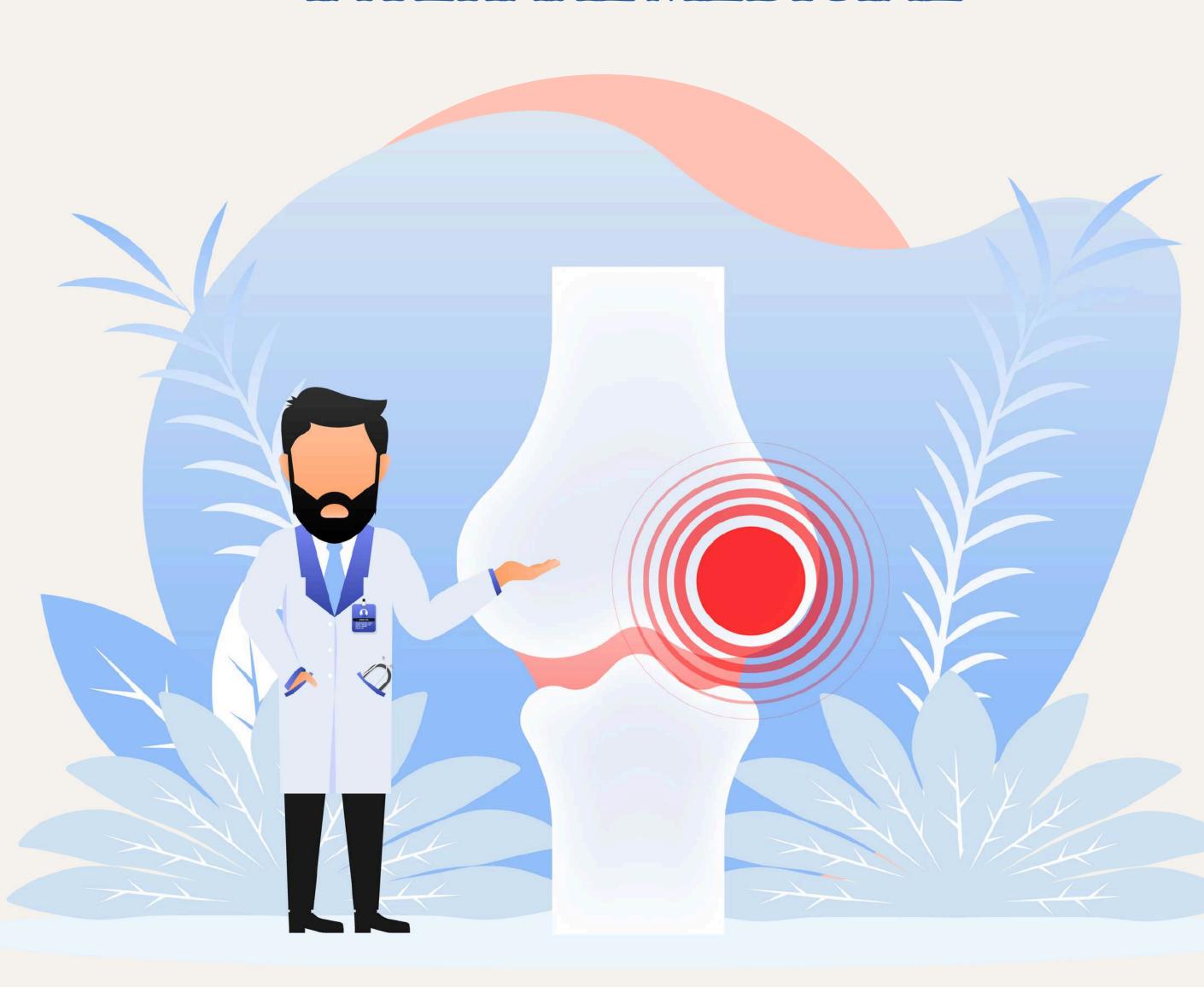
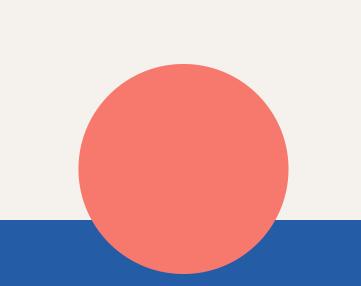


# RHEUMATOLOGY

# INTERNAL MEDICINE



Archive



### CONTENT:

- 1. Rheumatoid Arthritis
- 2.SLE
- 3. Dermatomyositis
- 4. Vasculitis & bahcet diseas
- 5. Gout
- 6. Seronegative arthritis
- 7. Scleroderma

### RHEUMATOID ARTHRITIS

#### 1. Which statement about rheumatoid arthritis is not correct?

A.The commonest cause of anemia seen in pts with the diseas is due to hemolysis.

**B.Synovitis characerisically involves Metarasophalangeal joints.** 

C.RF is of an IGM type.

D.Joint effusions occur in the first several months.

E. Felty's disease is more common in seropositive patients.

**Answer: A** 

#### 2. ONE of the following is not a disease -modifing anti-rheumatoid arthritis drug:

A.sulfasalazine

**B.NSAIDs** 

**C.methotrexate** 

**D.leflunamide** 

E.sodium aurothiomalate (Gold)

**Answer: B** 

### 3.cytokines of RA? IL6, TNF a

### 4. All the following are true about rheumatoid arthritis except:

A.it is chronic disease, but curable.

B.it is commonly associated with positive rheumatoid factor

C.antimalarial treatment is one of the lines of management.

D. the patients with the disease are liable to infection

E. this disease may affect the patients functionally.

**Answer: A** 

### 5. Boutonniere deformity is seen in:

A.RA.

**B.Psoriatic arthritis.** 

**C.Reactive arthritis.** 

D.Osteo arthritis.

E.Tenosynovitis of haud.

**Answer: A** 

#### 6. A disease modifying anti rheumatic drugs (DMARD) include all f the following except for :

A.Salazo pyrine.

**B.**Hydroxychloro quine.

C.Colchicine.

**D.Methotrexate** 

**E.leflenamide** 

**Answer : C** 

#### 7. One of the following deformities can't be caused by RA:

A.Swan neck deformity.

B.Genu valgua.

**C.Elbow flextion.** 

**D.Bouchard nodules.** 

**E.Z** deformity of thumb.

**Answer: D** 

#### 8. What is swan neck deformity in RA:

A.Hyper flextion of proximal interphalangal (PIP) and hyper extension of distal interphalangal (DIP).

B.Hyper extension of PIP and hyper flextion of DIP.

C.Hyper extension of PIP and hyper extension of DIP.

**D.Sublaxation of Metacarpophalangal.** 

E.Non of the above.

**Answer: B** 

# RHEUMATOID ARTHRITIS

9. The natural history of arthritis in patients suffering from rheumatoid arthritis with	th no
regular treat Select one:	

**A.Progressive** 

**B.Intermittent** 

**C.Migratory** 

**D.Regressive** 

**E.Stable with occasional exacerbation** 

**Answer: A** 

10. 54-year-old female presented with a two- month history of symmetrical poly arthritis of hands and feet associated with morning stiffness more than two hours. Rheumatoid factor and Anti CCP are positive. Which one of the following is the treatment of choice?

A.Aspirin

B.lbuprofen.

C.Methylprednisolone.

**D.Cyclophosphamide** 

**E.Methotrexate.** 

**Answer: E** 

11. A 26-year-old woman seeks preconception counseling. She has a 3-year history of rheumatoid arthritis and she is on methotrexate, hydroxychloroquine, low dose prednisolone, and folic acid. Currently her disease is under excellent control. Which of the following is the most appropriate next step in the management? Select one:

- A. Discontinue hydroxychloroquine
- **B.** Discontinue methotrexate
- C. Discontinue prednisolone
- D. Discontinue hydroxychloroquine, methotrexate, and prednisolone
- **E.Keep the treatment unchanged**

**Answer: B** 

12. A 55 year old women, with past history of rheumatoid arthritis, presents with progressive shortness of breath and dry cough a few months ago, on examination bilateral fine inspiratory crackles. whats the Dx?

**A.Pulmonary odema** 

**B.Consolidation** 

**C.Pleural effusion** 

**D.Pulmonary fibrosis** 

**E.Lung** cancer

**Answer: D** 

13.All the following are causes of monoarthritis except one:

A.Gout

**B.Trauma** 

**C.Septic arthritis** 

D. Pseudogout

E. RA

**Answer:E** 

14. All of the following are characteristic extra-articular manifestations of rheumatoid arthritis except?

A. Anemia

**B.** Cutaneous vasculitis

C. Pericarditis

D.Caplan,s syndrome

E. Thrombocytopenia

**Answer: E** 

### 15. Boutonniere deformity is seen in:

A.RA.

**B.Psoriatic arthritis.** 

**C.Reactive arthritis.** 

**D.osteo** arthritis.

E.Tenosynovitis of haud.

**Answer: A** 

### 16. RF is positive in all of the following, except:

- A. Subactue bacterial endocarditis
- B. Adult onset Still's disease.

C. Vasculitis

**Answer: B** 

# 17. All of the following help differentiate between inflammatory and non- inflammatory arthritis, except:

- A.. Favorable response to NSAIDS
- **B..** Mornign stiffness for 2 hours
- C. Pain improves with continued ambulation
- D. Presence of extra-articular features
- E. Hottness and rednes of the affected joint

**Answer: E** 

### 18.All of the following are consistent with the diagnosis of rheumoatoid arthritis, except:

- A.. Symmetrical involvemtn of the small joints of the hands
- **B. Elevated ESR**
- C. Wan neck deformities in the fingers
- D. Nodes of the distal interphalangeal Heberden's joint
- E. Erosive changes othe MCP joints on x-ray

**Answer: D** 

#### 19. a case of RA and takes etanercept, what statement is correct? There is risk of reactivation of TB

#### 20. Anti ccp, pain and swelling in mcp ?RA

### 21.Al the following joint are usually affected at onset of RA except one:

A.Proximal interphalangeal joints

- **B.** Distal interphalangeal joints
- C. Metacarpophalangeal joints

**D.Wrists** 

E. Metatarsophalangeal joints

**Answer: B** 

### 22. All the following are true about rheumatoid arthritis except?

A.it is chronic disease, but curable.

- B. it is commonly associated with positive rheumatoid factor
- C. antimalarial treatment is one of the lines of management.
- D. the patients with the disease are liable to infection
- E. this disease may affect the patients functionally.

**Answer: A** 

### 23. Most common eye finding in RA? sjogren or sicca syndrome...episcleritis

### 24.RA patient in pain, he takes indomethacin, next step:

**A.Methotrexate** 

**B** Corticosteroid therapy

### 25.A joint deformity that is not present in RA:

A.Heberden

**B.Botnunnier** 

C.Z-deformity

Answer : A

**Answer: A** 

### **MINI OSCE**

one of the following is wrong regarding this condition:
 Reversible deformity



1)What is vour diagnosis?

**Rheumatoid Arthritis** 

2)List three findings on the x-ray?

Marginal erosion - Joint space narrowing - peri-articulate osteopenia

3)List two serological tests to confirm your diagnosis?

anti-CCP - RF



1) Finding: Sublaxation

2)diagnosis: RA



1)69 YEARS, female patient All the following possible finding, EXCEPT?

A.Swan Neck

**B.Boutenier** 

C. Ulnar deviation

**D.Pain with passive movement** 

**E.Reducible deformity** 

**Answer: E** 

2)One of these drugs not for this lesion:

**A.Methotrexate** 

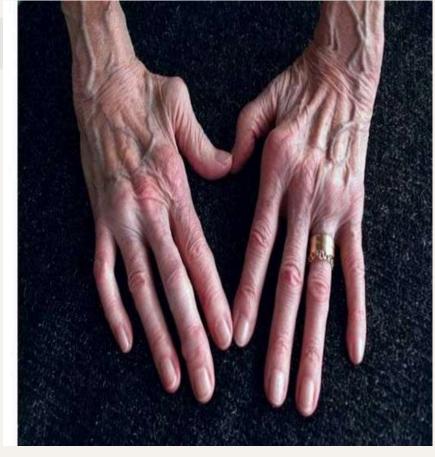
**B.Sulfasalazine** 

**C.Infliximab** 

**D.Hydroxycholoquine** 

**E.Chloramphenicol** 

Answer: E



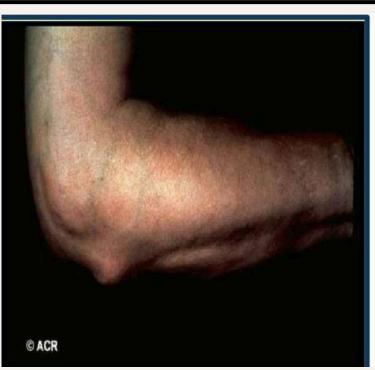
1)A-What is this finding?

**Rheumatoid nodule** 

2)How to confirm the diagnosis?

clinical diagnosis, RF, Anti-CCP, x-rays (erosive changes, deformities, etc)





### **MINI OSCE**

 The pt complains of morning stiffness & pain in the joints of his hands. What's the Dx?
 Rheumatoid arthritis (RA)





Female with joints pain in both hands  $\delta$  dyspnea.

1- What is the diagnosis?

**Rheumatoid arthritis** 

2- What is the sign you look for on olecranon fossa?

Subcutaneous rheumatoid nodules, ulnar deviation

3-Mention 3 drugs which stop the progression of this disease.

1. Methotrexate 2.Infliximab 3. Hydroxychloroquine 4. Etanercept.

Gold salts and penicillamine are no longer used in RA
New molecular biological agents for treatment of RA (bDMARDS)
Tofacitinib
Abatacept (not sure)



Interstitial Lung Diseases [Lung Fibrosis]; Caplan's Syndrome - [Intrapulmonary Nodules].

The following patient has been complaining of joint pain for several years and was diagnosed with rheumatoid arthritis. Name 2 deformities in the image

- 1. Swan neck deformity
- 2. Ulnar deviation
- 3.Z-deformity



56 YO pt complaining of general aches  $\delta$  pain, but also some stiffness  $\delta$  swelling in her both hands for the past 2 months that is worse in the morning. What's Your Dx.?

rheumatoid arithritis (Swan neck and butonniere deformities are both present).



**Ddx: Swan neck deformity** 





### **MINI OSCE**

- A 30 years old female patient comes to the clinic complaining of morning stiffness, pain at the MCPs and PIPs, and stiffness of joints that is more pronounced after prolonged inactivity. What is the Diagnosis? RA
- What is the explanation of joint stiffness after prolonged inactivity? Gel phenomenon
- The same patient comes again after 5 years, but is now complaining of dryness of mouth and blurred vision. What is your diagnosis? Secondary Sjogren Syndrome (keratoconjunctivitis sicca)

1-This patient had high creatinine. What's the cause?

One of tofacitinib sides effects, NSAIDS

2-Mention 2 drugs that modify the progression of this condition?

**Methotrexate, Hydroxyurea** 

3- female with joints pain in both hands and dyspne?

1- what is the diagnosis?

RA.

2- what is the cause of Dyspnea?

lung fibrosis and nodules

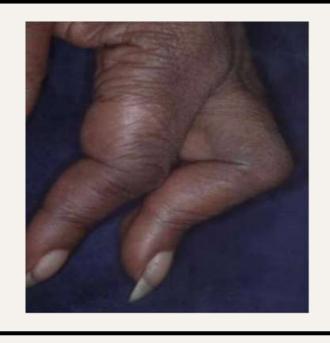


• A known case of Rheumatoid arthritis presents with progressive shortness of breath, describe your finding in this X ray?

Diffuse Reticulonodular infiltrates indicative of pulmonary fibrosis secondary to Rheumatoid arthritis



Ddx:Button hole deformity (boutonniere deformity)



• Ddx:subluxation of the first metatarsophalangeal joint

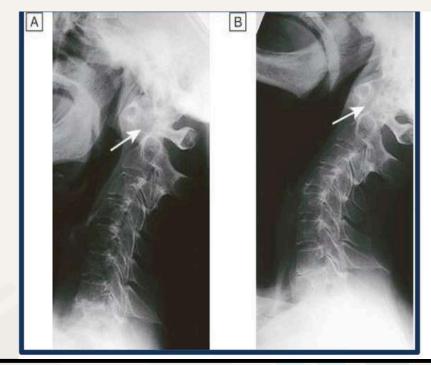


### **MINI OSCE**

• Ddx:Deviation at the metatarsal phalange joints



- DX: Rheumatoid Arthritis
- F: subluxation of cervical spine
- A. flexion, showing widening of the space(arrow)
- B. extension, showing reduction in this space



#### **DX:Rheumatoid Arthritis**

F: Radiocarpal joint destruction, ulnar deviation, erosion of the ulnar styloid bilaterally, dislocation of the left thumb PIP joint, and dislocation of the right fourth and fifth MCP joints

### **DX: Rheumatoid Arthritis**

F: Hand radiographs in longstanding rheumatoid arthritis demonstrating carpal destruction, radiocarpal joint narrowing, bony erosion (arrowheads), and soft-tissue

swelling





- a 29 female patient with recurrent hand joints artheritis and oral ulcer, what is the diagnosis?SLE
- all can be seen in sle except? Anticentromere antibodies
- · Which one of the followings statements is correct about patients with SLE: Select one:
- a. ANA (Antinuclear antibodies) is positive in almost all patients.
- b. Hydroxychloroquine is an enough treatment for discoid lesions on the face.
- c. Renal involvement occurs in 90% of patients.
- d. Arthritis is usually erosive and deforming.
- e. Psychosis is always a manifestation of CNS involvement.

**Answer:a** 

- Which of the following is true about serologic testing in SLE?
- a. A positive ANA is specific for SLE
- b. Ds-DNA level correlates with disease activity in SLE
- c. Anti-histone antibodies are seldom positive in non-drug induced SLE
- d. The majority of patients with SLE have anti-Sm antibodies
- e. Anti-Ro antibody is specific for SLE

**Answer:b** 

- · Raised JVP in SLE patient : constrictive pericarditis
- · case scenario and you are asked to how many SLE criteria are present: 5
- Recurrent abortion, sle, long ptt low platlets: anti phospholipid
- True regarding SLE :azathioprine & other immunosupressive drugs decreasing need for long term corticosteroid
- SS In ...

**SLE** +sjougren

- patients have SLE with chest pain and diffuse ST elevation >>Pericaditis
- Management of a patient how have a fever of 3 month duration. Has typical signs, symptoms, and laboratory findings consistent with SLE. She present to hospital with hematuria with dysmorphic RBCS.
   Next step in management:
- a. Renal biospys
- b. Intravenous methylprednisolone
- c. pulse cyclophosphamide
- d. IV methylprednisolone + pulse cyclphosmaide
- e. Monitoring c3 level

**Answer:a** 

- Patient present with Hb of 8... Blood film shows polychromasia. Best next step in management if patient is on hydoxychloroquine therapy for SLE:
- a. IV corticosteroids
- b. Plasmapharesis

Answer : a

- All of the following are criteria for SLE, except?
- A) Anti RNP.
- B)Mouth ulcer's.
- C)ANA.
- D)Photosensitivity.
- E)Leukopenia.

Answer: a



- All are criteria to diagnose SLE, except:
- A. Anti-RNP
- **B.** Photosensitivity
- C. Mouth ulcers
- D. Leukopenia

**Answer:a** 

- All the following are true regarding the ANA(Antinuclear antibody) test Except:
- a- it is the mainstay test in SLE
- b- there are several techniques for making this test.
- c- it is highly specific test for SLE.
- d- it may be positive in normal individuals.
- e- it is highly sensitive in SLE.

**Answer:c** 

- A 25-year-old woman presented with polyarthropathy affecting her hands, shoulders and knee joints. She has recently complained of a rash on her face and upper chest. On examination she has a rash on her face involving nose and cheeks. Blood testing revealed positive antinuclear antibodies, positive anti-double stranded DNA and low C3/C4 levels. Which one of the following diagnoses fits best with this clinical picture? Select one:
- a. Mixed connective tissue disease
- b. Flare of rheumatoid arthritis.
- c. Drug-induced Lupus
- d. Drug-induced photosensitivity.
- e. Systemic lupus erythematosis.

**Answer:e** 

- A 25-year-old woman, known to have systemic lupus erythematosus presents with edema of lower limbs. Laboratory studies showed proteinuria of 1.2 gm/24 hour. On examination she had BP 130/85 with mild pitting edema of lower limbs. Creatinine 0.9 mg/dl. Renal biopsy was arranged and showed: mesangial proliferative glomerulonephritis. The best treatment option for this patient is:Select one:
- a. Increase dose of Hydroxychloroquine
- b. Intravenous diuretics alone.
- c. Prednisolone 1mg/kg/day.
- d. Mycophenolate mofetil.
- e. Plasmapheresis.

**Answer:c** 

- Which one of the following medications is well known to cause drug induced systemic lupus erythematosus:
- a. Oral contraceptive pills.
- b. Procainamide.
- c. Prednisolone.
- d. Hydroxychloroquine.
- e. Rifampicin.

**Answer:b** 

- Which of the following is true about congenital heart block in neonatal lupus erythematosus?
- a. It is associated with maternal anti-Ku autoantibodies
- b. It is transient
- c. The majority of patients will require a pacemaker
- d. There is no increased risk of connective tissue disease in adulthood
- e. The risk of mortality is small.

**Answer:e** 



- Which of the following autoantibodies is least likely to be present in a patient with systemic lupus erythematosus?
- a. Anti-dsDNA
- b. Antinuclear antibodies
- c. Anti-La(ss-B)
- d. Antiphospholipid
- e. Anti-centromere antibodies

**Answer:e** 

- Malar rash and postive ANA.: (lupus)
- Most common type of lupus nephritis is:
- A. Mesangial glomerulonephritis
- **B.** Focal proliferative glomerulonephritis
- C. Diffuse GN
- **D. Membranous GN**

**Answer:c** 

- $\cdot$  All the following are true regarding the pathogenesis of lupus erythematosis except:
- a- the exact cause is unknown.
- b- It is a chronic inflammatory disease.
- c- the basic pathological unitis vasculitis
- d- it is due to type I hypersensitivity reaction.
- e- genetic and environmental factors may play a role in the disease

Answer: d

### MINI OSCE

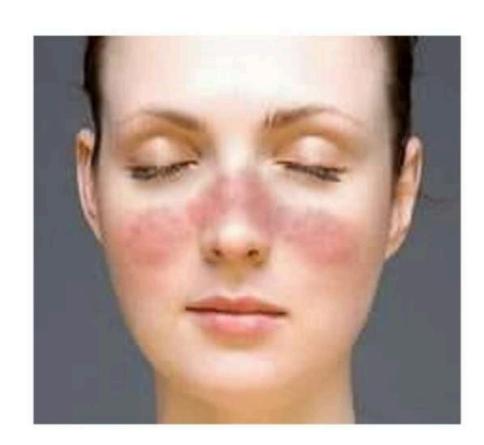
Station 11

-What is this?

Malar rash in SLE

What is your initial investigation?

ANA then if positive order dsDNA





### Station 3: A patient with a known history of SLE ..... Came with BP (high) and HB1Ac = 8%.

- What is your diagnosis?
   Cushing syndrome
- What are three things in the picture that support your diagnosis?
   Moon face – hirsutism – striae
- What is the most likely cause?
   Iatrogenic due to Exogenous steroids (SLE medication)



QTO . MIIAL 2 LIIE UIABIIO312 : :

- Scleroderma
- Rheumatoid arthritis
- · SLE



- ANSWER : SLE ✓
- NOTE: (the idea in the diagnosis is the <u>reversibility</u> of deformity even when typical RA deformities present, Note that this picture is much clear than the exam picture which was unclear for us!!)
- · Here there is a reversible swan neck deformities of the right hand .

# Q20: All of the following are differential diagnosis except:

- SLE
- · Viral arthritis
- Calcium pyrophosphate disease (CPPD)



Not sure about the exact answer ©



### Station 17

Q1:If this pt is ANA +ve then what is the next investegation you would order? anti Ds-DNA/anti-sm

 ${\tt Q2:if\,this\,pt.\,came\,to\,ER\,with\,seizuers\,then\,mention\,3\,differrential\,Dx?}$ 

TIA CVA Uremic encephalopathy (not sure)



17/11

### Rheumato

- 1) what is your diagnosis (SLE)
- 2) give 3 associated symptoms (alopecia / Raynaud/malar rash)
- 3) Give 3 lab investigations for it (ANA ,anti ds dna, anti smith , anti phospholipid ab)
- 4) Give me 2 line of treatment? (Steroid, biological agents)



### DERMATOMYOSITIS

- · Which one of the following statements is NOT true in regard to polymyositis/dermatomyositis?
- a. Distal muscle weakness is characteristic.
- b. Heliotrope rash is highly suggestive for dermatomyositis.
- c. steroid is a corner stone for treatment.
- d. Statins may cause a similar presentation.
- e. Subcutanous calcification is a frequent manifestation in juvenile dermatomyositis.

**Answer:** a

- Gottren Rash :dermatomyositis
- antibody not in dermatomyositis: anti RNP
- heliotrope rash :dermatomyocitis
- A paitent with typical history and signs and symptoms of dermatomyositis. What would you do to confirm your diagnosis?
- a. Muscle biopsy
- b. EMG
- c. ENA
- d. A δB

Answer: d

### MINI OSCE

6-A54 years old female patient complaining of difficulty in ascending stairs and Combing hair since 6 months and rash around the eyes. The most likely diagnosis?

- a. Sjogren 's syndrome
- b. Systemic lupus erythromatosis
- c. Polymyositis
- d. Dermatomyostis
- e. Polyarteritis nodosa



# DERMATOMYOSITIS

A 50 years women presents with muscle weakness and a rash

Q1 \ what is the name of this rash?Heliotrope rash Q2\ what is the diagnosis?dermatomyositis Q3 \ mention 3 investigation to diagnose it?

1- anti jo and anti mi 2 antibodies δ ANA

2- muscle biopsy

3- electromyography

4- CK level





1)In temporal arteritis ONE of the followings is not true: Select one:

A. Typically affects young age groups.

B.Headache and jaw claudication are common symptoms.

C.Can lead to blindness.

D.Temporal artery biopsy usually shows characteristic pattern.

E.Can present with fever and high ESR.

Ans:a

2)60 year old patient with headache and tenderness over temporal region and she suffers from tiredness during mastication and talking, what is the diagnostic test:

temporal artery biopsy

3)Temporal pain wt to do nxt?

high dose steroid

#### 4) Right sided headache:

Giant cell artiritis

5) Which of the following associations is true?

A.Hepatitis a with PAN.

**B.RF** and Riter's syndroe.

C.Giant cell arteritis and blindness.

D.RA and addison's disease.

E.TB and reactive arthritis.

Ans:c

6)Correct about PAN:

a. Association with hepatitis C

b.Pathology in small and medium arteries at site of bifurcation

c.Associated with leukocytoclastic necrosis

Ans:b

7)All of the following are true about vasculitis, except:

A.PAN is associated with hypertension

B.Wegner granulomatosis is associated with +ve C-ANCA

C.Hypersensitivity vasculitis mainly presents with large vessel involvement of the aortic arch vessls in females younger than 40 years of age.

D.Giant cell arteritis affects mainly people above the age of 50

E.Churg-strus disease occurs in people with history of atopy

Ans:c

8)Case with hemoptysis and hematuria with proteinase 3 positive (C-ANCA positive):

Wegner granulomatosis.

9)A patient present with B-Asthma mono neuritis multiplex-esoino phila. ANCA positive; what is the most likely diagnosis:

A.SLE.

**B.Wegner granulomatosis.** 

C.Microscopic polyangiitis.

**D.Good pasture.** 

**E.Currg-Strauss.** 

Ans:e

10)All of the following are ANCA associated vascuilitis except for:

A.Microscopic poly angiitis.

**B.Churg-strauss vascuilitis.** 

C.Kawasaki syndrome.

D.Wegner gramulomatosis.

E.All of the above.

Ans:c

11) Which is not associated with finger clubbing:

A.Wegner's granulmoatosus

**B.Idiopathic pulmonary fibrosis** 

C.Bronchiectasis

12)A 45 year old women who has never had significant respiratory disease is hospitalized for hemoptysis. urinary reveals proteinuria and microscopic hematuria, serological findings include normal complement level and negative assay for fluorescent antinuclear antibodies, renal biopsy reveals granulomatous necrotizing vasculitis with scattered immunoglobulin and complement deposits, the most likely diagnosis in this case is?

A.Mesangial lupus glomerulonephritis

**B.Henoch schonlein purpura** 

**C.Microscopic polyarteritis** 

**D.Wegener granulomatosis** 

**E.Goodpasture syndrome.** 

Ans:d

13) Patient with bronchial asthma, eosinophilia, and mononeuritis multiplex:

A. Churg strauss

14) Which one of the following is least recognised as a cause of membranous glomerulone phritis?

A.Malaria

**B.Lymphoma** 

**C.Hepatitis B** 

**D.Cryoglobulinaemia** 

E.Gold.

Ans:d

15)Which one of the following types of glomerulonephritis is most characteristically associated with cryoglobulinaemia?

A. Rapidly progressive glomerulone phritis

**B.Mesangiocapillary glomerulonephritis** 

C.Focal segmental glomerulosclerosis

**D.IgA** nephropathy

**E.Diffuse proliferative glomerulonephritis** 

Ans:b

16)A 14 year-old female patient comes with 2 months history of purpuric skin rash over the lower limbs with abdominal pain urinalysis showed + proteinuria. He reports URTI 2 weeks before the illness. ANA and ANCA were both negative. The most likely diagnosis is:

A.Henock-Schonlein purpura

**B.Polyarteritis nodosa** 

C.Polyangitis and granulomatosis

D.Systemic lupus erythematosus.

**E.Drug eruptions.** 

Ans:a

17) Question indicating Churg-strauss (Eosinophilia and asthma in history):

P-anca

18)Normal serum complement levels would be seen in patients with hematuria, abdominal pain, and hypertension resulting from which of the following?

A.Mixed essential cryoglobulinemia

B.Hepatitis c associated membranoproliferative glomerulonephritis

**C.Diffuse proliferative lupus nephritis** 

D.Henoch schonlein purpura

**E.Post streptococcal glomerulonephritis** 

Ans:d

19)One of the following features is least likely to be seen in Henoch-Schonlein purpura?

**A.Abdominal pain** 

**B.Renal failure** 

**C.Polyarthritis** 

**D.Thrombocytopenia** 

**E.Purpuric rash over buttocks** 

Ans:d

20)Henoch-Schonlein purpura (HSP) is an IgA mediated small vessel vasculitis. There is a degree of overlap with IgA nephropathy (Berger's disease). HSP is usually seen in children following an infection Features:

A.palpable purpuric rash (with localized oedema) over buttocks and extensor surfaces of arms and legs B.abdominal pain

**C.polyarthritis** 

D.features of IgA nephropathy may occur e.g. haematuria, renal failure

Ans:

#### 21) Retinal vasculitis

behcet

22)All are present in behcet's disease except:

A.headache

**B.pulmonary thrombosis DVT** 

C.erythema nodosum

**D.chronic post uveitis** 

Ans:b

23)Not part of criteria to diagnose Behcet:

**A.Arterial aneurysms** 

**B.Uveitis** 

**C.Pethargy test positive** 

Ans:a

24)All of the following are criteria for Behcet disease except for:

a.Mouth ulcers.

b.Arterial Anuyresm.

c.Hypopyon

d.Pethergytest.

e.Acne-like lesion

Ans:b

25) Pathergy test is positive in one of the following diseases.

a.Behcet s syndrome

b.Kawasaki disease

c.erythema multiforme

d.osteoarthritis

e.rheumatoid arthritis.

Ans:a

26) Differential diagnosis of sacroiliitis includes all of the following except for:

A.Psoriatic.

**B.Behcet disease.** 

C.Aukylosing spondylitis.

**D.Reactive arthritis.** 

**E.Chron disease.** 

Ans:b

### MINI-OCSE

- Mention two causes of this Non-blanching Rash?
- 1. Thrombocytopenia (ITP. Aplastic anemia.)
- 2. Vasculitis
- 3. Meningiococcemia? (not sure)



### 1.Name of these lesion:

purpura

2. Give 2 major differential:

**ITP** 

TTP

vasculitis

3. Mention 3 tests to differentiate between them:

platelet count

PT/PTT

bleeding time



- This 23-year old patient developed this skin lesion after a needle prick.
- What is your diagnosis?

#### **Behcet's disease**

• Mention two clinical manifestation of this disease.

### **Recurrent oral and genital ulcers**

what is the name of the test:

pathergy test



 This patient had this mouth lesion, and we did this test for him What's the name of the test?

### Pathergy test.

What's your diagnosis?

Behcet'sdisease.



- A 25 YO non-smoker female presented to the ER with bloody diarrhea, mixed with mucus δ tenesmus and with this. Mention 2 DDX?
- 1. Behchet's disease.
- 2. **IBD.**





 This patient has oral ulcer, arthritis and recurrent DVTs what's your diagnosis?

#### behcet's disease

mention one complication of this disease:

### **blindness**



A young male who have this lesion with haemoptysis
 δ other symptoms of DVT, what's your Dx?

#### **Bahcet's disease.**

Mention one of the ocular manifestation of this disease?

uveitis, iritis



 Pt came to your clinic complaining of painful red eye and joint pain On history the pt had recurrent mouth ulcers On examination you noticed this skin lesion

1-what is your dx?

behcet disease

2-What is the name of this lesion?

erythema nodosum

3-What is your management mention?

Systemic glucocorticoid (oral prednisolone)

+ Azathioprine + cochicine



 What is the most likely diagnosis in this 23 year old male pt with this painful lesion, red eyes and recurrent DVT?

#### **Bahcet's disease.**

What is the HLA type associated with this disease?

#### HLA-B51

mention two line of management?

Local and systemic glucocoricod +azathioprine





 Patient came to the clinic complaining of joint pain and this skin lesion On history the patient had recurrent mouth and genital ulcers what is your diagnosis?

#### **Behcet disese**

• What is the name of this skin lesion?

#### Pyoderma gangrenosum

mention other skin lesion of this disease

**Erythema nodosum, folliculitis** 

• Patient with painful mouth lesion, and we did this test for him (below), 3months later he developed left leg swelling  $\delta$  calf pain that diagnosed as DVT, What is the diagnosis?

**Behcet disese** 







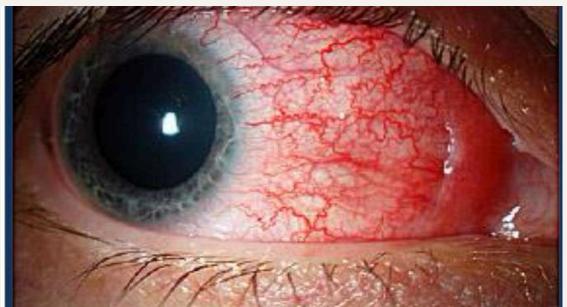
- This patient is a young male smoker who presented to the ER with this picture, what is the diagnosis?
- Dx: Buerger Disease
- (thromboangiitis oblitirans)



 An old male patient presented with progressive eye redness and pain, and now is having tinnitus. What is the most probable diagnosis?

Cogan syndrome, which is a form of large vessel vasculitis. It presents with sensorineural deafness and ocular abnormality (such as: uveitis, scleritis (as in this patient), episcleritis, vertigo, oscillopsia). The patient may also have constitutional symptoms.

• Tx: Topical steroids for keratitis, and systemic steroids for other symptoms



- A 12 years old boy.
- a) What is your diagnosis?

### Henoch schonlein purpura

 b) What's the major cause of morbidity and mortality in this patient?

**Renal failure** 



- Patient with hx of headache and high ESR
- What's your diagnosis?

#### temporal arteritis

Give one complication?

#### vision loss, stroke, hemorrhage

What is the best next step in management?

High dose IV corticosteroids [it is preferable to write: intravenous since it is an emergency case]



- This patient presents with history of recurrent sinusitis. He presents with hemoptysis and acute renal failure.
- What is the most likely underlying diagnosis?
   Wegener's granulomatosis (granulomatosis with polyangiitis).
- What is the likely cause of hemoptysis? vasculitis in the pulmonary blood vessels.





 previously healthy 31-year-old female presented with this rash with a normal platelets count, Diagnosis?

**HSP** 



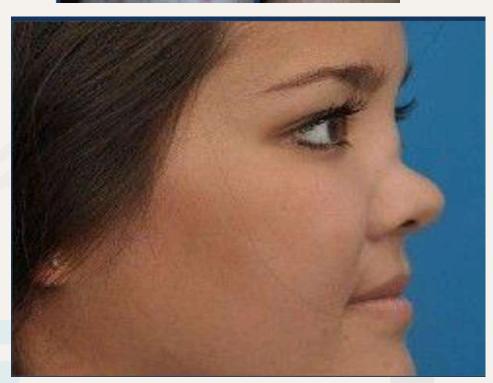
- This patient presented with this palpable rash, she had a history of URTI (upper respiratory tract infection) and she took antibiotics 1 week ago. What is the most likely diagnosis?
- Dx: Hypersensitivity vasculitis, may be seen 7-10 days after infections or drugs intake.



- DX: Henoch-Schönlein purpura
- F: Close-up of palpable purpura.
- Some lesions look like target lesions.



- This patient presented with this picture and dyspnea.
   What is the diagnosis?
- Granulomatosis with Polyangiitis (Wegener Granulomatosis). The nose of this patient shows saddle nose deformity.
- What is the most common antibody to be positive in this patient?
- C-ANCA (anti-PR3 antibodies)



• F: Cutaneous vasculitis in (net-like) pattern





- DX: Vasculitis
- F: Pigmented purpuric dermatosis of the Majocchi type. Note the annular appearance and the prominent elevated erythematous.borders



- DX: Systemic vasculitis
- F: Rash (palpable purpura)



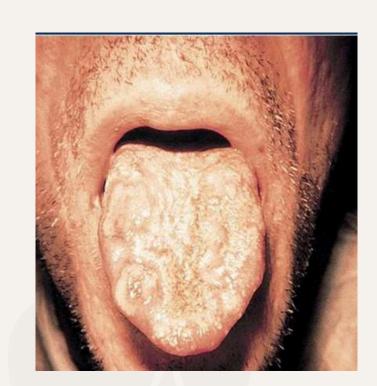
• DX: SLE

• F: Necrotizing vasculitis



• DX:Behcet'ssyndrome

• F: oral ulceration



DX: Vasculitis

• F: rash on the abdomen



• DX: Vasculitis

• F: rash on the abdomen





- 1) All of the following are indications for the treatment of Gouty arthritis except for:
- A)Chronic Gouty arthritis.
- B) Renal stones.
- C) Renal failure.
- D)Serum uric acid more than 8mg in men.
- E)All of the above.

Ans:d

- 2) All the following are true about gout except:
- A)Is caused by deposition of monosodium urate monohydrate crystals in the joints.
- B)It is an asymmetric arthritis.
- C) Can be caused by thaiazide diuretics.
- D) It is commoner in females than males 4:1.
- E)Attack of gout can be triggered by dehydration.

Ans:d

- 3)Synovial fluid analysis for patient with gout?
- -ve birefringent needle shaped crystals
- 4)Which disorder is diagnosed by the presence of calcium pyrophosphate is synovial fluid:
- A) Chondro calcinosis.
- B)Gouty arthritis.
- C)Psoriatic arthritis.
- D)Psoriatic arthritis.
- E)O.A

Ans:a

- 5) All the following are true about uric acid metabolism except.
- A) 2/3 of body uric acid pool is dietary in origin
- B) 2/3 is from endogenous purine metabolism
- C) 2/3 of uric acid is excreted by the kidney
- D) serum uric acid is increased in polycythemia rubra vera
- E) serum uric acid is increased in eclampsia of pregnancy.

Ans:a

- 6) All of the following statement about gout are true, except:
- A) In adult men the solubility of monosodium urate is 7 mg/dL .
- B) Women of child-bearing age have lower serum uric acid.
- C) Initial treatment of acuteattack should include NSAIDs, colchicine, and allopurinol .
- D) Diuretics should elevate serum uric acid.
- E) Attacks can be precipitated by acute MI.

Ans: c

8) Most cause cause of gout:

#### decrease renal excretion

- 9) A 50-year-old man presented with an acutely painful and swollen left knee joint. He has a long history of hypertension and is on Diuretic therapy. The pain has been severe for the past few hours. On examination the knee is hot and tender. There is swelling with moderate effusion. The knee joint aspiration revealed Knee joint aspirate white cell count 18000/cuml. Which one of the following is the most likely diagnosis?
- a. Pseudo gout.
- b. Rheumatoid arthritis.
- c. Osteoarthritis
- d. Acute gouty arthritis.
- e. Septic arthritis.

Ans:d



likely?

- a. Monosodium urate
- b. Calcium hydroxyapatite
- c. Cholesterol
- d. Calcium pyrophosphate dihydrate
- e. Dicalcium phosphate dihydrate (Brushite)

Ans:d

- 12) Which disorder is diagnosed by the presence of calcium pyrophosphate is synovial fluid:
- A)Chondro calcinosis.
- **B)**Gouty arthritis.
- **C)Psoriatic arthritis**
- D)Psoriatic arthritis.
- E)O.A

Ans:a

- 13)All of the following are indications for the treatment of Gouty arthritis except for:
- A) Chronic Gouty arthritis.
- **B)**Renal stones.
- C)Renal failure.
- D) Serum uric acid more than 8mg in men.
- E)All of the above.

Ans:e

- 14) Pt with gout ,what is the goal uric acid level:
- **A)<8**
- B)<7
- C) <6 D)<5
- E)<4

Ans:c

15) patient with right ankle artheritis, which statement is correct?

Previous two attacks of gouty artheritis in the 1st MTP rises the suspicion of gout in this joint

16)A 72-year-old male patient is using 100 mg of aspirin because of a previous CVA. He is expected to have: Select one:

- a. Aspirin is expected to impair excretion of uric acid.
- b. No effect on uric acid
- c. Reduces uric acid
- d. Increase chance of gout despite no change in uric acid
- e. Increases excretion of uric acid.

Ans:a



- 17) All the following are true about gout except:
- a- Is caused by deposition of monosodium urate monohydrate crystals in the joints.
- b- It is an asymmetric arthritis.
- c- Can be caused by thaiazide diuretics.
- d- It is commoner in females than males 4:1.
- e- Attack of gout can be triggered by dehydration.

مکررAns:d

- 18) All the following statements regarding the uric acid are true Except.
- a- two third of the body uric acid pool is dietary in origin.
- b- two third is from endogenous purine metabolism.
- c-normal serum uric acid level dose not exclude acute gouty arthritis.
- d- there are variation in normal values between male and female.

مکررAns:aمکرر

- 19) ONE of the following statements is true about treatment of pulmonary tuberculosis.
- a- pyrazinamide may precipitate hyperurecmic gout
- b- INH can cause optic neuritis
- c- renal impairment with rifampicine
- d- streptomycin is causing reversible damage to vestibularnerve
- e- hepatitis is usually caused by ehambutol

Ans:a

#### 20) Risk factors for urate stones

1.Gout

2.ileostomy: loss of bicarbonate and fluid results in acidic urine, causingthe precipitation of uric acid

### MINI-OCSE

Q1:This patient had multiple attacks of joint pain, redness and swelling this year.

The medication used to prevent further attacks is?

A)Allopurinol

**B)NSAID'S** 

C)Infliximab

**D)Immunosuppressive drugs** 

E)Simple analgesia

**Answer: A** 





### **Q2:all precipitate the attack <u>except</u>:**

A)Physical stress

B)Diuretic

C)Alcohol

D) Probenecid

E)Trauma

**Answer: D** 



### Q3:what is the most common presentation of the condition that is shown with this X-ray?

A)Pseudogout

**B)Pseudo rheumatoid** 

C) Asymptomatic

**D)Pseudo osteoarthritis** 

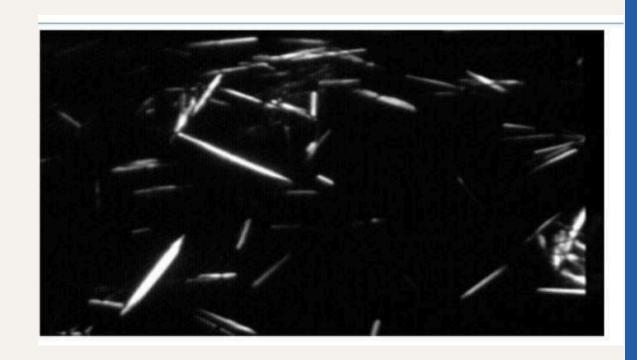


# GOUT MINI-OCSE

Q4:what do you see? needle shaped mono sodium urate crystals

5-Diagnosis?

Gout



**Q6**:

1-Dx:

Gout

#### 2-TTT of this:

avoid secondary causes of hyperuricemia: medications, obesity, alcohol, purine

Acute gout:

a-bed rest

**b-NSAIDs** 

c- Colchicine (if no response to NSAIDs or C/I)

d-corticosteroids (if no response to NSAIDs and Colchicine)



(initiate prophylactic tit after 2-3 acute attacks)

-allopurinol or uricosuric drugs (e.g probenecid)

add colchicine or NSAIDs for 3-6 months (to prevent acute attack then discontinue)

**Very important Note**: DON'T give allopurinol during an acute attack of gout

Side effect for allopurinol: stevens-Johnson syndrome

Q7:-This patient was prescribed an antihypertensive medication.

a) What is the diagnosis?

**Acute gouty attack -podegra** 

b) What was the drug?

**Thiazide** 



**Q8**:

1-Diagnosis?

Gout

2- A blood test to confirm it?

Serum uric acid level

(not sure, in the slide the gold standard is Synovial fluid analysis)



# GOUT MINI-OCSE

Q9: This patient presented with sudden onset pain in his big toe. A-What is the diagnosis?

**Gout (Acute gouty arithritis)** 

**B-Mention** a line of management:

Steroids, NSAIDS, ...



Q10: A patient recently diagnosed with hypertension was started on diuretics, presents to the ER with severe big toe pain, it's the third attack of such pain,

what is your diagnosis?

**Acute Gouty Arthritis** 



Q11:What do you sea and what is your ddx:

Tophus with white monosodium urate monohydrate rystals visible beneath the skin. Diuretic-induced gout in a patient ith pre-existing nodal OA.





Q12-A pt with hypertension (or DM) presented with right ankle swelling  $\delta$  pain. He had 2 previous similar conditions; one was in the same site, the other was on the left ankle. His CBC showed leukocytosis (WBC count = 10,000).

1- What is the most probable Dx? Gout.

2- Mention another DDx.

Septic arthritis, Cellulitis, Pseudogout

3-If a sample from the synovial fluid was aspirated, what is your confirmatory test? Identification of monosodium urate crystals under polarized light microscopy; they have a needle-like morphology  $\delta$  strong negative birefringence.

4-Mention 2 drugs for the treatment of the acute attack. Steroids, NSAIDs, Colchicine.

# GOUT MINI-OCSE

### Q13:

1-What is the abnormality in this x-ray?

Linear calcification of the joints cartilage

2-Diagnosis?

Pseudo-gout (CPPD)



### **Q14**:

1-What is the finding?

Weakly positive birefringence of rhomboidal crystals of calcium pyrophosphate dihydrate under polarized light

2-What is the diagnosis?

**CPPD** (calcium pyrophosphate dehydrate deposition disease)

3-What is the most commonly involved joint?
The knee joint

4-What is the treatment?

Same as gout. NSAIDS, Corticosteroids, colchicine.

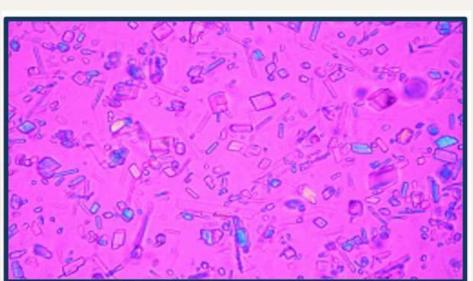
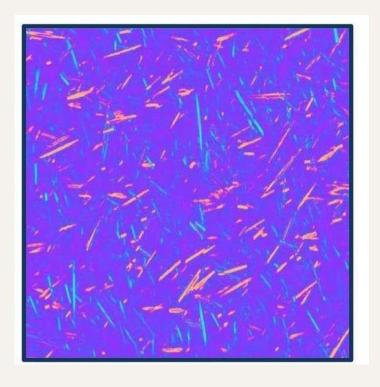




Fig. 25.26 Erosive arthritis in chronic gout. Punched-out erosions are visible (arrows), in association with a destructive arthritis affecting the first metatarsophalangeal joint.



FIGURE 105-2 This X-ray of the finger in Figure 105-1 shows several tophi (monosodium urate [MSU] deposits) in the soft tissue over the third distal interphalangeal joint. Note the typical punched out lesions under the tophi. This is subchondral bone destruction. (Reproduced with permission from Windo



Needle shaped monosodium urate crystals. Has a negative birefringence under polarized light.

### SERONEGATIVE ARTHRITIS

1) A21 year old bisexual man has a 4 week history of intermittent diarrhea, urethral discharge, and pain in the right knee and left second toe. He has several oral ulcers, a clear urethral discharge, a scaly papular rash on palms and soles, onycholysis, sausage-like swelling of the left second toe, and heat and swelling of the right knee. The results of Gramstains and cultures of urethral discharge are negative. Rheumatoid factor is not present. The most likely diagnosis is?

A.Reiter's syndrome

**B.**Gonococcal arthritis

**C.Behcet disease** 

D. Acquired immune deficiency syndrome

**E.** Psoriatic arthritis

Ans:a

2) A30 old man with urethritis, conjunctivitis and arthritis. What is the most likely diagnosis?

**A.Septic arthritis** 

**B.Gout** 

**C.Ankylosing spondylitis** 

D.RA

**E.Reiters syndrome** 

Ans:e

3) Patient have a history of back pain with morning stiffness more than 1 hour?

+ HLA B27

4) P.t with dysuria pyuria and other signs of reactive arthritis What is the most common organism to cause it?

A. Salmonella

**B.** Yersinia

C. Campylobacter

D. Shigella

E. Chlamydia

Ans: E

5) one is wrong about psoriatic arthritis?

chronic posterior uveitis

6) achilles enthesitis seen in?

reactive arthritis

7) One of the following isn't a characteristic for spondylo arthropathy:

A.Strong association with HLA-B27.

**B.Occasional Aortitis.** 

C.Assocoation with chronic inflammatory bowel disease.

**D.Tendency for posterior Uveitis** 

E.Enthesitis.

Ans:d

8)The isn't a cause of secondary sjogren:

**A.Reactive arthritis.** 

B.SLE.

C.Scleroderma.

D.RA.

E.Hypothyroctism.

Ans:a

### SERONEGATIVE ARTHRITIS

9)Differential diagnosis of sacroiliitis includes all of the following except for:

A.Psoriatic.

**B.Behcet disease.** 

C.Ankylosing spondylitis.

**D.Reactive arthritis.** 

**E.Chron disease.** 

Ans:b

10) A healty patient who is HLA-B27 is most likely to develop ONE of the following.

**A.psoriatic arthritis** 

**B.enteropathic spondylitis** 

**C.gonococcal arthritis** 

**D.Reiner's disease** 

E.ankylosing spondylitis

Ans:e

11) Rheumatoid factor is positive in all the following diseases except:

A. Rheumatoid arthritis

**B.Dermatomyocytis** 

C. Ankylosing spondylitis

**D.Discoid SLE** 

E. Mixed connective tissue diseases.

Ans:c

12)A-25- year old man presents with urethritis, painful swollen left knee and conjunctivitis. ONE of the following is most likely diagnosis.

**A.SLE** 

**B.Gonococcal arthritis** 

C.Gout

**D.Reiter's syndrome** 

**E.Ankylosising spondylitis** 

Ans:d

13) A 20-yea-old male is complaining of arthritis and eye irritation. He has a historyof burring on urination. On examination, he has Right knee effusion and dermatitis of the glans penis. Which of the following is ONE most correct statement about this patient?

A.Nisseria gonorrhoeae is likely to be cultured from the glans penis

B. the patient is likely to have positive rheumatoid factor

C.An infectious process of the GI tract may precipitate this disease

D.The anti-nuclear antibody is very likely (highly) to be positive

E.There is strong association with HLA-B8 antigen.

Ans:c

14) HLA-B27 is commonly associated with all of the following Except.

A.it may present normaly in general population

**B.ankylosing spondilitis** 

**C.polymyositis** 

**D.reactive arthritis** 

E. Reiter's disease

Ans:c

15) seen in Xray of osteoarthritis?

Narrowing of joint space

### SJOGRENSYNDROME

### MINI-OCSE

**Q1**:

A 28 YO male pt had chronic lower back pain with morning stiffness which improves with exercise.

What is your Dx?

**Ankylosing Spondylitis. Bilateral sacroiliiteis** 



**Q2**:

**Diagnosis?** 

Bamboo spine and Anterior uveitis So diagnosis is ankylosing spondylitis





**Q3**:

What is your ddx:

Ankylosing spondylitis: iridocyclitis with synechiae



**Q4**:

Male patient presented with unilateral uveitis. This is x-ray for his spine.

What is your Dx.?

**Ankylosing Spondylitis "Bamboo spine"** 





### **Q5: What is your differential diagnosis:**

Ankylosing spondylitis: advanced sacroiliitis (radiograph)

• The sacroiliac joints are almost completely obliterated.

Bony trabeculae cross the residual sacroiliac joint space.

There is no gross sclerosis at this time.

A moderate degree of osteopenia is present.





### SJOGRENSYNDROME

### MINI-OCSE

**Q6**:

your ddx:

Keratoderma balanorrhagicum, seen in seronegative arthropathies





**Q7**:

This patient also has non itchy scaly rash on both knees, what's your diagnosis?

Psoriatic Arthritis(onycolysis and pitting nail)



**Q8**:

your ddx:

Ankylosing spondylitis: calcaneal erosion and spur (radiographs)



**Q9**:

In which disease could we see this lesion?

Psoriatic Arthritis Sausage digit and rash





**Q10**:

1-Dx?

**Psoriatic arthritis** 

2-Nail lesion?

**Onycholysis nail pitting** 

**3-Affected joint?** 

I think it was DIP





### SJOGRENSYNDROME

### MINI-OCSE

**Q11**:

What is your ddx:

Psoriatic arthritis: asymmetric synovitis, knees



**Q12**:

your ddx:

nails pitting and Non itchy scaly rash





Q13:

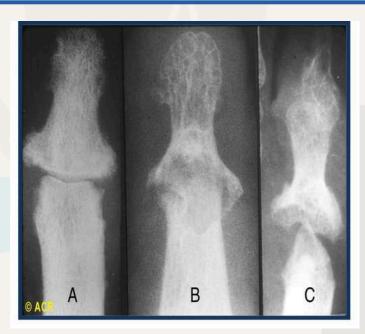
What is your ddx:

Psoriatic arthritis: progressive joint changes (radiographs)

A -Early PsA(marginal erosion)

**B-Pencil-in-cup deformity:** 

**C-Advanced PsA(telescoping of digits)** 



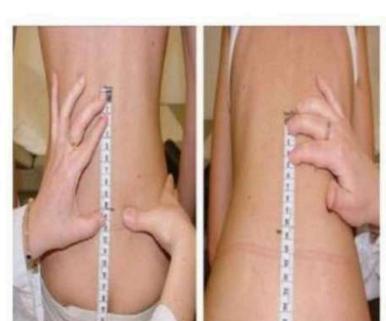
Arthritis mutilans telescoping



### **Schober test**



- Patient standing upright
- Two marks are made on the patient's back: one at the level of the sacral dimples (at the fifth lumbar spinous process) and the other 10 cm above.
- The patient then bends forward as far as possible (ie, attempts to touch toes with knees extended), and the distance between the two marks is again measured.
- Normally the overlying skin will stretch to 15 cm
- Values less than this can be indicative
   of reduced lumbar mobility. Which is seen in ankylosing spondylitis



### SCLERODERMA

typical case scenario of scleroderma with shortness of breath, what is the most likely diagnosis?

### **Pulmonary hypertension**

- In which of the following is more likely to have positive anti-centromere antibody.
- a. CREST syndrome
- b. Diffuse Scleroderma.
- c. Mixed Connective Tissue Disease
- d. SLE (systemic lupus erythematosis)
- e. Vasculitis.

Ans: (a)

- Wrong regarding scleroderma:
   there is vegetation on the heart valves
- Wrong about scleroderma:
- A. Pulmonary fibrosis
- **B.** Encephalopathy

Ans:(b)

- Which antibody is rather specific for diffuse scleroderma?
- a. Anticentromere AB
- b. Anti-myeloperoidase AB (p-ANCA)
- c. Anti-Jol AB
- d. Antimitochondrial AB
- e. Anti-Scl70

**Ans: (e)** 

- · All the following are poor prognostic signs in scleroderma except.
- a- old age of onset.
- b- limited skin involvement.
- c- high ESR
- d- renal involvement
- e- pulmonary hypertension

**Ans: (b)** 

Associated with Raynoud

### systemic sclerosis

Q 3 - A 4 2 y e a r old female with finger pain upon cold exposure, If this patient's blood pressure is 150/90, what drug would you choose?

- a. Beta blockers
- b. ACE inhibitors
- c. Thiazides
- d. Vasodilators
- e. Calcium channel blockers

**Ans: (b)** 

