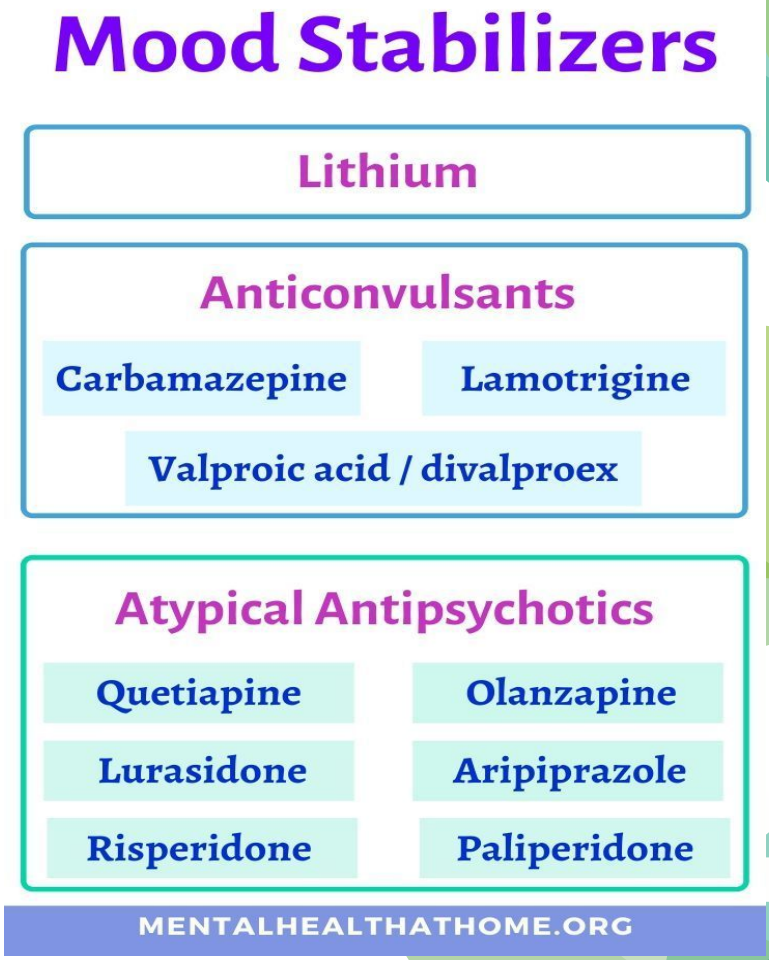
1. Mood stabilizers are used to treat acute mania and to help prevent relapses of manic episodes (maintenance treatment) in bipolar disorder and schizoaffective disorder .

2. Less commonly, they may be used for:
    - Augmentation of antidepressants in patients with major depression refractory to monotherapy
    - Potentiation of antipsychotics in patients with schizophrenia or schizoaffective disorder
    - Treatment of aggression and impulsivity (e.g., neurocognitive disorders, intellectual disability, personality disorders, other medical conditions)

Lithium

Antimanic agent

- Inhibition of norepinephrine and dopamine release in the brain
- Increase of serotonin production in the brain
- Alteration of Na+/ K+ ion transport (brain, muscle cells)
- Metabolized by the kidney
- Onset of action takes 5–7 days.
- Indications :in acute mania and as prophylaxis for both manic and depressive episodes in bipolar and schizoaffective disorders.
- It is also used in cyclothymic disorder and unipolar depression.



Side effects of lithium

NARROW THERAPEUTIC INDEX

- Early:
  - Nausea, vomiting, diarrhea, weight gain, metallic taste
  - Polyurea, polydypsia (nephrogenic diabetes insipidus)
  - Fine Tremor, muscle weakness, edema
  - Worsening of psoriasis
  - Acne
  - Hair loss
- Late:
  - Hypothyroidism, Goitre
  - Memory impairment
  - Nephro toxicity
  - ECG changes : T wave flattening
  - Arrhythmia

Lithium can cause Ebstein's anomaly

Toxicity

mild	plasma levels 1.5-2 mEq/L	1. anorexia 2. vomiting 3. diarrhoea 4. coarse tremor 5. ataxia 6. Dysarthria تلعثم 7. confusion 8. Sleepiness
moderate	2-2.5 CNS	1. impaired consciousness 2. neurological signs: 3. nystagmus 4. muscle twitching 5. hyperreflexia 6. convulsions
Severe overdosage	>2.5	1. toxic psychosis 2. convulsions 3. syncope 4. oliguria 5. circulatory failure 6. coma and death

Contraindications

- Pregnancy, breastfeeding
- Children < 12 years
- Cardiac / renal / hepatic impairment
- brain trauma, brain organ syndrome
- NSAIDs, ACE inhibitors, diuretics
- Dehydration, hyponatremia
- Thyroid disease

Prior to initiating, patients should have :

- an ECG,
- basic chemistries,
- thyroid function tests,
- a complete blood count (CBC),
- and a pregnancy test.

Anticonvulsants

Anticonvulsants

Enhance GABA inhibition, Block excitatory transmitters, Block neuronal Na channel, Block t-type ca channel

1) Valproic Acid

- Multiple mechanisms of action:
  - Blocks sodium channels
  - Increases GABA concentrations in the brain.

- Therapeutic use:
  - Acute mania, mania with mixed features, and rapid cycling.
  - All seizures types

Side effects:

- CNS: NDA (nystagmus , diplopia , ataxia)
- Liver: Microsomal enzyme inhibition
- Blood: neutropenia
- Teratogenic: craniofacial anomalies and neural tube deficit
- Alopecia
- Pancreatitis
- Fulminant hepatic toxicity

2) Carbamazepine

- Acts by blocking sodium channels and inhibiting action potential
- Therapeutic use :
  - Mania with mixed features and rapid cycling • bipolar disorder
- **Side effects:**

  1.CNS: NDA (nystagmus , diplopia , ataxia)
  2. Liver: Microsomal enzyme induction
  3. Blood: Leukopenia, aplastic anaemia, thrombocytopenia, and Agranulocytosis
  4. Teratogenic: craniofacial anomalies and neural tube deficit
  5. Increase ADH secretion
  6. Significant drug interactions with many medications metabolized by the cytochrome P450 pathway
  7. Toxicity: Confusion, stupor, motor restlessness, tremor, twitching, and vomiting.

3) Lamotrigine

- Work on sodium channels that modulate glutamate and aspartate.

- Therapeutic use:
  - Efficacy for bipolar depression,
  - Little efficacy for acute mania or prevention of mania

Side effects:

- Dizziness, sedation, headaches, and ataxia.
- Stevens-Johnson syndrome(life-threatening rash)
- Valproate will ↑ lamotrigine levels, and lamotrigine will ↓ valproate levels.
- Insomnia

Other drugs

1- Oxcarbazepine (Trileptal) :

- As effective in mood disorders as carbamazepine, but better tolerated
- Less risk of rash and hepatic toxicity
- Monitor sodium levels for hyponatremia

2- Gabapentin (Neurontin)

- Often used adjunctively to help with anxiety, sleep, neuropathic pain
- Little efficacy in bipolar disorder

3- Pregabalin (Lyrica)

- Used in GAD (second-line) and fibromyalgia
- Little efficacy in bipolar disorder

4-Tiagabine (Gabitril): Questionable benefit in treating anxiety

5-Topiramate (Topamax)

- May be helpful with impulse control disorders Beneficial side effect is weight loss
- Can cause hypochloremic, metabolic acidosis, as well as kidney stones
- The most limiting side effect is cognitive slowing

Side effects:

- GI symptoms
- Weight gain
- Sedation
- Alopecia
- Pancreatitis
- Hepatotoxicity or benign aminotransferase elevations
- ↑ ammonia
- Thrombocytopenia
- Teratogenic effects during pregnancy (neural tube defects)

Guidelines

Guidelines

- Start antiepileptic drugs (AEDS) following a second epileptic seizure .
- Therapy should be started with ONE drug (monotherapy) : → if failed , SUBSTITUTE with another drug . if failed , use combination of 2 drugs .
- Combination of valproic acid + lamotrigine → Stevens - Johnson's syndrome
- Stopping of AEDS can be considered if seizure free for > 2 years, with AEDs being stopped over 2- 3 month

Past years questions

1- Which of these is not a side effect of lithium?

A-Nephrogenic DI
B-thyroid enlargement
C-benign leukocytosis
D-weight loss
E- Constipation
F- muscle rigidity (سؤال مكرر كل مرة جواب)

3- Which of the following is not Valproic Acid side effect?

A) Nystagmus
B) Diplopia
C) hirsutism
D) thrombocytosis (سؤال مكرر كل مرة جواب)
E) Pancreatitis

4- Which of the following is not carbamazepine side effect?

A) Nystagmus
B) Hepatotoxicity
C) Aplastic anemia
D) CYP450 inhibition
E) nephrogenic DI
F) hypernatremia (سؤال مكرر كل مرة جواب)

5- One of the following best description for lithium?

A) works immediately
B) narrow therapeutic index
C) does not need CBC and hepatic Monitoring
D) safe for breastfeeding

6- Late side effect of lithium?

Memory impairment

7- Absolute contraindication of lithium:

Severe kidney failure

8- which one of these is the toxic dose for lithium

a-1.5
b-1.2
c-0.5

9- not a mood stabilizer

a-lithium
b-valproate
c-fluvoxamine
d-carbamazepine
e-lamotrigine

Past years questions

10- Lithium acts physiologically by all of the following except?

Dopamine inhibition
norepinephrine inhibition
alpha 2 agonist
increase serotonin production

11- Ebstein anomaly is teratogenic side effect of:

lithium.

12- a lady using medications for her mental illness but she can't remember the name of meds or illness, complained of polyuria and polydipsia, what's her diagnosis?

Bipolar (you should know the drug first which is lithium based on the side effects)

13- Which of the following symptoms indicates lithium toxicity:

a. Coarse tremor
b. Fine tremor
c. Hypothyroidism

14- Which drug requires a strict monitoring of serum levels every 3 months & is likely to cause Sodium imbalances is:

a. Valproic Acid
b. Carbamazepine
c. Clozapine
d. Lithium
e. Clonazepam

15- Which of the following is not a mild sign of lithium toxicity:

A. ataxia
B. oliguria
C. vomiting
D. coarse tremor

16- One of the following is idiosyncratic side effect of carbamazepine?

Agranulocytosis

17- wrong about bipolar disorder?

carbamazepine used in treatment of a depressive episode

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Antipsychotics

TYPICAL ANTIPSYCHOTICS

HIGH POTENCY

- HALOPERIDOL
- TRIFLUOPERAZINE
- FLUPHENAZINE

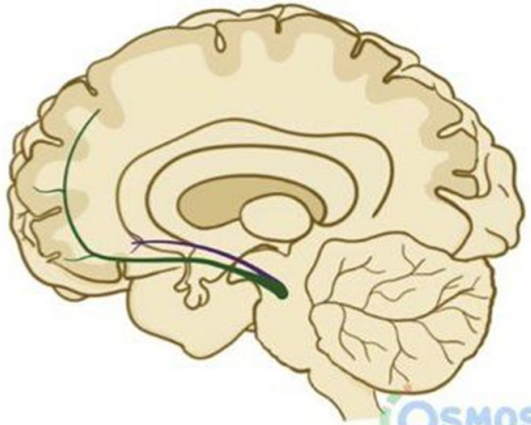
↳ Need ↓ to achieve therapeutic effect

LOW POTENCY

- THIORIDAZINE
- CHLORPROMAZINE

↳ Need ↑ to achieve same therapeutic effect as high-potency

* BLOCK DOPAMINE D2 RECEPTORS in MESOLIMBIC
  ↳ ALLEVIATE POSITIVE SYMPTOMS
* BLOCK DOPAMINE RECEPTORS in MESOCORTICAL
  ↳ WORSEN NEGATIVE SYMPTOMS



Antipsychotics uses

- **Schizophrenia (and its related spectrum of disorders, including schizoaffective disorder and schizophreniform disorder).**
- **Bipolar disorder**
- **Mania**
- **Major depressive disorder with psychotic features.**
- **Delusional disorder**
- **Severe agitation.**
- **Borderline personality disorder**
- **Dementia**
- **Delirium**
- **Substance-induced psychotic disorder.**

Providers may treat other conditions with antipsychotics, but those drugs aren't their main treatment. These conditions include:

• Tourette syndrome
• Huntington's disease.
• Obsessive-compulsive disorder.

Typical antipsychotics

Low potency

- Lower affinity for dopamine receptors so a higher dose is required.
- Higher incidence of antiadrenergic, anticholinergic, and antihistaminic S.E
- Lower incidence of EPS and neuroleptic malignant syndrome.
- More lethality in overdose due to QTc prolongation, and the potential for heart block and ventricular tachycardia.
- Rare risk for agranulocytosis, and slightly higher seizure risk.
    - Chlorpromazine (Neurazine/Zuledine)
    - Thioridazine (Ridazine)

Mid-potency

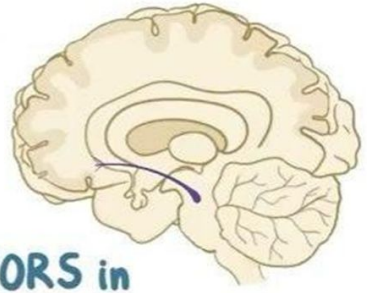
- Have midrange properties.
    - Loxapine (Loxitane)
    - Thiothixene (Navane)
    - Molindone (Moban).
    - Perphenazine (Minitran).

High potency

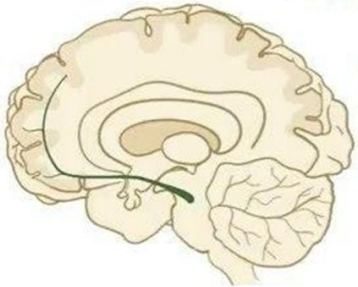
- Greater affinity for dopamine receptors; so, a relatively low dose is needed to achieve effect.
- Less sedation, orthostatic hypotension, and anticholinergic effects.
- Greater risk for extrapyramidal symptoms and (likely) TD.

1. Haloperidol (Haldol): Can be given PO/IM/IV. Decanoate (long acting) form available.
2. Fluphenazine (Prolixin): Decanoate form available.
3. Trifluoperazine (Stelazine): Approved for nonpsychotic anxiety.
4. Pimozide (Orap)

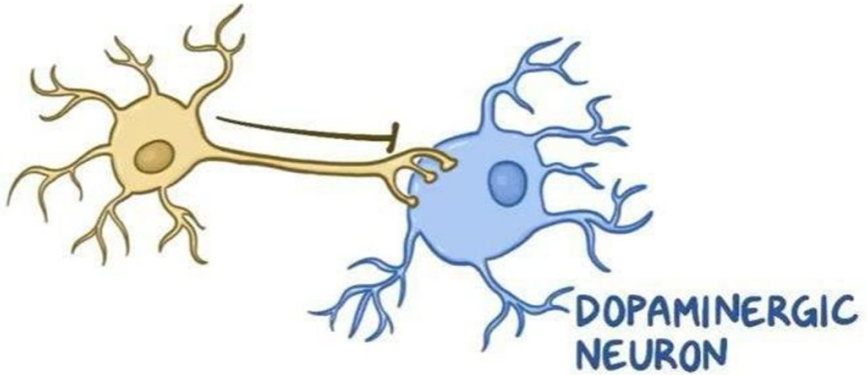
ATYPICAL ANTIPSYCHOTICS



* BLOCK DOPAMINE D_2 RECEPTORS in MESOLIMBIC
  ↳ ALLEVIATE POSITIVE SYMPTOMS



* BLOCK SEROTONIN 5-HT_{2A} RECEPTORS in MESOCORTICAL



Atypical antipsychotics

- They are less likely to cause EPS, TD, or neuroleptic malignant syndrome.
- They may be more effective in treating negative symptoms of schizophrenia than typical antipsychotics.
- Atypical antipsychotics are also used to treat acute mania, bipolar disorder, and as adjunctive medications in unipolar depression.
- They are also used in treating borderline personality disorder, PTSD, and certain psychiatric disorders in childhood (e.g., tic disorders)

- Clozapine (Clozaril/Leponex)
  - Gold standard, Only antipsychotic shown to be more efficacious than the others; used in treatment refractory schizophrenia.
  - Only antipsychotic shown to decrease the risk of suicide
  - Not used as a first line agent ,can cause agraulocytosis, needs essential monitoring of WBCs
- Risperidone (Risperdal/Raxidone/Respal/Respirox)
  - Has an injectable form named Consta
  - Can cause increased prolactin
- Quetiapine (Seroquel/Asero/Esperal/Quzal)
  - Has an extended-release form
  - Lowest risk Of movement disorder
- Olanzapine (Zyprexa/Benzopain/Olenza/Olexa)
- Ziprasidone (Geodon/Zeldox)
- Aripiprazole (Abilify/Abizol/Aripal/Arina/Zorta)
  - Unique mechanism of partial D2 agonism

How to treat psychotic symptoms:

- **First-line: always use atypical agents**
- **Emergency room: use short-acting intramuscular agent such as haloperidol, fluphen-azine, olanzapine, or ziprasidone**
- **Nonadherent patient: use long-acting antipsychotic medication such as haloperidol, fluphenazine, risperidone, paliperidone, or olanzapine**
- **Last resort: clozapine**
- **All meds ineffective: may consider ECT**

Antipsychotics side effects

Antidopaminergic effects

A) Extrapyramidal symptoms (Acute)

- **PsuedoParkinsonism:** bradykinesia, masklike face, cogwheel rigidity, pill-rolling tremor.
    - Management by Anticholinergic, or dopamine agonist, and lowering dose of antipsychotic or discontinue
- **Dystonia:** Presentation: spasms of various muscle groups Young men may be at higher risk, seen in 10% patients.
    - **Managed** by anticholinergic (such as benztropine) , diphenhydramine.
- **Akathisia:** Presenting Symptoms: motor restlessness, “ants in your pants” ,often mistaken for anxiety and agitation.
    - **Treatment**: lowering the dose, adding benzodiazepines or beta-blockers, switching to other antipsychotic medication.

B) Hyperprolactinemia: Leads to decreased libido, galactorrhea, gynecomastia, impotence, amenorrhea.

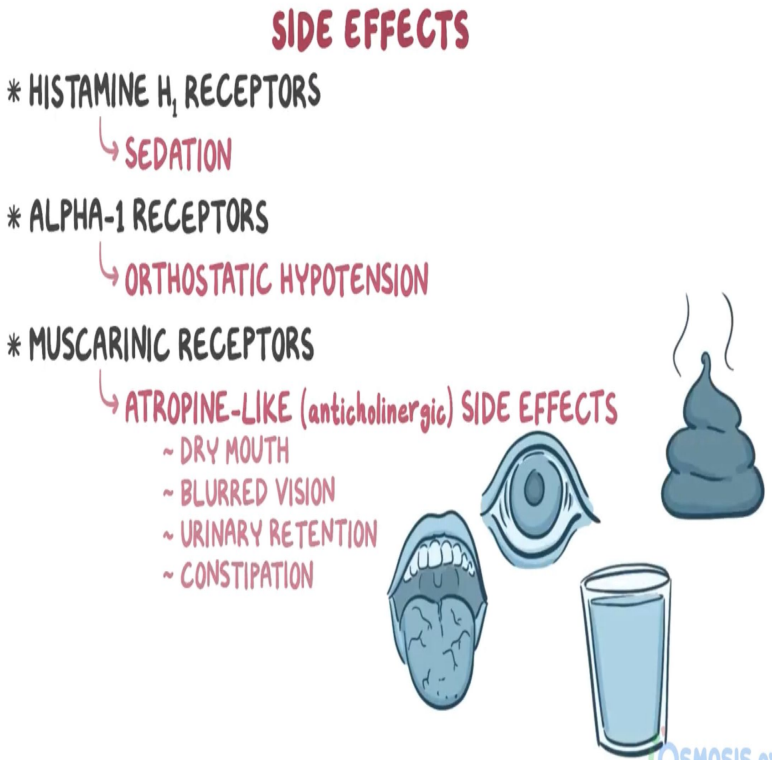
Side effects continued

Tardive dyskinesia

- Characterized by choreoathetosis and other involuntary movements
- Movements often occur first in the tongue or fingers and later involve the trunk.
- Etiology may be a form of “chemical denervation hypersensitivity,” which is caused by chronic dopamine blockade in the basal ganglia.

Treatment: Use newer antipsychotic medications.

- Seen more frequently in **elderly females**
- Can occur after **3–6 months** after treatment



Neuroleptic malignant syndrome

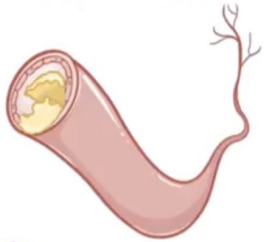
- The primary adverse effect of antipsychotic medication use is neuroleptic malignant syndrome.
- It is a fairly rare and potentially life-threatening condition and considered a psychiatric emergency.
- Characterized by:
  - Muscular rigidity
  - Hyperthermia
  - Autonomic instability and delirium
  - CPK will be elevated.

- **F**ever (most common presenting symptom).
- **A**utonomic instability (tachycardia, labile hypertension, diaphoresis).
- **L**eukocytosis.
- **T**remor.
- **E**levated CPK.
- **R**igidity (*lead pipe* rigidity is considered almost universal).
- **E**xcessive sweating (diaphoresis).
- **D**elirium (mental status changes).

- Usually associated with high dosages of high-potency antipsychotic medication.
- Treatment: Immediate discontinuation of the medication and physiologic supportive measures (cooling, ice packs); dantrolene (muscle relaxant) or bromocriptine (D2 agonist) may be used.

SIDE EFFECTS

* METABOLIC SYNDROME
  - ~ WEIGHT GAIN
  - ~ DIABETES
  - ~ DYSLIPIDEMIA
  - ~ ↑ CARDIOVASCULAR RISK



* SEIZURES
* AGRANULOCYTOSIS
  - ~ FREQUENT & OVERWHELMING INFECTIONS
  - ~ WBC & ANC MONITORED

CLOZAPINE

OLANZAPINE

ARIPIPRAZOLE

* PROLONG Q-T INTERVAL

ZIPRASIDONE

Past years questions

1- A patient on antipsychotic started to experience restlessness and he says he is unable to set still?

A- Rigidity
B- Akathisia
C- Dystonia
D- Bradykinesia

2- antipsychotic causes weight gain?

Olanzapine

3- The first side effect of antipsychotic:

Dystonia

4- which one of these is a typical antipsychotic :-

a- haloperidol
b- olanzapine
c- clozapine
d- risperidone
e- quetiapine

5- What is the prognosis for a 24-year-old man diagnosed with schizophrenia who is adherent to antipsychotic medication treatment?

His delusions and hallucinations may improve, but his tendency to isolate and his cognitive abilities may not improve

6- a schizophrenic patient who was started on haloperidol but was not improving . The doctor recommended to stop the drug and switch to risperidone 5 mg after a few weeks the patient started having symptoms of akathisia what is your next step

a- lower the dose (then propranolol)
b- change the drug
c- administer benztropine
d- administer benzodiazepines

Past years questions

7- Least cardiac side effect with haloperidol therapy:

A. Atrial fibrillation
B. Palpitation
C. Ventricular fibrillation
D. Torsades de pointes
E. Sudden cardiac

8- A patient on risperidone comes into your office and reports that she
Intends on going to her gynecologist because she hasn't been having her menstrual periods.
She has taken a pregnancy test and it was negative. Which lab test would you order?

a. Lumbar puncture
b. Risperidone level
c. Complete blood count
d. Liver profile
e. Prolactin level

9- Which of the following is a metabolite of Risperidone?

Paliperidone

10- Schizophrenic man who takes risperidone complaining of decreased sex drive, and of wet nipples, but he claims the wet nipples are due to sweat. What lab test would you like to order:

Prolactin level

11- One of the following is an atypical antipsychotic:

A. haloperidol
B. quetiapine
C. chlorpromazine

12- In the treatment of bipolar depression in young women, caution must be used with which of the following agents because it may increase the risk of polycystic ovarian syndrome?

a. Quetiapine
b. Lamotrigine
c. Divalproex
d. Olanzapine

13- Among these side effects which is the first to appear after taking antipsychotics

Hypothyroidism
Parkinsonism
Tardive dyskinesia
Akathisia