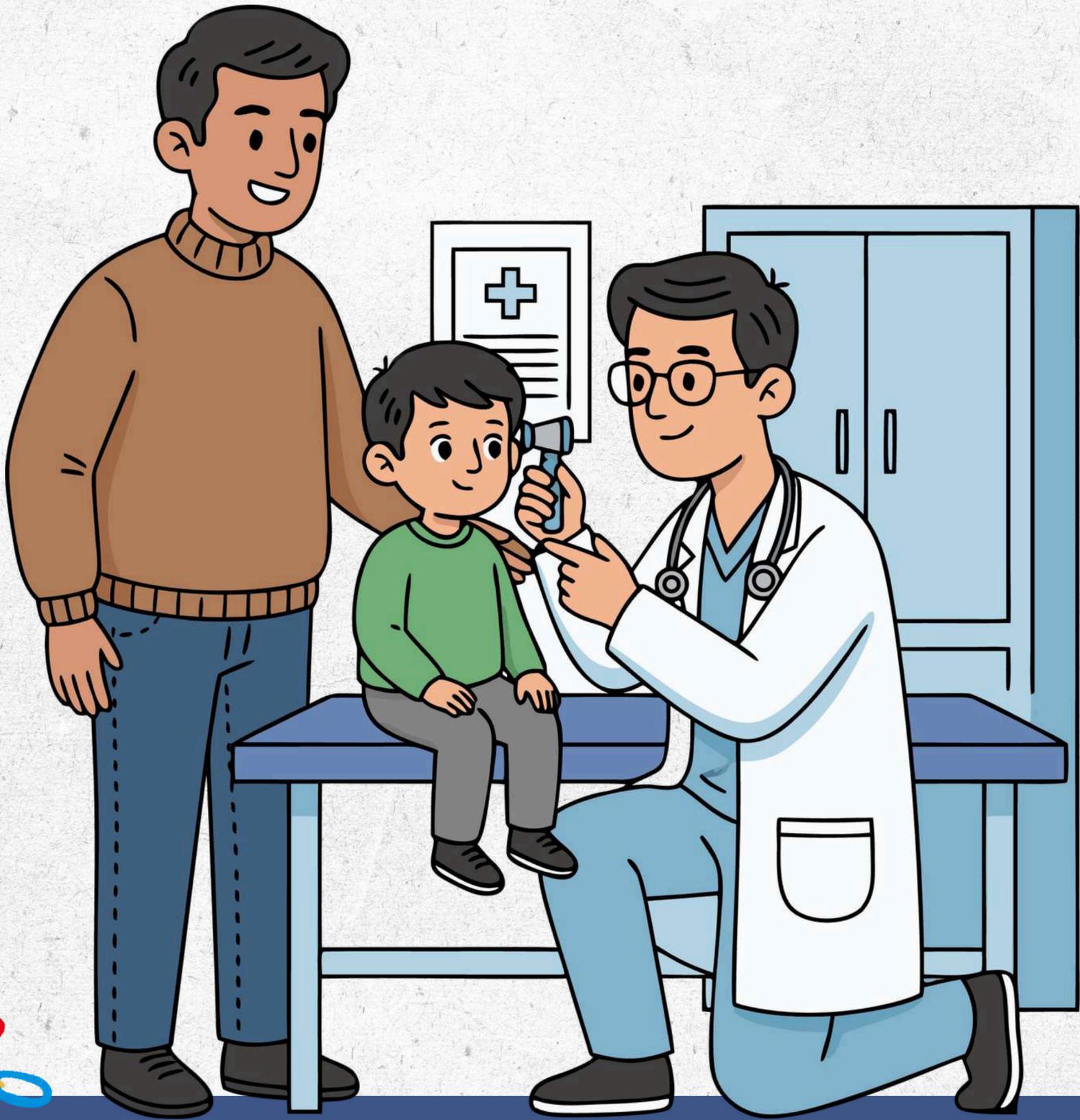




# PEDIATRIC MINI OSCE ARCHIVE

UPDATED FROM BEFORE 2022 UNTIL 12.2025

DONE BY  
ROUH GROUP



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## DR.Omar Nafi :

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SEIZURES

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MUSCULAR DYSTROPHY

## DR.Reham :

PNEUMONIA

URTI

CF AND OTHERS

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## DR.Alaa' :

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## DR.Hadeel :

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## DR.Randa :

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## DR.Amjad :

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JAUNDICE

COMMON PROBLEMS

IODM

## DR.shawawrh

## DR.Mohammed;

CONGENITAL HEART

DISEASE

KAWASAKI

## Others

# DR. Omar Nafi :

## DEVELOPMENT ASSESSMENT

### Station 1

This photo makes some confusion, child seems to push a hand of car and unsupported, but the doctor says the child is supported

(Not the same photo as in the exam)

What is the vaccine the child is taking at this age?

Answer:

- Measles
- OPV



### Station 2

The vocabulary for this child?

Answer: 50 word



### Station 3

What is the name of this sign?

Answer: Tip toe walking

Give 2 DDX:

Anewer: cerebral palsy  
Duchanne



### Station 4

Showing this picture:

A child holding a cup with both hands.

Questions:

1. What is the developmental age of this child?

• 12 months

2. What three vaccines are recommended at this age?

- MMR (Measles, Mumps, Rubella)
- PCV (Booster)
- Hepatitis A



### Station 5

Showing this picture:

A child holding a cup with both hands.

Questions (Yes / No based on the picture):

1. Can the child go to the bathroom alone?

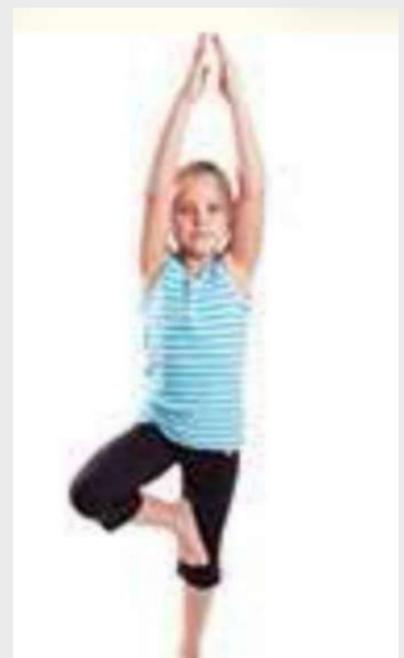
› Yes

1. Can the child identify 4 colors?

• No

3. Can the child say approximately 20 words?

• Yes



# DEVELOPMENT ASSESMENT

6 developmental

A → pincer grasp ✓

B → stands with support ✓

vaccines at this age measles, OPV

Picture C (rash, fever 40°C), 2 DDX

scarlet fever ✓

kawasaki ✓

فقرة حزر فزر الصورة

## Station 7

Pic 1: 18 months

Pic 2: 2 years

Pic 3: 14-15 months

Pic 4: 2 years



## Station 8

What is the skill shown in image A?

- Kicks a ball
- At what developmental age?
- 2 years
- What is the type of play shown in image B?
- Interactive play (parallel)
- At what developmental age?
- 3 years



## Station 9

Mention two skills

Symbolic play

Kissing

What is the developmental age

18 months



## Station 10

Mention two skills present in this image

Responsive smile

Fix and follow 180

What is the developmental age

Six weeks

Mention skill in prone position

Raise head to 45



# DEVELOPMENT ASSESSMENT

## Station 11

a) What is the skill shown?

**Stand with support (furniture)**

b) Age of development:

**10 months**

c) fine motor skill:

**Pincer grasp**

d) a game that she can play:

**Plays gesture games**

**o Plays "peek-a-boo"**



## Station 12

a) development age:

**4 years**

b) what is shape she can copy?

**Cross**

c) 3 social skills:

**Brush teeth, Wash Hand, Toilet alone**

d) to what number she can count?

**20**



## Station 13

Development age ?

1. **10 months**

2. **12 month**

3. **18 month**

4. **24 month**



## Station 14

write the name of each skill?

1. **Drink from Cup by tow hands**

2. **Casting the objects**

• what the vaccines, should be given to them?

**HAV, MMR**

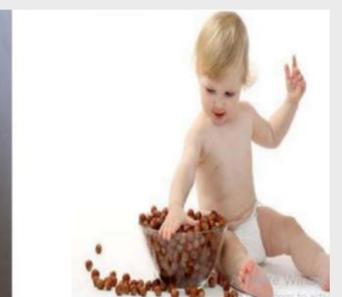
• if baby have this rash and conjunctivitis,

• write 2 differentials?

**Measles**

**Rubeola**

**kawasaki**



# DEVELOPMENT ASSESSMENT

## Station 15



How many words he can say? **10**



at what developmental age ?

**18 months**



at what developmental age ?

**4 y**



Name of this skill ?

**Interactive play**

## Station 16

Other social skills does this boy do it:

**name 4 colors**

**plays cooperative games**

**\*\*what's the name of this skill and at which age:**

**Sit alone with straight back at 8 months**



**\*\*what's the name of this skill and at which age:**

**Stands with support walks around furniture at 10 months**



**\*\* how many words does this boy talk and type of play :**

**He kisses his parent, 10 single words, shows 4 parts of the**

**body, symbolic play**



**\*\*what's the name of this skill and how many words does he**

**talks:**

**Casting objects /single words (2-3 words other than**

**'dada'/'mama'),**

**commands with gesture**



# DEVELOPMENT ASSESMENT

## Station 17

A-Skill of A and B and at what age? •

a : casting object. b : drink from a cub

Both at 12 months •

B- what vaccines should they receive? •

MMR1, HAV •

C- if the patient with 40c fever for 5 days and •

pic of C what is your ddx: **kawasaki, measles**



## Station 18

1) Developmental age?

**10 months**

2) Mention 2 other skills?

**Waves 'bye bye'**

**Mature pincer grip**

3) Write vaccines given at this age.

**OPV**

**Measels**

**vit A 100**



## Station 19

A picture of two draw man test:

Calculate the age of each child → by **using  $3 + (n/4)$**

Age for these

**The spoon one is 18 months**

**The fork one is 24 months (2 years)**



## Station 20

1-Can copy (shape) : **circle**

2- Can build (cubes) : **Bridge**

3-How many words can he say?

**200 words**

4-What type of play ?

**Interactive play**



# DEVELOPMENT ASSESMENT

## Station 21

What is his age? **10 months**

What he can do in gross motor?

**Stand with support, Walk around furniture**

Mention 2 skills in social

**Waves bye bye**

**Plays " peek-a-boo "**



## Station 22

Mention one gross motor skill at this age:

**Walk around the furniture**

**Stand with support**

Mention one fine motor skill at this age:

**Mature pincer grasp**

What vaccines she should takes at this age?

**OPV (3rd dose) / Measles vaccine (1st dose)**



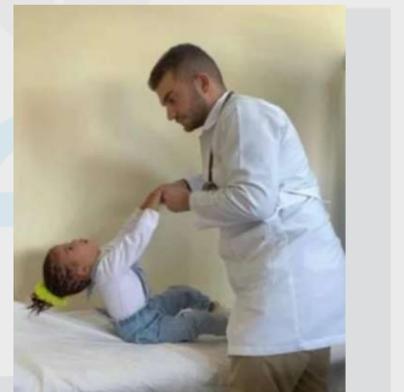
## Station 23

1- What is the name of the skill?

**Marked head lag**

2- What is the developmental age?

**less than 6 weeks**



## Station 24

Child find hidden object at any age ?

• **9 months**

• What is the formula of draw man test ?

•  **$3 + n/4$**

• If child draw man with 20 parts what is expected age ?

• **8 years old**

What the expected age of this girl ?

**4 years old**

what she can draw ?

**cross**



## Station 25

What is the fine motor skill that this child can do ?

**Mature pincers grap**



# DEVELOPMENT ASSESMENT

## Station 26

Write the name of each sign in developmental Assessment



Palmar reflex

Palmar grasp

Mature pincer grip

## Station 27

How old is the baby ?

o 3 months

❖ How many words can he speak ?

o Vocalizes, laughs and coo

❖ DDX for the rash

o Chickenpox

o Measles

o Rubella

o HS



## Station 28

what is the gross motor skill associated with this fine motor skill

→ Walk around with support (furniture)



Another photo

## Station 29

How many this kid can count ?

→ 20 The age is 4y

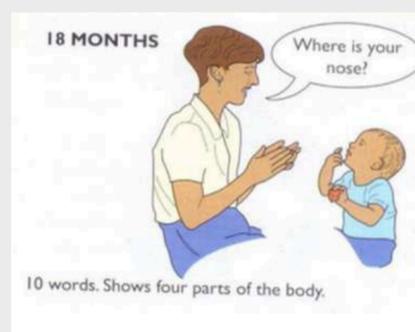


## Station 30

this kid use spoon or fork??

18 MONTHS

→ Spoon



## Station 31

Whats the age for baby talks

• 10 word ?18m

• 50 word ?2y

• 200 word ?3y

# DEVELOPMENT ASSESSMENT

Station 32



5 years



3 years



9m

Station 32

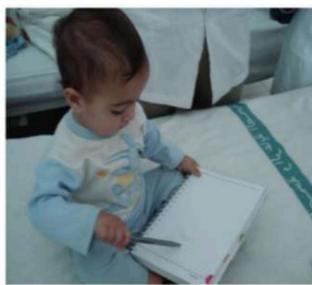
What the name of this skill :

**pat a cake**



Station 33

Name Of This Skills??



**Scribbling**



**Pincer Grasp**



**Reach Out**

Station 34

1) What is his developmental age?

**18 months**

2) How many words he can say?

**10 words**



Station 35

What is the developmental age for each picture? (not the same pictures)



**18 months**



**2 years**

Station 36

Dressing himself : **5 years**

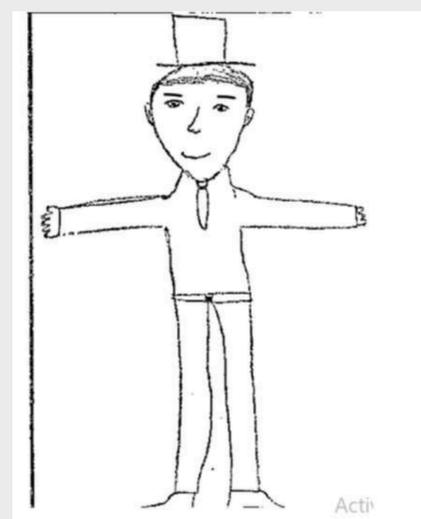
• Pat-a-cake: **9 months**



Station 37

developmental age : **5-6 years or More than 5 years**

• Formula that you use : **3+(n\4)**



# DEVELOPMENT ASSESMENT

## Station 38

What is the child doing in both pictures and what is the developmental age?



**6 Weeks**

**Responsive smile**



**Neonate/ <6 Weeks**

**Spontaneous Smile**

## Station 39

1- name two skill in the pic?

**raise the whole chest by hands**

2- the developmental age ?

**6 MONTHS**

NB: not same pic , the child was turning his head to another side



## Station 40

Write down how much words can each of them say



**Mama , Dada**



**50 Words**

## Station 41

What are the aspects of developmental assessment is affected in this patient?

**Speech, Language and Hearing**



## Station 42

Two skills ?

- **Responsive smile, follow object in 180 degree**
- **Age?**
- **6 weeks**



## Station 43

How many words can he speak?

**10 words**

How he indicate desire ?

**By pointing**



## Station 44

1-What's the name of this skill?

- **Reach out for toys**
- **2-The developmental age is ?**
- **at least 4 months**



# DEVELOPMENT ASSESMENT

## Station 45

### Station 44

1- What is that skill ?

- **Scribbling**
- 2- what is the age ?
- **14 months**



• **Name 4 color**

### Station 46

What age? **4 years**

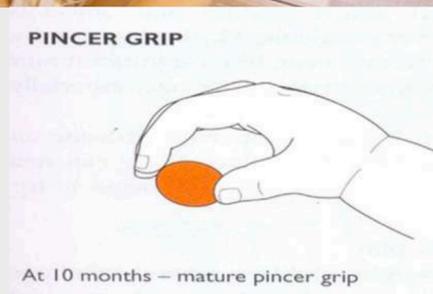
What's his pencil skill ? **Draws a cross**



### Station 47

What age?

**10 months**

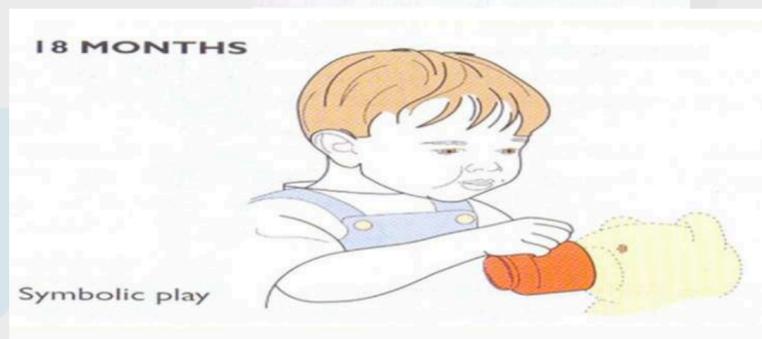


At 10 months – mature pincer grip

### Station 48

How many words can he say

**- 10 words**



### Station 49

What's the age of each skill?

**Both of them at 3 years**



### Station 50

Developmet assesment

- 1-raise chest on palms

**6 Months**

- 2-reah out toys

**4 M**

- 2-responsive smile

**6 Weeks**

- 4-identify body parts

**18 M**

### Station 51

If this baby can stoop down to pick up an object  
what is the estimated age?

**18 months**



### Station 52

Number of words	age
10 words	??
50 words	??

**18 monthes**

**2 years**

# DEVELOPMENT ASSESMENT

Station 53

What is the name of this test ?

**Object Permanence**

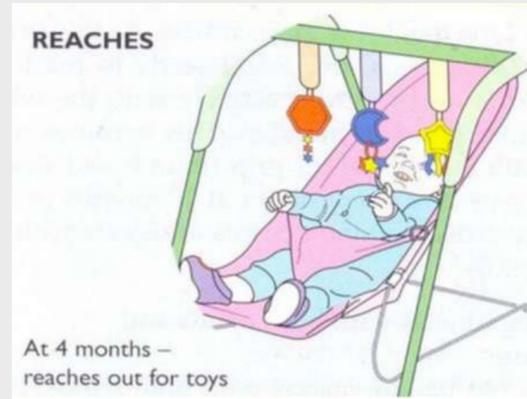
2- what is the estimated age?

**9 months**



Station 54

**4 months.. (reach out)**



مبارك انت هيك خلصت اطفال



# SEIZURE

Long case 2

2. Picture for child development with head lag:



• A) Age for child? **below 6 week, some say below than three month**

• B) EEG? **Hypsarrhythmia**

• C) picture for lesion, name of it? **Ashleaf**

• D) diagnosis? **west syn.**

• E) cause? **tuberus scelerosis**

• F) manegment? **Vigabatrin**

• g) Side effect of druge? **Visual defect**

• g) What is the finding in the brain image: **ventricular calcification**



# SEIZURE

A child with seizures

• 1. What is the dx? **Sturge weber syndrome**

• 2. What do you see on the ct scan?  
**Tram track calcifications**

complication in the eye?

**Glaucoma**



Child of 6 months of age presented with spasm of flexor and extensor and still has head lag

1-What is the diagnosis ?

**West syndrome**

2-what is the management ?

**Vigabatrine**



This drug used as

1- prophylactic for : **Migraine**

2- treatment of : **Epilepsy**

**(Seizures)**

B—what is the side effect

• **Weight loss**

• **Kidney stones**

• **Paresthesia**

• **Cognitive slowing (Word-finding difficulty)**



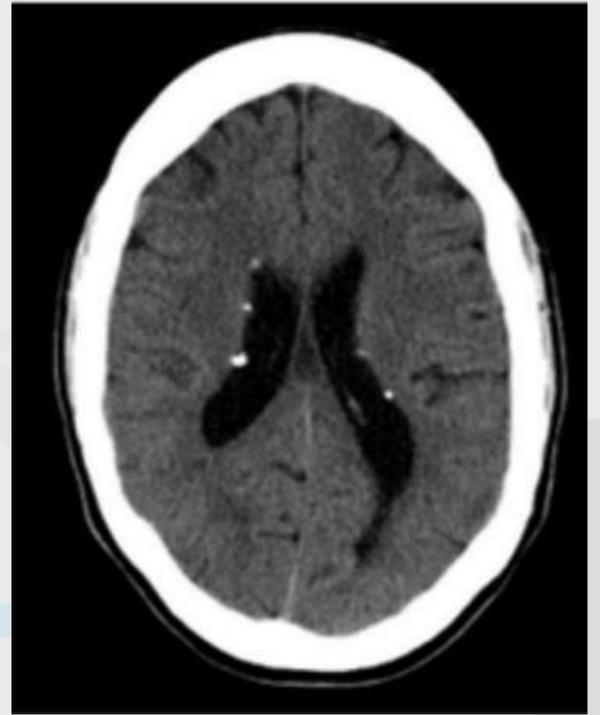
# SEIZURE

Child with seizures with skin finding:

1. name of skin lesion? **ash-leaf spots**

2. CT findings? **Calcification**

3. Dx : **Tuberous sclerosis**



# CEREBRAL PALSY

INFANT DEVELOP SEIZURE WITHIN HIS FIRST HOURS OF LIFE  
AND DOING BRAIN CT SCAN AND THIS THE RESULT:

WHAT IS THE MOST COMMON CAUSE

**INTRAVENTRICULAR HEMORRHAGE**

WHAT IS THE COMPLICATIONS

**PERIVENTRICULAR LEUKOMALACIA**

**SPASTIC CEREBRAL PALSY**

**DEVELOPMENTAL IMPAIRMENT**



YOUR DDX

**INTRAVENTRICULAR  
HEMORRHAGE**



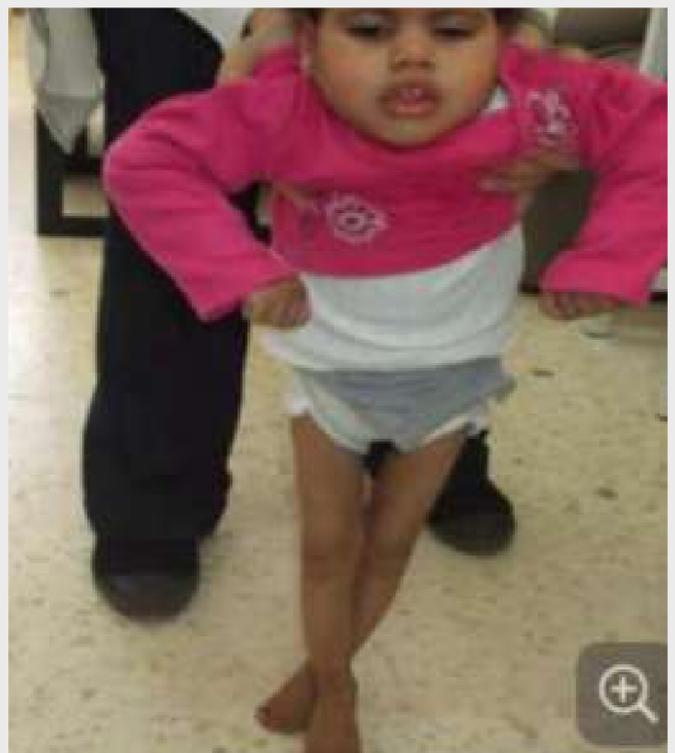
MENTION 2 COMPLICATIONS

**DOUBLE DIPLAGIA SPASTIC CP, SEIZURE**

WHAT IS THE ASPECT OF  
DEVELOPMENT THE MOST IMPAIRED  
??

**GROSS MOTOR**

**I AM NOT SURE (IT MAYBE FINE  
MOTOR)**



# CEREBRAL PALSY

-WHAT'S THE NAME OF THIS SIGN?

**SCISSORING POSTURE.**

**MENTION 4 CAUSES.**

**SPASTIC CP.**

**CERVICAL SPONDYLOSIS WITH MYELOPATHY**

**SPINAL CORD TRAUMA OR TUMORS.**

**CVA, MS ...**



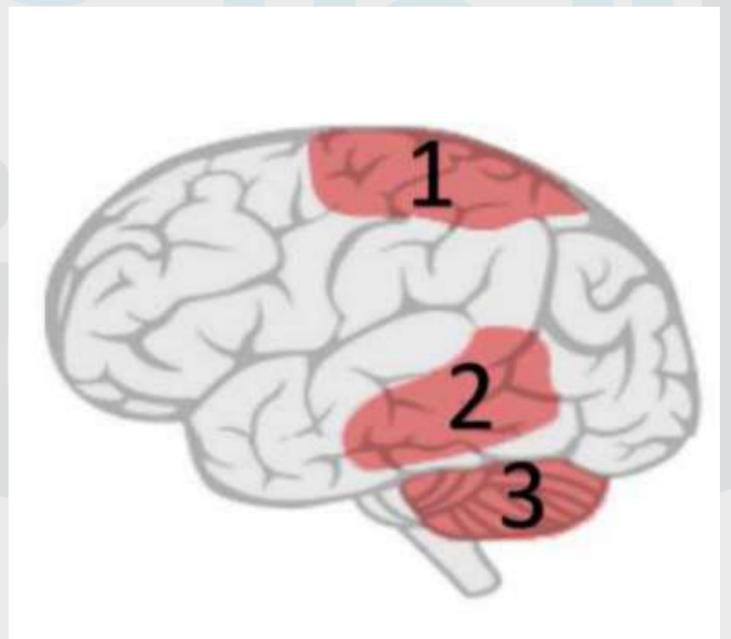
**WHAT IS THE TYPE OF CEREBRAL PALSY FOR EACH AREA?**

**1 - SPASTIC PALSY**

**2 -> DYSKINETIC  
(CHOREOATHETOID) PALSY**

**3 - ATAXIC PALSY**

**1+2+3 - MIXED CEREBRAL PALSY**



**DIAGNOSIS :**

**SPASTIC DIAPLEGIC**

**CEREBRAL PALSY**



**WHAT IS THE DEVELOPMENTAL AGE**

**SIGN NAME LESS THAN 8 MONTHS?**

**SCISSORING POSTURE.**



# CEREBRAL PALSY

WHAT IS THE NAME OF THIS SIGN?

**TIP TOE WALKING**

GIVE 2DDX:

**CEREBRAL PALSY**

**DUCHANNE**



QUESTION 8: AN 8-YEAR-OLD GIRL PRESENTS TO THE CLINIC; SHE CANNOT SIT WITH BALANCE.



WHAT IS HER GROSS MOTOR DEVELOPMENTAL AGE?

**LESS THAN 8 MONTHS**

WHEN ATTEMPTING TO ASSIST THE PATIENT TO STAND, THE POSTURE IN PICTURE B WAS NOTED, WHAT IS THE NAME OF THE POSTURE?

**SCISSORING POSTURE**

WHEN ATTEMPTING TO ASSIST HER AGAIN, THE PATIENT STOOD LIKE THE PICTURE C, WHAT IS THE NAME OF THIS?

**TIP TOE WALKING**

GIVEN THAT THE TONE IN HER UPPER LIMBS IS NORMAL, WHAT IS THE DIAGNOSIS?

**DIPLEGIC CEREBRAL PALSY**

# IMMUNIZATIONS & VACCINES

Immunization

A 12 months male baby has itchy rash:

a) Can he take any vaccine and when?

**Answer: No, vaccines should be deferred (postponed) during the acute phase of the illness**

Two complications?

**Secondary bacterial skin infections (e.g., Impetigo or Cellulitis caused by Staph or Strep).**

**Pneumonia (Varicella pneumonia).**



This baby took a vaccine. After 6 wks he developed this lesion with axillary LNs enlargement

What is your spot Dx?

**Post-BCG vaccine abscess formation with regional lymphadenitis.**

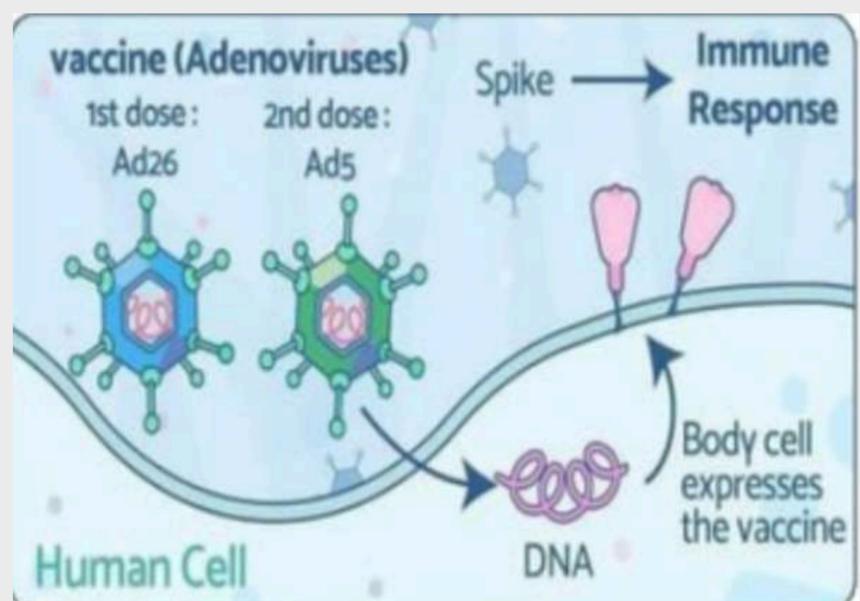


what is this vaccine name:

**sputnik v**

2) stored at what temperature for 2 years:

**(-18)**





# IMMUNIZATIONS & VACCINES

A Nurse is giving injection to a 2 month old baby in his Rt thigh.

What is she giving him?

**DTP, HIB, HBV and IPV**



1-What do we call this vaccine?

**OPV.**

2-What's the age of this child?

**91 days (& more).**



6 YO child with this scar on his abdomen What vaccines would you like to give him?

**Post splenectomy pt should receive Pneumococcal vaccine or Meningococcal vaccine.**



Mention 3 moderate side effects for DTP:

**Seizure, Non-stop crying for 3 hours or more, High fever**

1- What vaccines you give for a 4 months old baby?

**(DTaP – Hib – IPV) – HBV – RVS**

2- What is the route of administration?

**IM**

# IMMUNIZATIONS & VACCINES

Example of each type of vaccine?

## EXAMPLES FOR EACH TYPE OF VACCINES

• Live attenuated	• Whole cell	• Subunit (conjugated)	• Subunit (recombinant)	• Toxoids
<ul style="list-style-type: none"> <li>• BCG</li> <li>• MMR</li> <li>• OPV</li> <li>• Rota</li> <li>• Varicella</li> <li>• Yellow fever</li> </ul>	<ul style="list-style-type: none"> <li>• Pertussis</li> <li>• IPV</li> <li>• Flu</li> <li>• HepA</li> </ul>	<ul style="list-style-type: none"> <li>• Hib</li> <li>• Pneumo</li> <li>• Meningo</li> </ul>	<ul style="list-style-type: none"> <li>• HepB</li> </ul>	<ul style="list-style-type: none"> <li>• Tetanus</li> <li>• Diphtheria</li> </ul>

Complete the table :

Age	Vaccine
Within 1 <sup>st</sup> month	BCG Vaccine
2 months Day 61	Hexaxim vaccine (Hexa) - first dose, ROTA vaccine - first dose
3 months Day 91	Hexaxim vaccine (Hexa) - second dose, ROTA vaccine - second dose, OPV - first dose
4 months Day 121	Hexaxim vaccine (Hexa) - third dose, ROTA vaccine - third dose, OPV - second dose
9 months	Measles vaccine, OPV - third dose, Vitamin A (100 thousand international units)
12 months	MMR-1, HAV
18 months	MMR-2, DaPT, OPV, HAV, Vit A (200 thousand international units)
6 years	Td
15 years	Td

# MENINGITIS

Q1 :

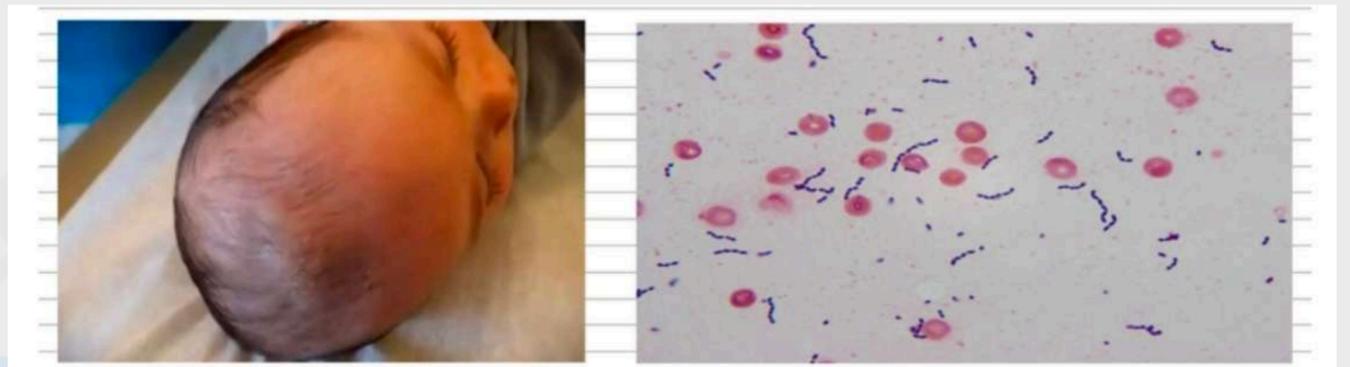
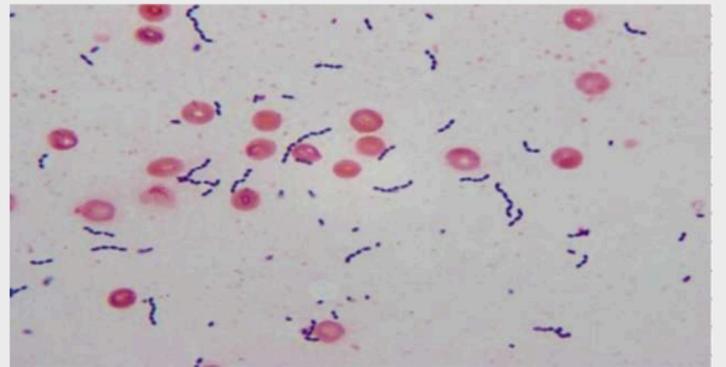
CSF GRAM STAINING FOR 6 WEEKS BABY  
SHOW THIS ORGANISM.

- WHAT IS THE CAUSITIVE AGENT ?

**GBS**

- WHAT IS THE DURATION OF TREATMENT ?

**14 DAYS**



Q1 :

-WHAT IS THE FINDINGS ?

**BULGING ANTERIOR FONTANELL**

- WHAT IS THE CAUSITIVE ORGANISM?

**GBS**

- WHAT IS THE TREATMENT ?

**AMPICILLIN + 3RD GENERATION CEPHALOSPORINE**

- WHAT IS THE DURATION OF TREATMENT ?

**14 DAYS**

Q1 :

CASE OF MENINGITIS LESS THAN 2 YEARS :

- NAME OF THE TEST ?

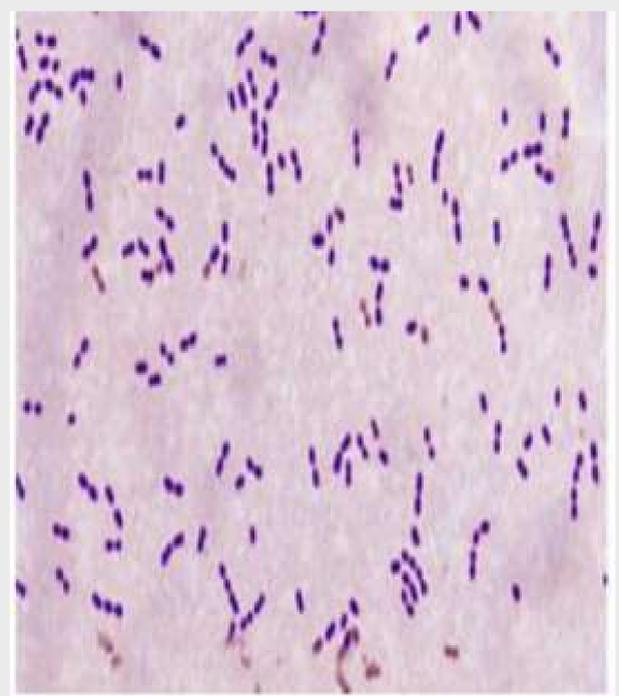
**CSF GRAM STAIN**

- IDENTIFY THE ORGANISM ?

**S.PNEUMONIAE**

- HOW TO PREVENT ?

**PNEUMOCOCCAL CONJUGATED VACCINE**



# MENINGITIS

Q1 :

1) WHAT IS YOUR DIAGNOSIS?

**MENINGOCOCCEMIA**

2) WHAT TEST IS DONE HERE?

**CSF GRAM STAIN**

3) WHAT ORGANISM CAUSES THIS CASE?

**NEISSERIA MENINGITIDES**

4) WHAT IS THE TREATMENT OF CHOICE?

• **3D GENERATION CEPHALOSPORIN,**

**VANCOMYCINE , STEROIDS**



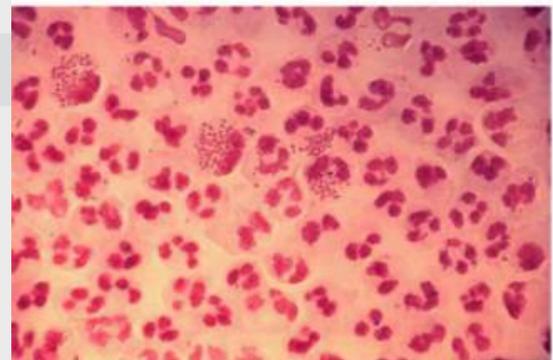
Q1 :

• PRESENTATION OF MENINGITIS OF 1 YEAR OLD

1. DX : **MENINGOCOCCEMIA**

2. NAME OF TEST : **GRAM STAIN**

3. NAME : **N. MENINGITIDES**



Q1 :

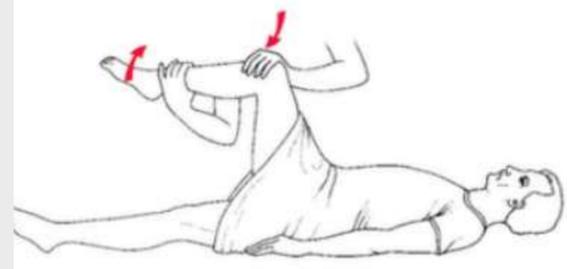
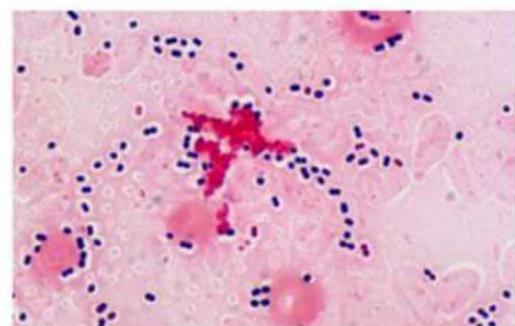
• PRESENTATION OF MENINGITIS OF 6 MONTHS .

1. NAME OF TEST : **CSF GRAM STAIR**

2. NAME OF SIGN: **KERNIG'S SIGN**

3. MANAGEMENT:

**CEFTRIAZONE + VANCOMYCIN**



# MENINGITIS

Q1 :

15 MONTHS OLD PATIENT WITH HISTORY OF VOMITING AND FEVER.

WBC= 22 , PLATELETS= 298, RBC= 4.5, NA = 136, K=3.6 , GLUCOSE = 95

URINE:

RBC= 2-4 , PROTEIN =+1 , PH = 5.5

CSF:

PROTEIN = 110 , GLUCOSE = 25 , WBC = 1000 ( 90 % NEUTROPHILE )

1- WHAT IS YOUR DDX

**BACTERIAL MENINGITIS**

2- THE MOST COMMON 3 ORGANISM

**STREP. PNEUMONIA**

**N. MENINGITIDIS**

**H.INFLUENZA**

3- IF THE CULTURE SHOW GRAM + DIPLOCOCCI , WHAT IS THE ORGANISM ?

**STREP. PNEUMONIA**

4- WHATS YOUR TREATMENT

**3RD GENERATION CEPHALOSPORINE + VANCOMYCIN**

**CORTICOSTEROID ( DEXAMETHASONE )**

5-TWO ORGANISMS PREVENTED BY VACCINATION

**H.INFLUENZA VACCINE , PNEUMOCOCCAL VACCINE**

6- IF YOU REPEAT KFT AND THE NA BECOME 127 , WHAT IS YOUR DDX ?

**SIADH**

7- MENTION 3 LONG TERM COMPLICATION

**DEAFNESS ,OTHER CRANIAL NERVE DEFICITS , CEREBRAL INFARCTION**

**RECURRENT SEIZURES OR MENTAL RETARDATION**

Q1 :

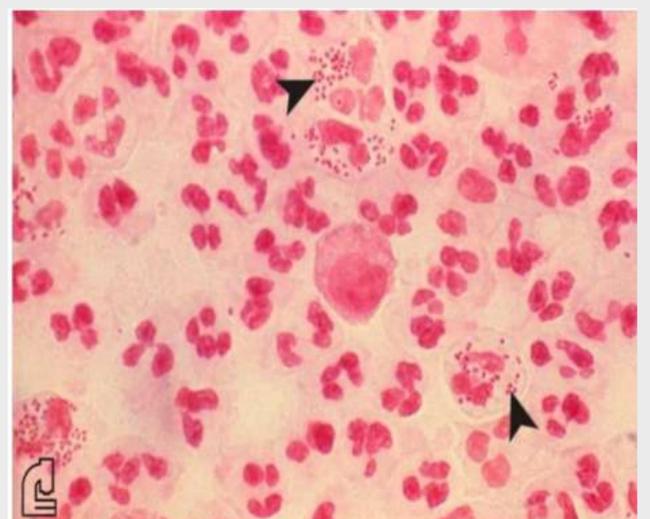
-DESCRIBE THE STUDY OF CSF :

**CSF STAIN**

-FINDINGS :

**INTRACELLULAR GRAM -VE DIPLOCOCCI**

**{N.MENINGITIDIS}**



# MENINGITIS

ESSAY STATION :

PATIENT WITH GONOCOCCAL MENINGITIS PRESENTED BY INTRACTABLE SEIZURE AND NOT RESPOND TO ANTIEPILEPTIC DRUG

-CAUSE OF SEIZURE :

**HYPONATREMIA (ELECTROLYTES SHOWING THIS)**

-DIAGNOSIS :

**WATERHOUSE-FRIDERICHSEN SYNDROME**

-CAUSE:

**MENINGIOCOCCEMIA**

-INITIAL MANAGEMENT :

**ANTIBIOTICS/3RD G CEPHALOSPORIN, CS, FFP**

-TREATMENT PROPHYLAXIS OF CONTACT OF AGE LESS THAN 18 YEAR :

**RIFAMPIN**

-TYPES OF VACCINE FOR ORGANISM:

**POLYSACCHARIDE BASED AND PROTEIN BASED**

-COMPLICATION:

**SEIZURE, HEARING LOSS, MENTAL RETARDATION**

Q1 :

DESCRIBE:

**SKIN GLASS TEST**

USE:

**DIFFERENTIATE BETWEEN**

**BLANCHING/NONBLANCHING PURPURA**

**NONBLANCHING PURPURA :**

**MENINGIOCOCCEMIA & THROMBOCYTOPENIA**



Q1 :

**4 WEEKS BABY**

WHAT IS THE ORGANISM :

**GBS**

WHAT IS THE TEST ?

**CSF GRAM STAIN**

DURATION OF TREATMENT ?

**14 DAYS**



# MUSCULAR DYSTROPHIES

Q1: A) What is the sign in each picture?

Answer:

First picture (left):

→ Facial wasting (Myopathic facies / Hatchet face)

Second picture (right):

→ Inverted V-shaped (tented) upper lip

Third picture (back):

→ Scapular winging



B) What is your diagnosis?

Answer:

-Myotonic muscular dystrophy

Q2: A) What is the most prominent facial feature in this condition?

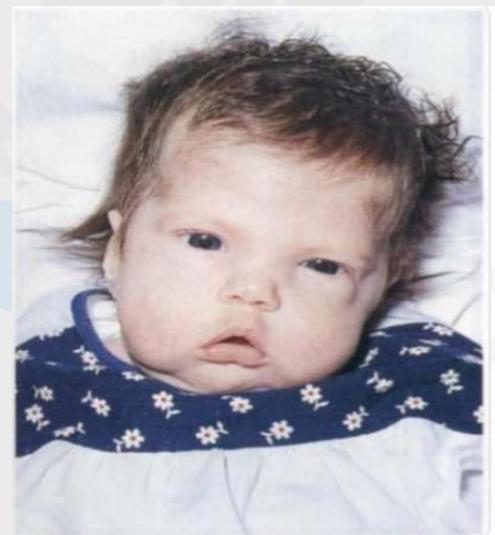
Answer:

-Inverted V-shaped upper lip (tented upper lip) and facial wasting.

B) What is the diagnosis?

Answer:

-Myotonic muscular dystrophy (specifically the Congenital form of Myotonic Dystrophy Type 1)



C) Inheritance?

Answer:

-Autosomal dominant

D) Incidence?

Answer:

-1 in 30000

Q3: A) What is the sign?

Answer:

-Calf muscle hypertrophy (Pseudohypertrophy)

B) Mention 2 DDx.

Answer:

-Duchenne muscular dystrophy (DMD), Becker muscular dystrophy (BMD)

C) What is the enzyme?

Answer:

-creatine kinase

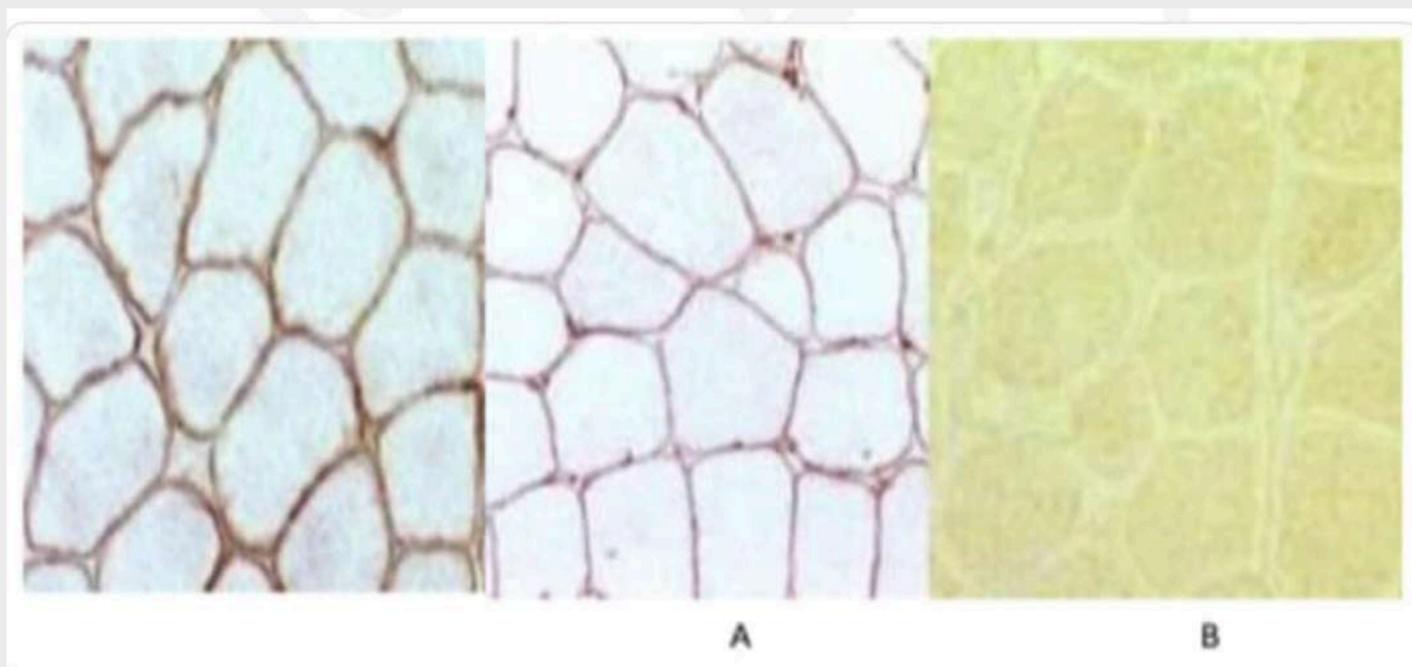


# MUSCULAR DYSTROPHIES

Q4: A) Write 3 DDx of this condition.

Answer:

- Becker muscular dystrophy
- Limb-girdle muscular dystrophy
- Spinal muscular atrophy (Type III)



Q5:

A) What is the condition associated with sample A?

Answer:

- Becker muscular dystrophy

B) What is the condition associated with sample B?

Answer:

- Duchenne Muscular Dystrophy (DMD)

Q6: 5 year old boy, with progressive difficulty climbing stairs. You expect to find all the following EXCEPT?

- Proximal muscle weakness
- Gowers' sign
- Calf pseudohypertrophy
- Normal intelligence



Answer:

- Normal intelligence

# DR. Reham :

## PNEUMONIA

Case: 6 year old with cough, fever

CXR finding: Lobar consolidation

Organism: *S. pneumoniae*

1) Mention 2 findings on X-ray?

Thin wall cavity with fluid level.

2) What's the diagnosis?

**Parapneumonic abscess (Lung abscess).**

3) What's the management?

**IV antibiotics 4-6 weeks; if no response, surgery.**



### Section 3

Question 6: 12-year-old presents with fever, cough, and wheezing, X-ray of chest is shown below.

What is the diagnosis?

**Bronchopneumonia (Atypical pneumonia).**

What is the most likely infecting organism?

***Mycoplasma pneumoniae*.**

What is the treatment?

**Macrolides (e.g., Azithromycin).**



# PNEUMONIA

A) What's your dx?

**Right upper lobe pneumonia**

B) give me two clinical findings in this patient:

**1- dull in percussion**

**2- bronchial breathing**



## Section 2

8# 4 y old girl come to ED with high grade fever and sever cough and low oxygen saturation

1/ What's the finding of this X-ray?

**Right upper lobe consolidation**

2/ after 2 days fever back and decrease air entry, what is the cause?

**Parapneumonic effusion / Empyema**

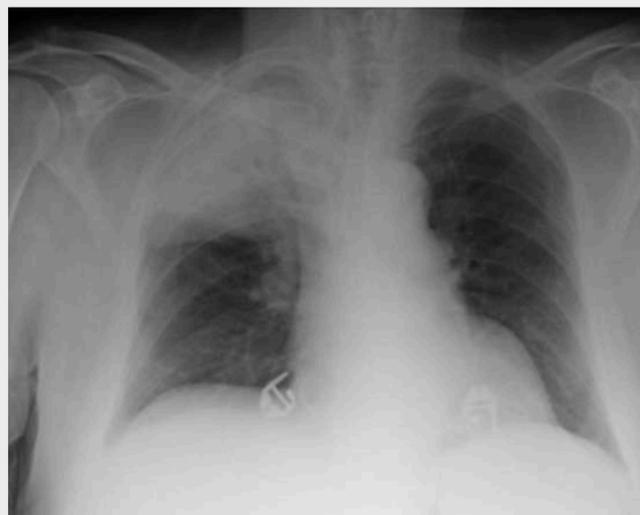


Radiological finding? **Right upper lobe Consolidation**

Two findings on Physical exam?

**Auscultation -> decrease breath sound on Rt. side**

**Percussion -> dullness on Rt. side**



# PNEUMONIA

Describe what you see in this chest X-ray: Lung abscess in right lung

\*What is the most common organism:

**S. Aureus**

\*What is the best management: **3rd generation cephalosporin with vancomycin/Incision and drainage**



1-Write findings in this Image:

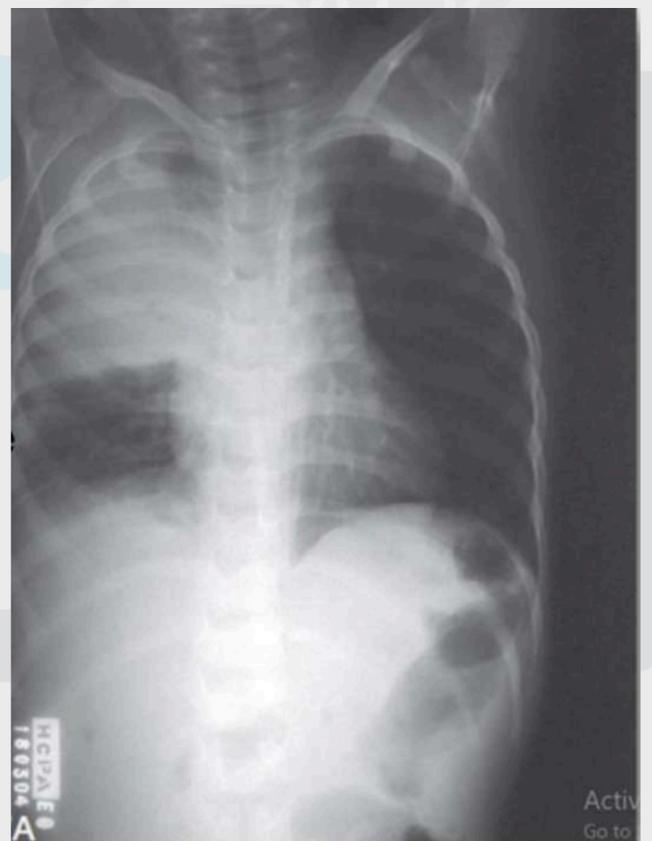
**Opacification or consolidation in upper lobe of right lung**

2-What can you notice in physical examination:

**Dullness on percussion**

**Decrease breath sounds**

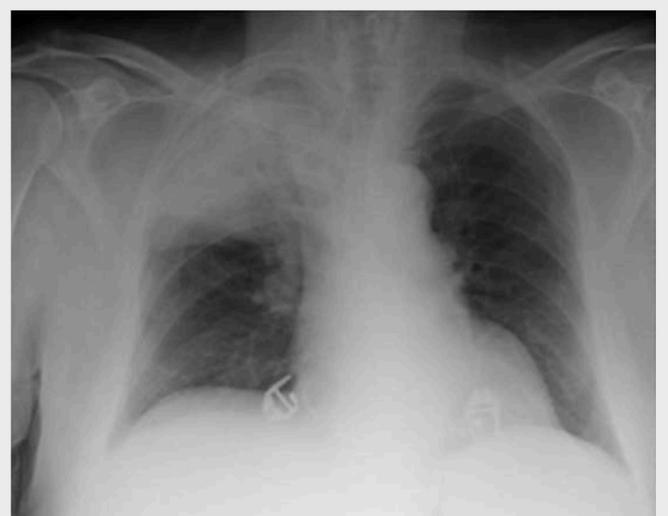
**Bronchial breathing**



Patient with high fever and cough:

A- What is your diagnosis: **RT upper lobe pneumonia**

B- Most common organism: **S. pneumonia**



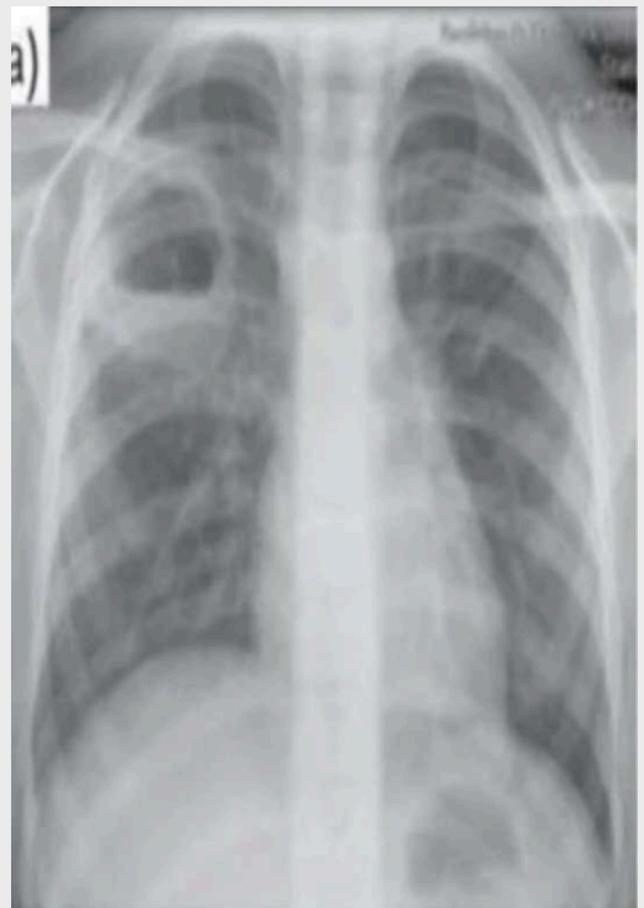
# PNEUMONIA

6-year-old child diagnosed with pneumonia before 5 days and treated with antibiotic, he is presented today with persistent fever and cough.

1) Describe the x-ray: **Thick-wall cavitary lesion in the right upper lobe with air-fluid level.**

2) What is the diagnosis? **Lung abscess**

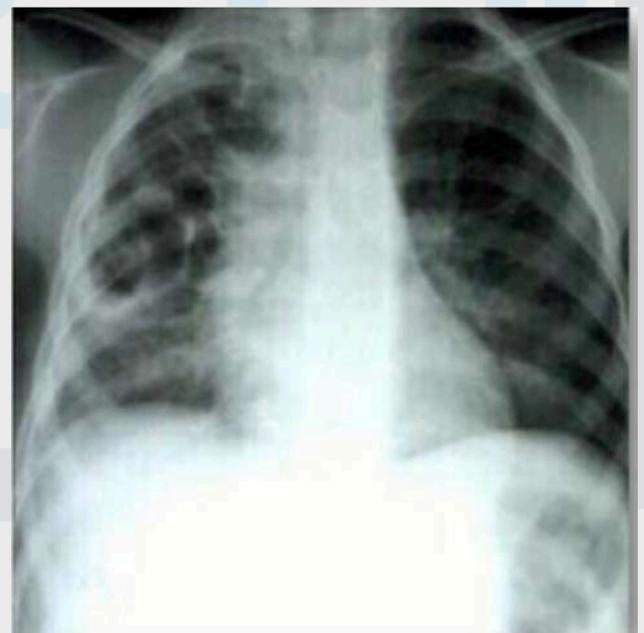
3) What is the treatment of choice? **IV antibiotic (clindamycin) for 4-6 weeks. Surgery if not respond t antibiotic.**



1- Describe the finding in the chest x-ray? **pneumatocele (cysts in the right upper lobe)**

2- What is the most common organism? **Staph aureus**

3- What is the management? **IV penicillin or nafcillin. Observation after antibiotics. If it persist \rightarrow surgical treatment.**

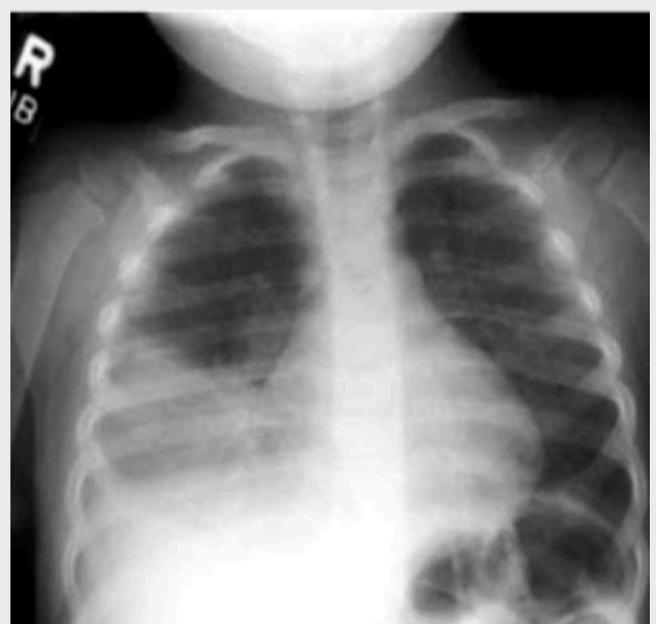


Describe this chest x ray? **Right lower lobe consolidation silhouetting with diaphragm and obliteration of right costophrenic angle.**

Most common organism?

**Streptococcus pneumonia**

Drug of choice? **Vancomycin and third generation cephalosporin**



# PNEUMONIA

Mention 2 DDx:

**Pneumonia (Consolidation)**

**Pleural effusion (specifically a parapneumonic effusion)**

2. Treatment?

**Admission, Oxygen therapy, and Intravenous antibiotics (e.g., Ceftriaxone).**



4 y old girl come to ED with high grade fever and sever cough and low oxygen saturation

1- Whats the finding of this xray?

**Dense opacity/consolidation in the right lung with loss of the costophrenic angle (suggesting effusion).**

2- whats the organism?

**Pneumococcus (Streptococcus pneumoniae)**

3- whats the management?

**Admission... O2... antibiotic... antipyretic**



1. what is the radiological findings?

**Right lower lobe consolidation and obliteration of the right costophrenic angle**

2. Dx?

**Right lower lobe pneumonia with effusion**

3. Management?

**Ceftriaxone and vancomycin**



# PNEUMONIA

Presented with history of fever and chest pain 3 days ago

1) Finding in X-ray:

**Left side opacity with obliteration of costophrenic angle and meniscus sign.  
(Pleural effusion)**

2) If thoracocentesis show straw colored fluid, what is the most susceptible organism?

**Mycobacterium tuberculosis**



6 years old patient presented with this CXR

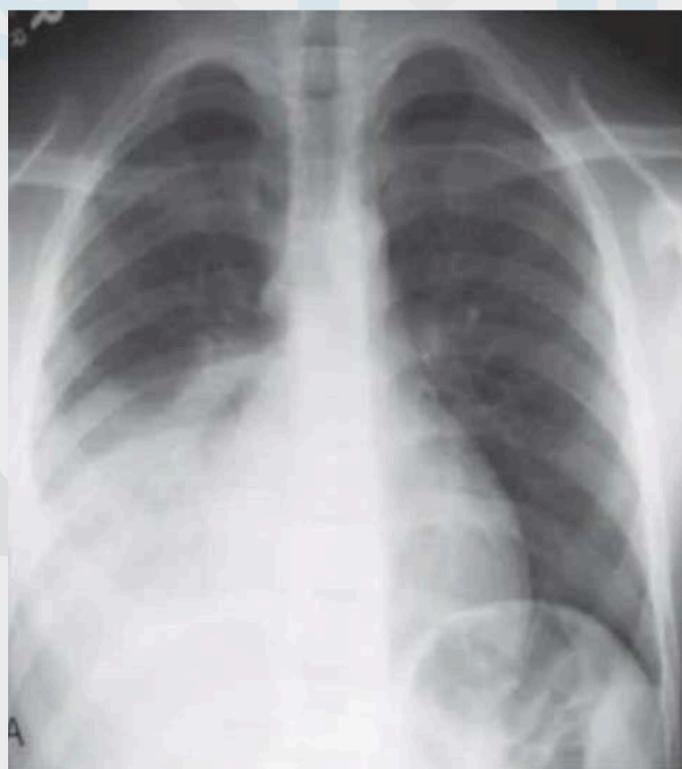
1- Give the most common organism causing this finding?

**S. Aureus**

**S. pneumoniae**

2- What's your management?

**3rd generation cephalosporin  
(Ceftriaxone) and Vancomycin.**



What is the diagnosis?

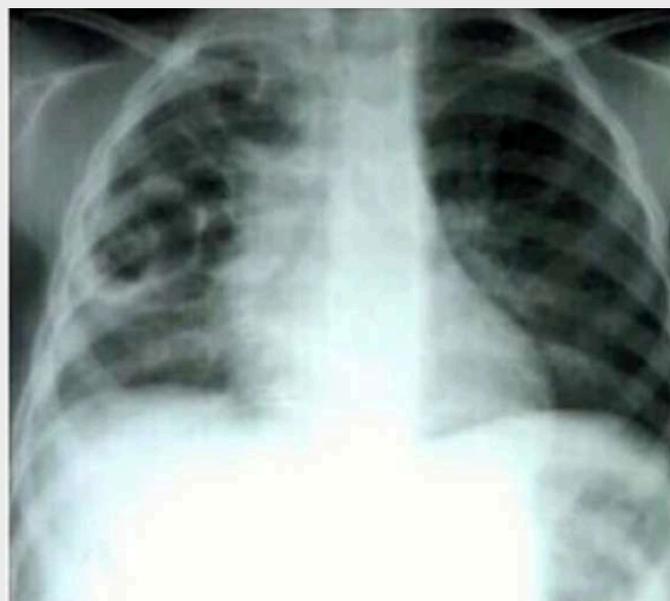
**Pneumatocele**

What is the cause?

**Staph aureus**

What is the best treatment?

**Vancomycin**



# URTI

Q1: 7-year-old boy presents with drooling, distress, not received all his vaccines. His X ray:

A)What is your diagnosis?

Answer:

- **Acute epiglottitis**

B)What is the most causative organism?

Answer:

-**Haemophilus influenzae type B(Hib)**

C)What sign on X ray does it present with?

Answer:

-**Thumb sign**

D)What is the treatment?

Answer:

-**Endotracheal intubation and 3<sup>rd</sup> generation cephalosporin .**



Q2: 1yr old male presented to the ER with barking cough and respiratory distress with strider at rest, an AP-neck X-ray is performed:

A)What is the sign in X-ray ?

Answer:

- **Steeple sign**

B) What is the most common causative organism?

Answer:

-**Parainfluenza virus**

C)What is your first line management?

Answer:

-**Corticosteroids (Single dose of Dexamethasone)+Nebulized epinephrine .**



# URTI

Q3: A patient presents with trismus (difficulty opening the mouth), previous history of pharyngotonsillitis. Physical examination reveals a bulging of the right tonsil and deviation of the uvula to the left side.

A)What is the diagnosis ?

Answer:

- **peritonsillar abscess(Quinsy)**



C)What is the treatment ?

Answer:

-**Drainage(main treatment) through needle aspiration or incision and drainage.And IV antibiotic(effective against GAS and anaerobes).**

Q4: A 4-year-old child with: High fever, sore throat, drooling, sitting leaning forward.

A)What is the diagnosis ?

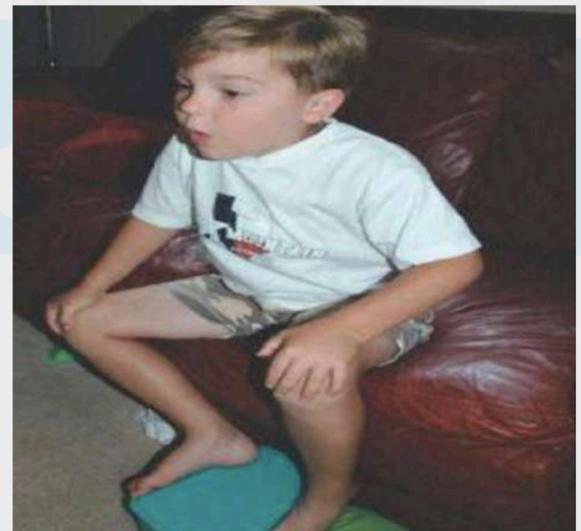
Answer:

- **Acute epiglottitis**

B) What is the most causative organism?

Answer:

-**Harmophilus influenzae type B(Hib)**



C)What is the treatment ?

Answer:

-**Airway stabilization(endotracheal intubation) and 3<sup>rd</sup> generation cephalosporins.**

Q5: 2-year-old boy presents with barking cough at night, low grade fever, inspiratory stridor and hoarseness.

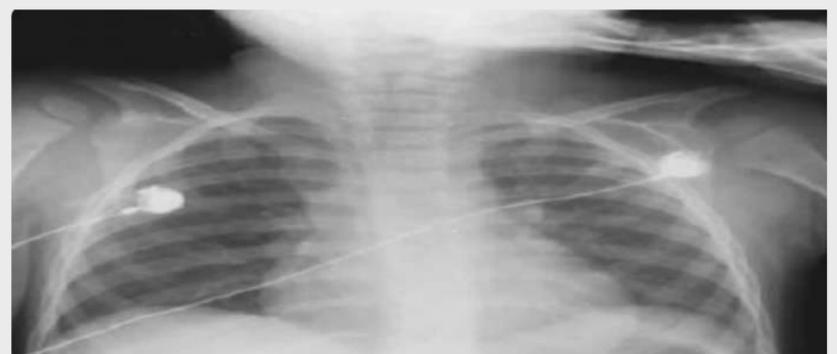
A)What is your differential diagnosis ?

-**Croup**

-**Acute epiglottitis**

-**Bacterial Tracheitis**

-**FB aspiration**



B) Mention 2 lines of management ?

Answer:

-**Nebulized racemic epinephrine, oral corticosteroid, helium-oxygen mixture(Heliox)**

# URTI

Q6: A 4-year-old boy is brought to clinic because his mother noticed decreased hearing for 1 month.

There is no fever, no ear pain, no ear discharge, he had a cold 5 weeks ago. On examination

- Otoscopy: dull, retracted tympanic membrane with visible air-fluid level
- No bulging
- No redness



A) What is your diagnosis ?

Answer:

- **Otitis media with effusion**

B) What is the most common causative organism?

Answer:

- **Streptococcus pneumoniae.**

C) Mention 2 risk factors.

Answer:

1. **Young age (2–5 years) → Short, horizontal Eustachian tube**
2. **Recurrent URTI**
3. **Adenoid hypertrophy → Eustachian tube obstruction**
4. **passive smoking**
5. **Daycare attendance**

D) What is the treatment?

- **watchful waiting for 3 months (Most cases resolve spontaneously).**

**high dose amoxicillin (if infection is suspected)**

**Tympanostomy tubes (if effusion is bilateral and persistent >3 months with hearing loss)**

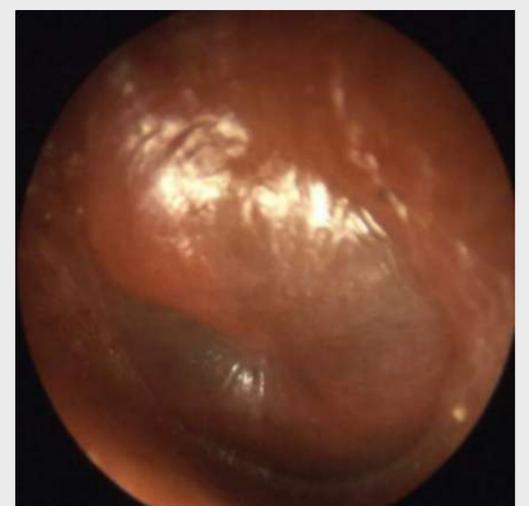
Q7: 3yr-old child with fever, ear pain, what is the possible treatment for this patient?

Answer:

- **Start Amoxicillin high dose for 7 days.**

All of the following increase the risk factor of this condition except?

- **Breast milk**



# RS (CYSTIC FIBROSIS, BRONCHIOLITIS , OTHERS)

Q8: 6 months old boy developed nasal congestion and rhinorhea, 2 days after he develops cough and wheezing

- What if the findings in X-ray?

**Hyper inflated chest + perihilar thickening**

- Your diagnosis?

**Bronchiolitis**

- Most common cause ?

**RSV**



Showing this picture:



Patient with tonsillar ulcers, pharyngitis, and splenomegaly.

Questions:

1. What is the most likely diagnosis?

• **Infectious Mononucleosis**

2. What would you expect to see on the peripheral blood smear?

> **Atypical (reactive) lymphocytes**

- 12) ABG

Whats the Metabolic state for patient? **hypoxemia**

- B-type of respiratory failure? **type 1**
- C- two device can used for this case ?
- **1-facial mask**
- **2-Nasal canula some say venturi mask**

. : 12 years old patient with wheezing, cough and high fever

39c

1. Diagnosis: **Atypical pneumonia**
2. Organism: **mycoplasma**

c) Tx: **Azithromycin**



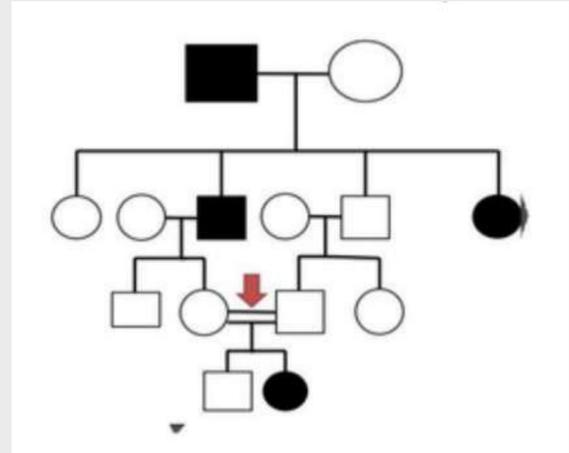
# RS (CYSTIC FIBROSIS, BRONCHIOLITIS , OTHERS)

• What is the mood of inheritance?

**Autosomal recessive**

2- give two examples

**Cystic fibrosis/ hemophila c**



A child patient who had recurrent chest infections, and FTT and nasal polyp

\*What is the cause of recurrent Infections:

**Cystic fibrosis**

\*what is the antibiotic choice:

**Erethromycin, antipseudomonas**



A girl was eating peanuts then sudden cough and difficulty breathing and this is her xray



1. What do you see on her x-ray? **Hyperinflation due to air trapping in the right lung, Flat diaphragm, Mediastinal shift to the other side**

2. What are auscultation findings? **On auscultation**

**We might hear stridor if the peanut is obstructing an upper airway, A wheeze if it's obstructing a lower airway, Decreased air**

3. What is the dx? **foreign body aspiration**

4. What is the treatment? **bronchoscopy and removal of the foreign body**

child with recurrent respiratory infections and has finding in this picture

1-What is the diagnosis ?

**Cystic fibrosis**

2-Mention diagnostic test

**1-2 reads of sweat chloride more than 60**

**2-Genetic study (2 mutation of cystic fibrosis )**



# RS (CYSTIC FIBROSIS, BRONCHIOLITIS , OTHERS)

1) Name the test

**Tuberculin test**

2) When to read?

**After 48-72 h**

3) When is it considered positive?

- 15 mm in healthy individuals
- 10 mm in pt. with chronic illness/ less than

4 years...

**>5 mm in HIV pt and immunocompromised**



Pic for 7 month child, in low grade fever, dry cough

1- what are the finding?

**Hyperinflated lungs and bilateral perihilar opacities**

2- what is causative organism?

**Respiratory Syncytial Virus (RSV) (The most common cause of bronchiolitis in this age group)**

3- lab test you order?

**Nasopharyngeal swab (for RSV rapid antigen test or PCR)**



# ASTHMA

What are these?

**Inhaler, spacer**

Do we use inhaler to children 1 year old?

**yes**

What drug given by inhaler

**SABA, inhaled corticosteroids**



Inhaler



Spacer

Asthmatic patient

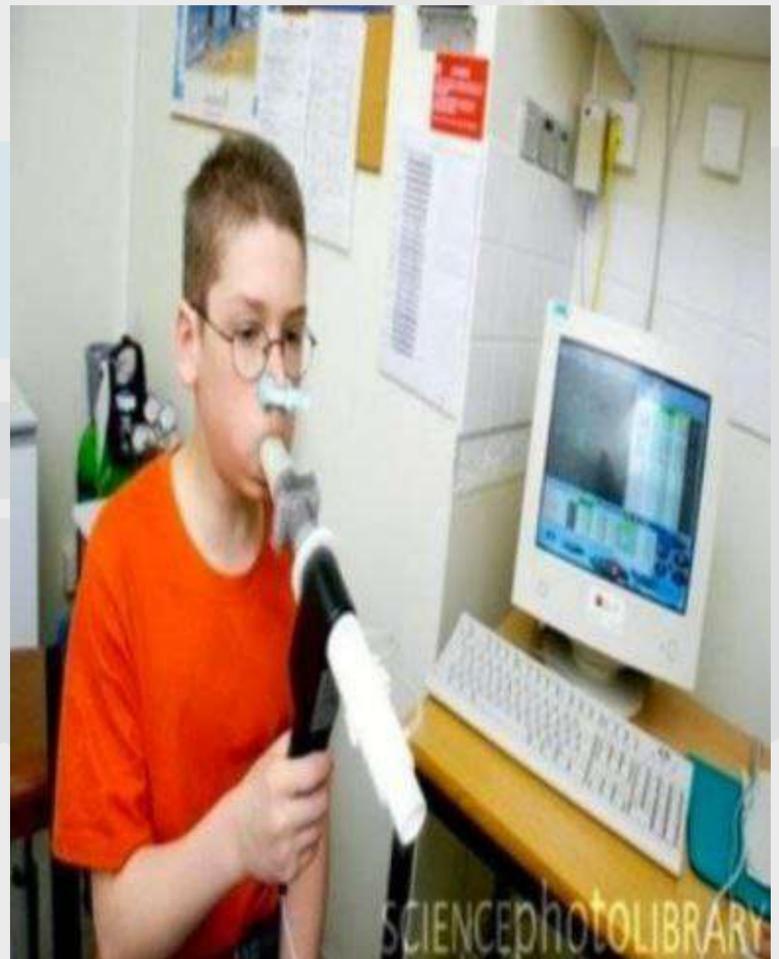
What is the name of the test?

**Spirometry (PFT)**

What is the expected result for this patient?

**FEV1 / FVC ratio < 80%**

**(Reversible obstructive pattern)**



## Station 1

A 3 year old boy with vomiting, diarrhoea, he develops thrombocytopenia and anemia later on, peripheral blood smear is shown below

• What is the sign?

Answer: Schistocyte cell

• 2 DDx

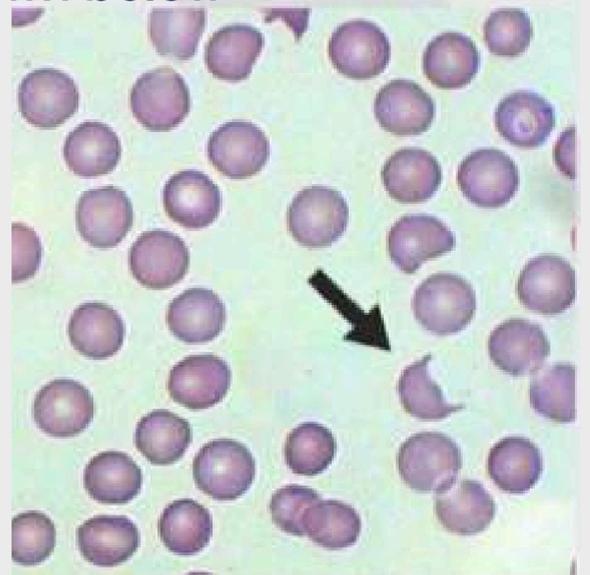
Answer:

1) HUS

2) DIC

• what about creatinine level?

Answer: High



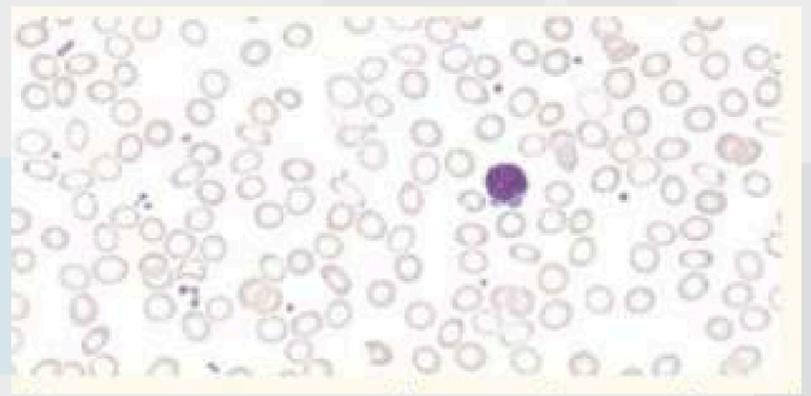
## Station 2

Peripheral blood smear showing Showing this picture:

Questions:

1. Give two differential diagnoses for this presentation. (2 points)

- Iron deficiency anemia
- Thalassemia



## Station 3

Q.7 3years old, hb 6

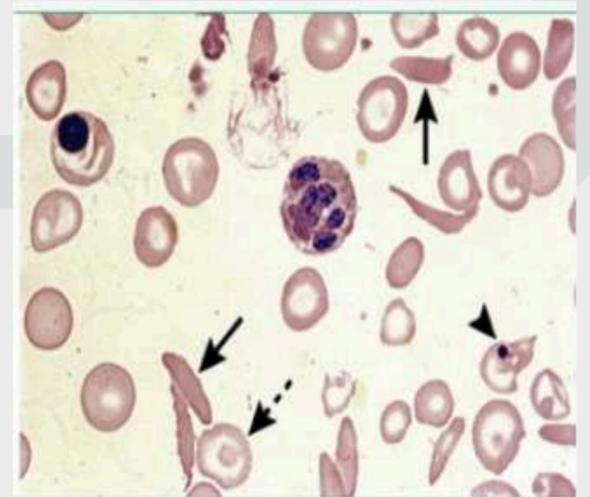
1) what do you see ?

Sickle cell, Howell jelly body

2) mention two prophylactic measures?

penicillin until 5years

pneumococcal and h influenza vaccine



سؤال بعنوان احزر السؤال والجواب

① Fanconi anemia (pancytopenia)

absent thumb ✓

# ANEMIA

## Station 4

10-year-old female presents with jaundice, pallor, hepatosplenomegaly, i and Ho=6, retics 15 %, LDH 1200

What 2 special facial features are present in this patient?

- Frontal bossing.
- Maxillary hyperplasia.
- Flat nasal bridge.

If these tests were ordered, what would they show?

- Direct Coombs test: Negative.
- Bone marrow erythroid precursors:

Hyperplastic/increased.

What is the curative management for this case?

- Bone marrow transplantation.



## Station 5

Long case 1

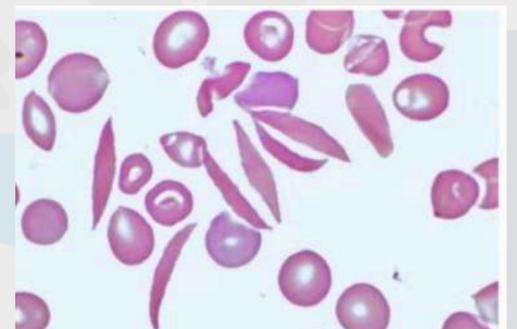
Blood film

A) Diagnosis? sickle cell anemia

B) how to confirm? HB electrophoresis

C) the child present with this hand x ray

1. what is this? Dactylitis
2. management for dactylitis? NSAID & hydration



D) most common cause for osteomyelitis in this patient other staph aureus?

Salmonella

E) what is the medication you would Describe?

1-hydroxiurea

2-antibiotic

f) Definitive treatment

bone marrow transplantation

g) The patient come with SOB cough and this CXR: What is your diagnosis?

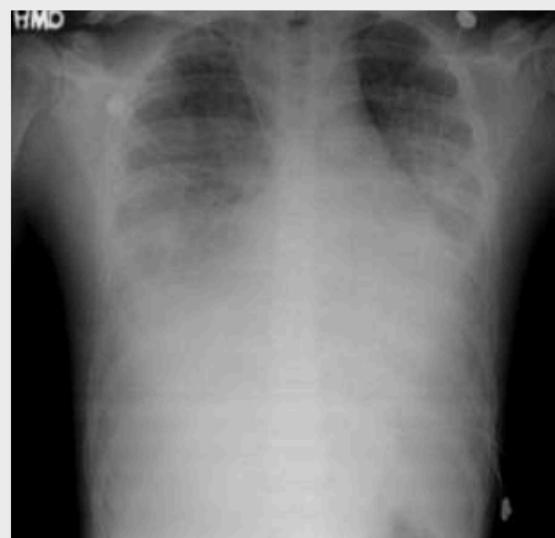
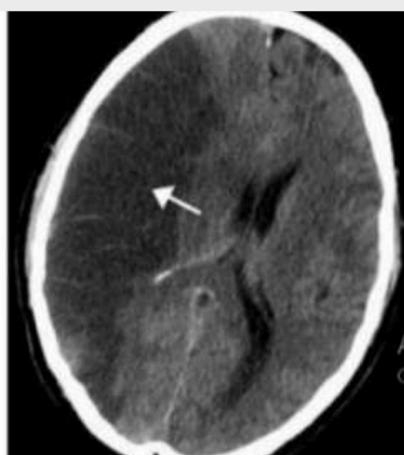
Acute chest syn.

h) what vaccine do we give to the patient not included in jordanian vaccination schedule, give two vaccines?

1. pneumococcal vaccine
2. meningococcal vaccine

j) Patient come 2 years after with this photo (brain image) what is this?

Stroke



# ANEMIA

## Station 6

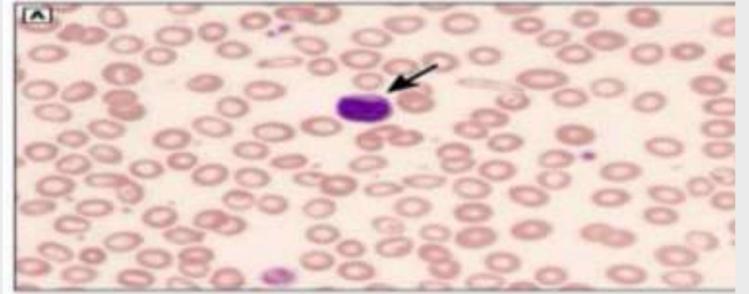
.8 months baby come to the clinic complain from pallor and blood film show this

\*What is the finding seen in blood film

**Microcytic hypochromic RBCs**

\* Write two differential diagnosis

1. **Iron deficiency anemia**
2. **Thalassemia**

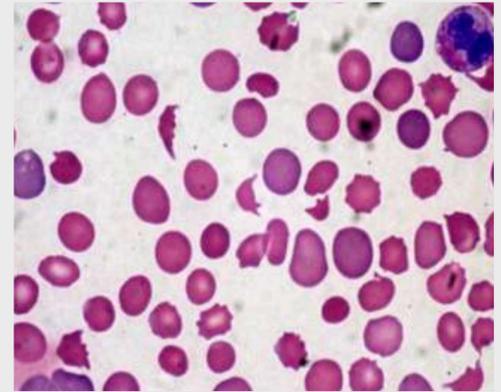


## Station 7

1/What's the abnormality in this blood film?

**Schistocyte cell**

2/ treatment?



## Station 8

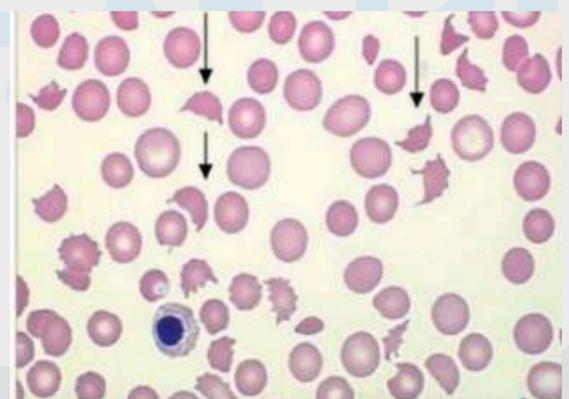
Finding ? **Hypersegmented neutrophil**

Diagnosis? **Megaloblastic Macrocytic Anemia due to B12 or folate deficiency**



## Station 9

- The findings in this blood film (in great arrow)?  
**Schistocytes cells (helmet cells)**
- write 2 differentials? **TTP, HUS**



## Station 10

3-year-old child presented with pallor and fatigue, Hb: 6 g/dL

- Mention one physical and one radiological finding:

**Physical: Chipmunk facies**

**Radiological: Crew-cut skull (Hair-on-end)**

2) Mention two methods for diagnosis:

**Electrophoresis**

**Genetic test**



## Station 11

1) This blood film shows?

**Hypersegmented neutrophil**

2) Give 2 DDX

**Vit. B12 deficiency**

**Folate deficiency**



# ANEMIA

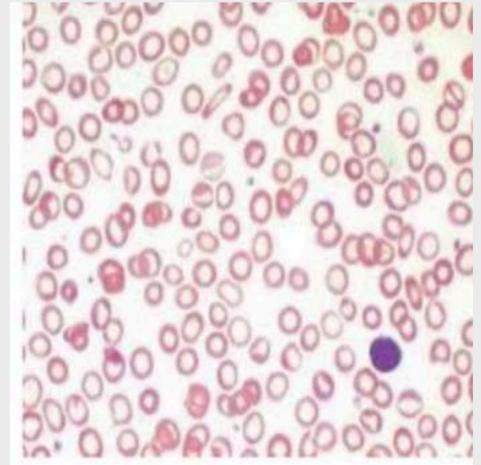
## Station 12

What is the diagnosis?

**Microcytic hypochromic anemia (iron def anemia)**

What the investigation?

**ferritin level, RDW ,Retic count Hb electrophoresis**



## Author station

• 18 month years old girl come to primary clinic, blood tests and blood film was done, Shows low Hb and low MCV

\*What findings can see in the blood film:

**Microcytic Hypochromic**

\*What is the possible cause:

**Iron deficiency anemia**

\*this girl come to take her vaccine at primary health care, which vaccines she will received according to Jordanian National Immunization Program:

**MMR-2, DaPT, OPV, HAV, Vit A (200 thousand international units)**

## Station 12

Q7)History of fatigue, splenomegaly, high • MCHC :

1. give other test to confirm diagnosis:

• **osmotic fragility test**

1. treatment in severe cases:

• **splenectomy and blood transfusion**



## Station 13

A child came to the hematologic clinic with his family complain from bone pain.

1- Is there any abnormality in this blood film, and if yes what is the diagnosis?

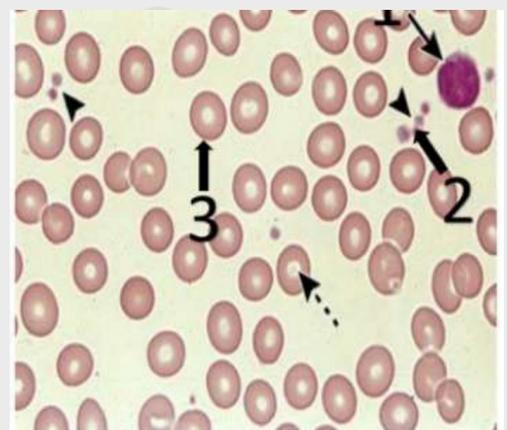
**No, it's normal blood film**

2- What is the numbered cells?

1 → **Normal lymphocyte**

2 → **Several platelets**

3 → **Normal red blood cell**



## Station 14

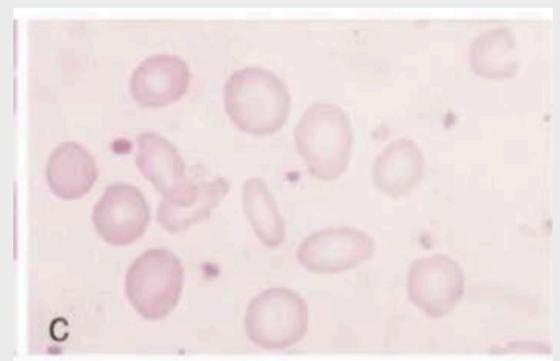
1 : describe what you see ?

• **microcytic hypochromic**

2 : write down 2 differential ?

• **Iron deficiency anemia**

• **Thalasemia**



# ANEMIA

## Station 15

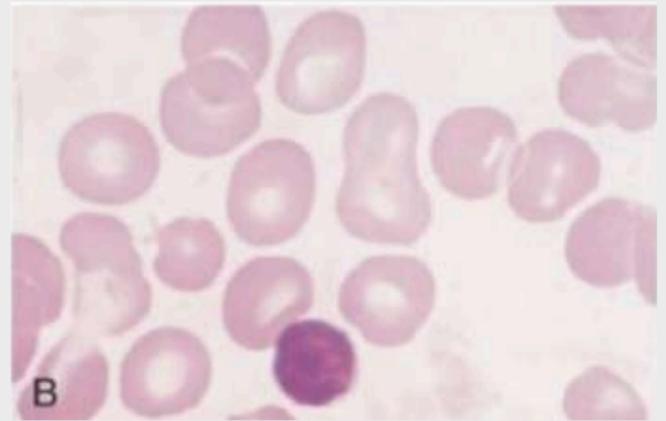
1: Describe what you see ?

**Macrocytic cell**

• 2 : write 2 differential dx?

**Folic acid deficiency**

**Vitamine B12 deficiency**



## Station 16

• Scenario of child developed jaundice after treated with Nitrofurantoin for his UTI, he was pale with low hemoglobin, With Blood film: (case of G6PD def.)

• Findings on Blood film ?

**Bite cell, Heinz bodies, ..**

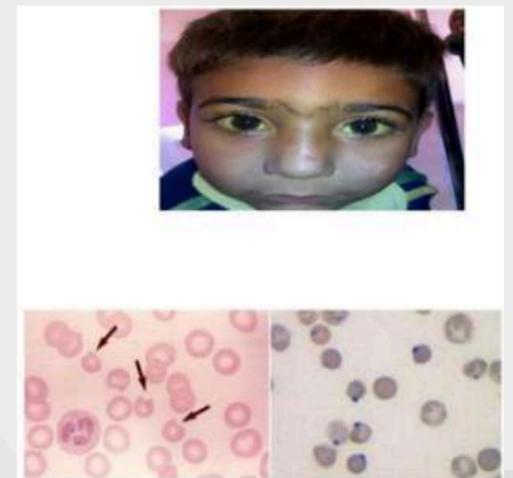
- Single best test to confirm your diagnosis ?

**G6PD enzyme level**

- Management ? **Stop the offending drug immediately**

**Supportive treatment , Check labs: CBC, bilirubin.**

**Blood transfusion if severe anemi**



## Station 17

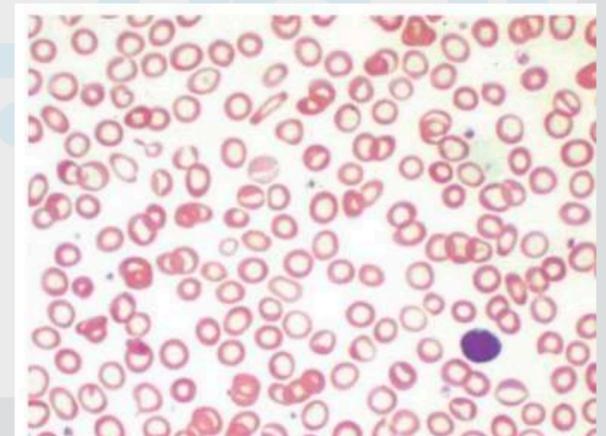
According to this blood film

1-what are the possible ddx?-3

- **IDA**
- **Thalassemia**
- **Sideroblastic anemia**

2-investigations/2?

- **RDW, Hb electrophoresis**



## Station 18

• 2 year old mael with pain, jaundes and palor

1. mention two crisis in this senario?

**-clussive crisis and splenic sequestration crisis**

- Antibiotic in acute chest syndrome ?
- **third-generation cephalosporin and macrolide**
- Two Follow up:
- **vaccination and**
- **Prophylactic Penicillin**



## Station 19

1. which type of anemia? **Macrocytetic anemia**

2. risk factor?**poor nutrition, malabsorption**

3. lab test need for conformation ? **CBC, serums vitamin levels**

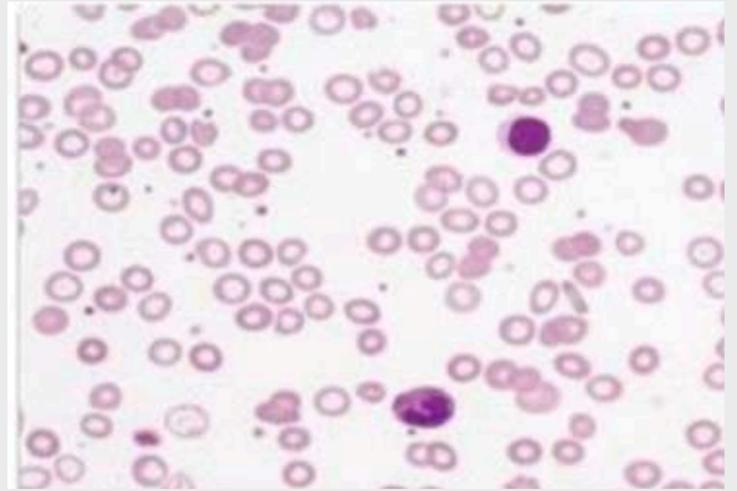


# ANEMIA

## Station 20

A blood film for an exclusively breast fed baby

- 1) 2 DDx: **IDA**
- 2) 2 important investigations to reach your final diagnosis: **serum ferritin, CBC**



## Station 21

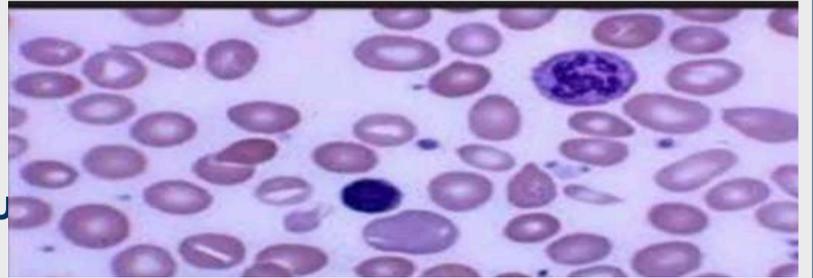
All of the following are true except

- **Low ferritin level**

Author station

28-5 years old female patient presents with nu  
pallor all of the following are causes except ?

- **excessive cow milk consumption**



## Station 22

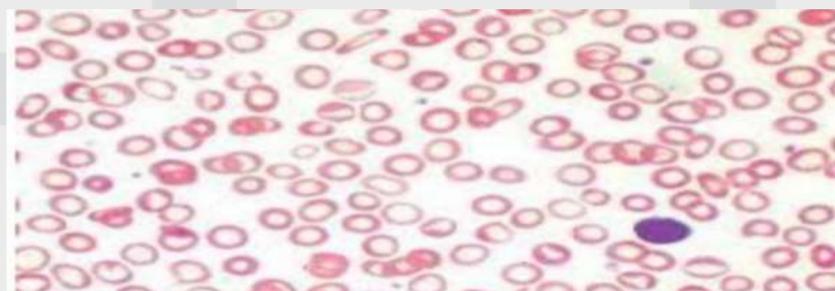
24- the CBC of the two years old male patient presented with pallor, Hb 6, RDW 19, MCV 55, the following are helpful for confirm the diagnosis except ?

- **HB electrophoresis**

author station

the CBC of the two years old male patient presented with pallor, Hb 6, RDW 19, MCV 55, which of the following is the possible diagnosis ?

- **Iron deficiency anemia**



## Station 23

year male acute illness sever sepsis

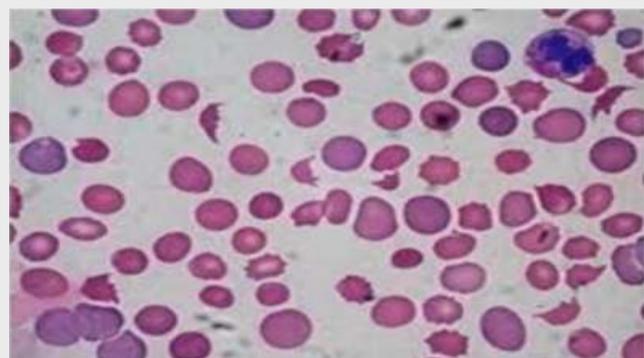
Shistocytes pic

Lab findings suggest the picture

**Prolonged pt ptt INR**

**increased D dimer**

**Thrombocytopenia**



# BLEEDING DISORDERS

Q1) 5 years old female with rash and purpura after viral infection, normal WBC and Hemoglobin and well general health conditions what is the diagnosis?

**ITP**

if patient develops sudden headache and LOC?

**Intracranial hemorrhage**

Urgent surgical intervention?

**Splenectomy**



Q2) A child presenting with bleeding in the leg.:

1. What is the most likely diagnosis?

**Hemophilia**

2. If the patient develops an inhibitor to the replacement therapy, what treatment would you give?

**Bypassing agents, e.g., recombinant activated factor VII (rFVIIa) or activated prothrombin complex concentrate (aPCC)**



Q3) 2 purpuric rash post viral infection

**ITP and HSP**

Q4) if sick with anemia and nephropathy

**HUS**

Q5) child presents with this rash on his lower limbs that developed after a respiratory viral illness, the patient looks well, and his platelets are 2,000 what is the diagnosis?

**Immune thrombocytopenic purpura (ITP)**

How will the following laboratory values be affected?

**WBCs: Normal**

**Mean platelet volume: Low**

What is the second line of management?

**Rituximab or Eltrombopag or splenectomy**

**Considering that IVIG, Steroids and anti-D are the first lines of management**



Q6) picture for knee joint recurrent hemarthrosis after trauma

A) Diagnosis: **hemophilia**

B) write lab changes

:1-ptt..... **Increase**

2-pt..... **Normal**



# BLEEDING DISORDERS

Q7) 1/ mode of inheritance

**X-linked**

2/ mention 2 complications

**Chronic Arthropathy**

**development inhibitors to factor VIII or IX**



Q8) diagnosis/ or what you see? (not sure exactly)

**hemarthrosis / hemophilia**

The mode of inheritance ?

**X-linked**

treatment of inhibitors (0.5)

**Bypassing agents, e.g., recombinant activated factor VII (rFVIIa) or activated prothrombin complex concentrate (aPCC)**



Q9) 8 year old boy with a known bleeding disorder presents with this finding

1-What is the most likely diagnosis?

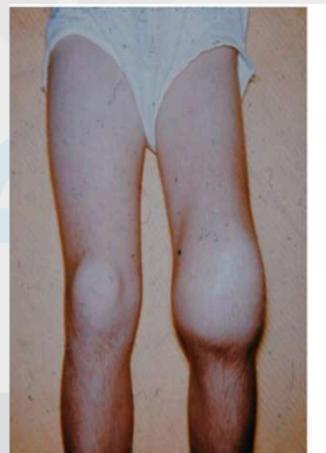
**Hemophilia a**

2- describe the pic

**Unilateral swelling of the left knee**

3- when to consider it severe?

**< 1% factor VIII protein activity ( spontaneous bleeding)**

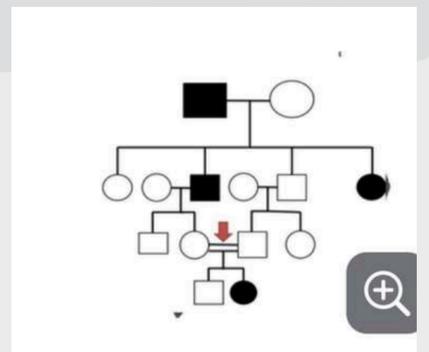


Q10) What is the mood of inheritance?

**Autosomal recessive**

2- give two examples

**Cystic fibrosis/ hemophila c**



Q11) Discribe what you see in the picture

**Swelling in the left knee**

2) Give 3 DDx

**Hemophilia A, B**

**Septic arthritis**

**Trauma**



Q12) Knee swelling with prlongod PTT

. What are thediagnosis?

**HemophiliaA, B**

What the type of inhertence?

**x-linked**



# BLEEDING DISORDERS

Q13) A girl came with cough and epistaxis and her cbc shows the following:

Hb: 13.5 / platelets: 4000

1. Describe the lesions?

**Purpuric rash**

2. What is the dx?

**Immune thrombocytopenic purpura**

3. What is the treatment?

**\* Therapy for moderate and severe clinical bleeding**

**with severe thrombocytopenia (platelet count  $<10,000/\text{mm}^3$ ):**

**> Prednisone, 2 to 4 mg/kg/24 hours for 2 weeks.**

**> IVIG, 1 g/kg/24 hours for 1 to 2 days.**

**> Splenectomy is indicated in acute ITP only for life-threatening bleeding.**



Q14) What is the type of rash?

**purpuric rash**

What you see in lab?

Urine; **hematuria**

Platelets: **normal**

Mention 2 complications?

**1. renal insufficiency**

**2. scrotal effusion due to testicular torsion**



Q15) What is the type of inheritance?

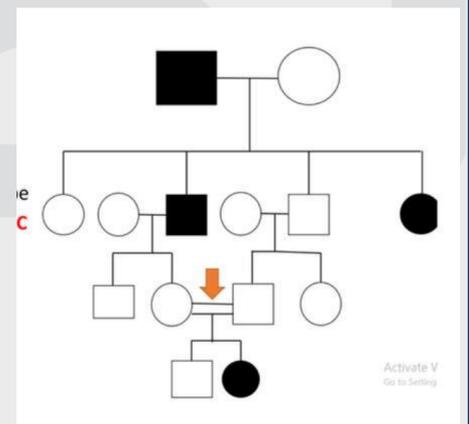
**Autosomal recessive**

2- Give two examples for the type

**Cystic fibrosis / Hemophilia C**

3- What is the arrowed double line indicates?

**Consanguinity**



Q16) History of skin rash in 12 years old girl since 2 days, His platelet count 4000

Your differential diagnosis?

**ITP**

Your treatment?

**IVIG and corticosteroid**

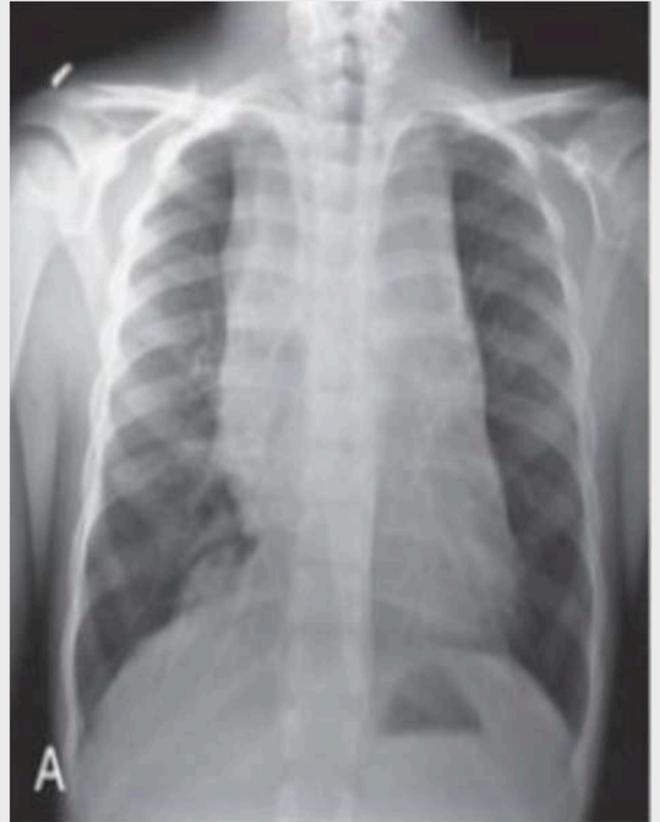


# LUKEMIA

pt come with wight loss fever night sweat. Normal CBC.

what's your diagnosis? **Lymphoma**

what you see in X-ray? **Bulky disease (wide mediastinum)**



mediastinum widening and his wbc's were 100000

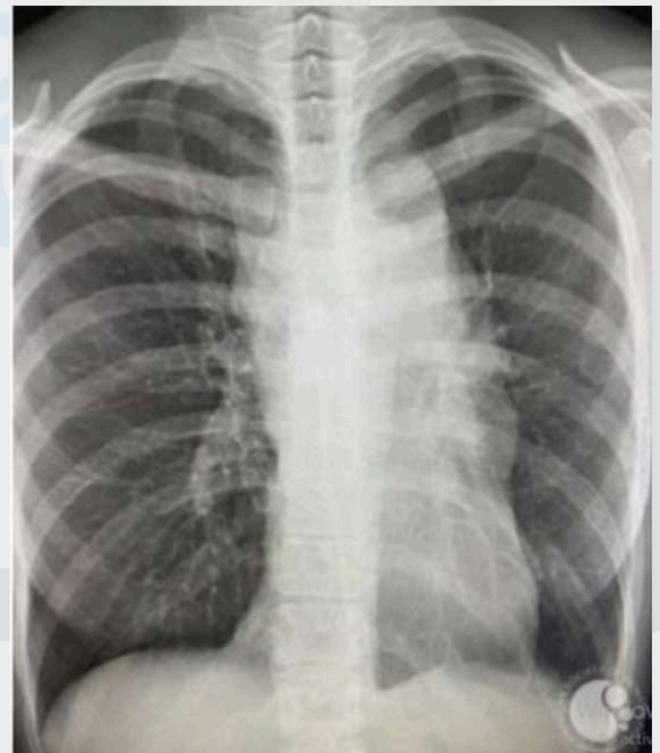
A) What's your diagnosis? **ALL**

B) Give two complications?

1-**Bleeding**

2-**Thrombosis**

3-**recurrent infection**



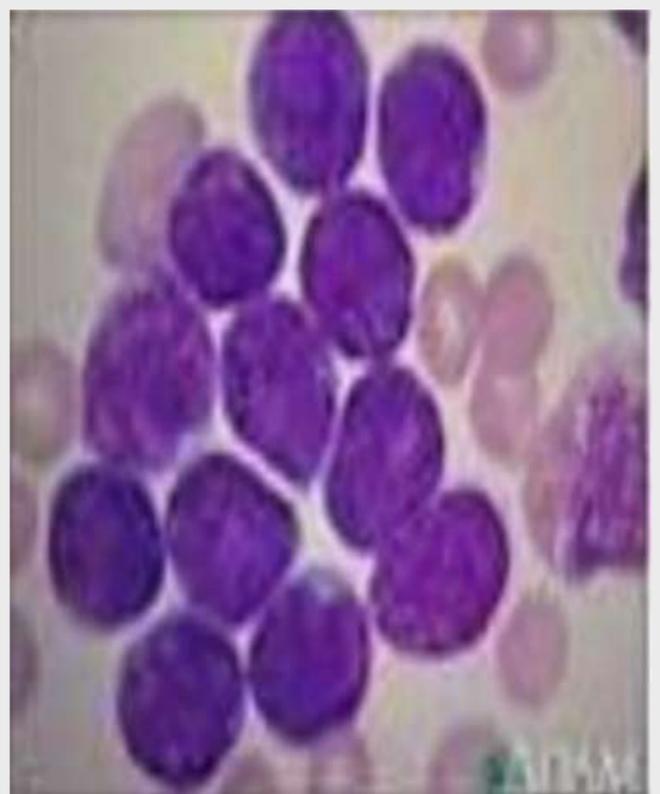
1) Child present with low grade fever and limping

a) Give two other presentation:

**Purpura, lymphadenopathy, bone pain, pallor**

b) 3 electrolyte affected in tumor lysis syndrome:

**Elevated uric acid, K, PO4, and decrease ca**



# LUKEMIA

The child complain of cough, on examination there was lymphadenopathy:

1: describe what you see Xray?

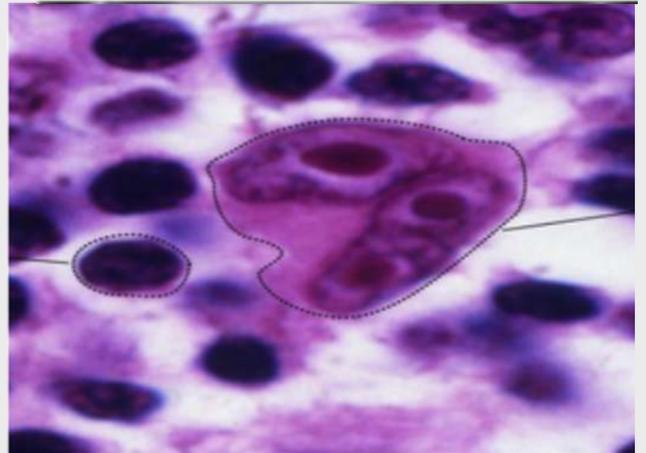
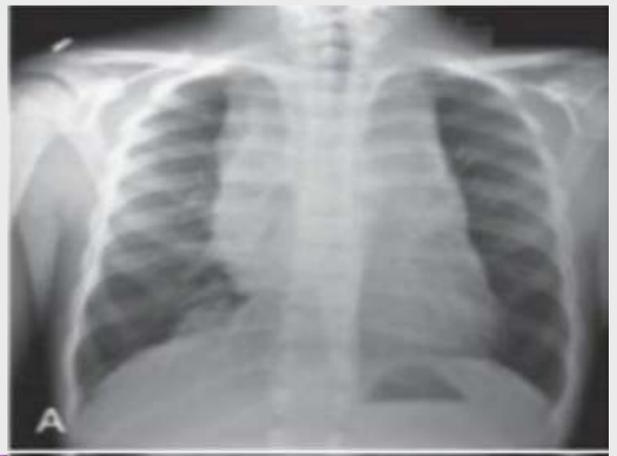
**Wide mediastinum**

2: what is the cell shown?

**Reed sternberg cell**

3: Dx?

**Hodgkin lymphoma**



1) What is the type of cells pointed at?

**Lymphoblasts**

2) Found in which type of malignancy?

**ALL**

3) Mention 3 good prognostic factors for this disease? (from the lecture)

**Age: 1-10 year.**

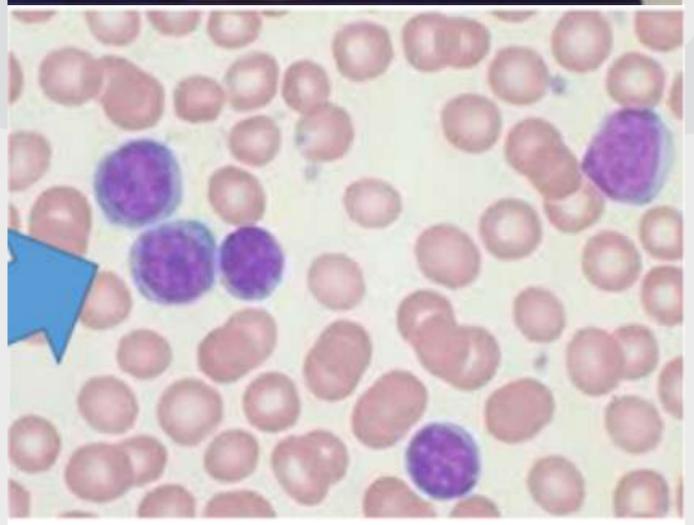
**WBC: < 50,000**

**Chrom. Abnormalities: presence of TEL/AML1 gene, Philadelphia- negative, hyperdiploidy, absence of MLL rearrangement**

**Immunophenotype: B-cell ALL**

**No CNS involvement**

**Early Response to Chemotherapy**



# LUKEMIA

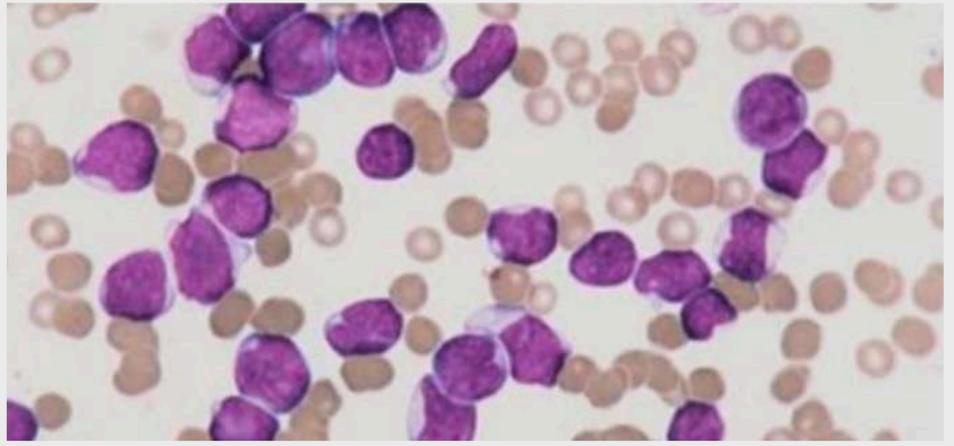
Mention 2 Acute complications of this disease?

**Bleeding**

**Acute tumor lysis syndrome**

**Thrombosis**

**Serious infection**

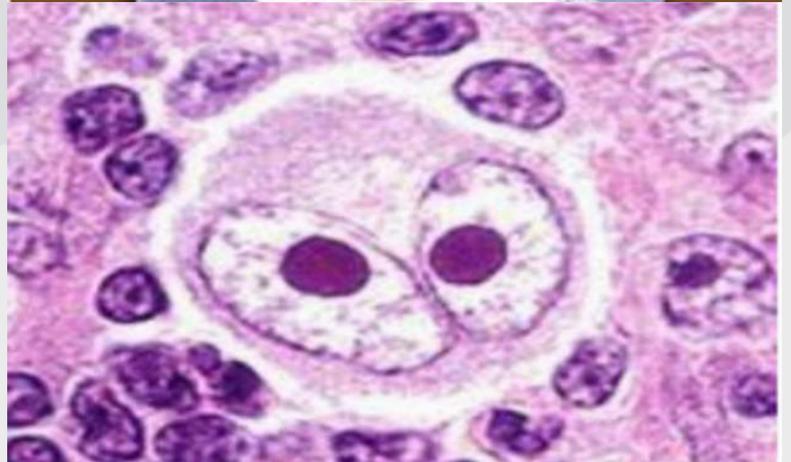


What is the name of the cell on the biobey ?

**Reed sternberg cell**

what is your diagnosis ?

**Hodgkin's lymphoma**



# PEDIATRIC MALIGNANCY

A. Describe what you see in A:

**Answer abdominal enlargement suggestive of massive intra-abdominal mass/ascites.**

B. Describe what you see in B

**Answer: Large heterogeneous renal mass occupying most of the abdomen.**

C. What is your diagnosis

**Answer: Wilms tumor (nephroblastoma).**

D. What is the stage 5 of this disease

**Answer: Bilateral renal involvement at diagnosis.**



What is the abnormality?

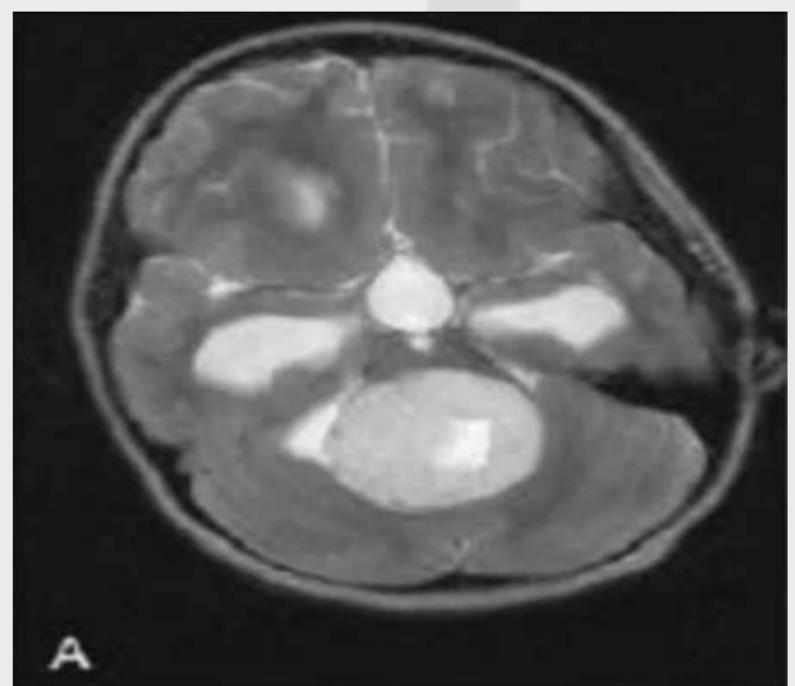
**Brain tumor.**

The patient complains of?

**Headache, irritability, lethargy.**

**Loss of vision.**

**Ataxia, posture.**



# PEDIATRIC MALIGNANCY

Q: Hematuria & Flank pain.

Mention two DDX (Differential Diagnosis):

**Wilms' tumor.**

**Neuroblastoma.**

Mention 2 other clinical manifestations:

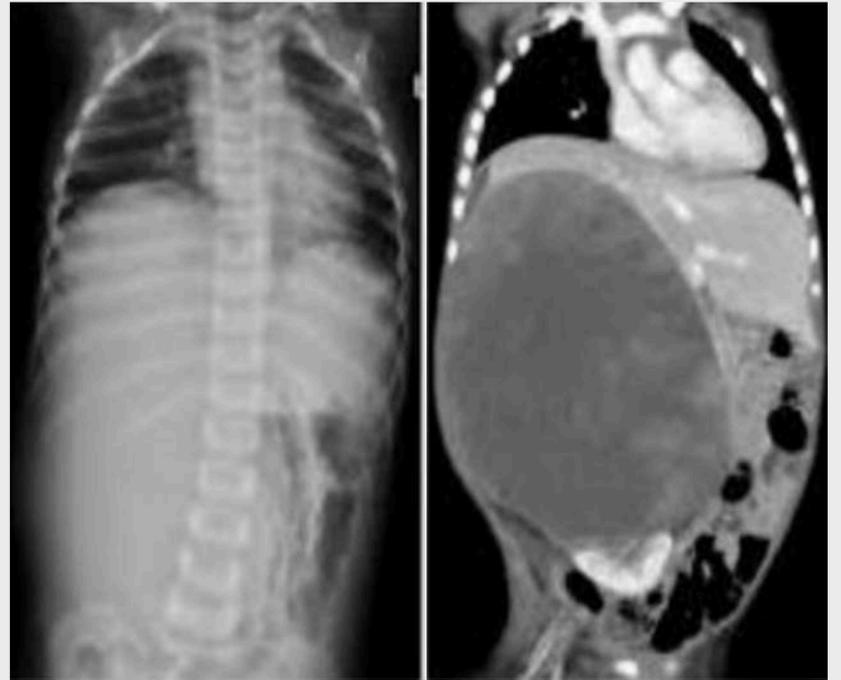
**Abdominal mass (palpable).**

**Hypertension.**

Mention associated syndromes:

**Beckwith-Wiedemann syndrome.**

**WAGR syndrome.**



Name of this sign:

**Raccoon eyes**

Differential diagnosis (DDx):

**Neuroblastoma**

**Basal skull fracture**

**Child abuse**

**Leukemic infiltration**



# PEDIATRIC MALIGNANCY

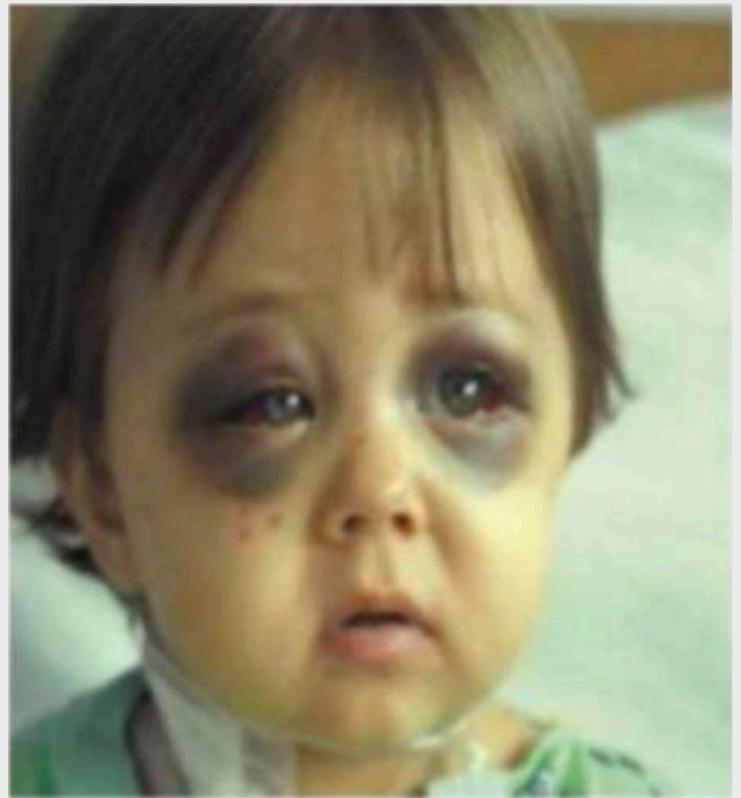
Hx: Abdominal mass

a) What's the finding shown?

**Raccoon eyes (Periorbital ecchymosis)**

b) Diagnosis?

**Metastatic Neuroblastoma**



• A) what is the name of this sign? **Leukocoria**

• B- give 2 ddx: **retinoblastoma**, **congenital cataract (galactosemia)**



• A) what is the name of this sign? **Leukocoria**

• B- give 2 ddx: **retinoblastoma**, **congenital cataract (galactosemia)**



## MALABSORPTION

9 years old boy came to you due to iron deficiency anemia and abdominal pain

What the name of this manifestation?

**Dermatitis herpetiformis**

2 Tests to confirm your diagnosis?

1) tTG-IgA antibody

2) total IgA



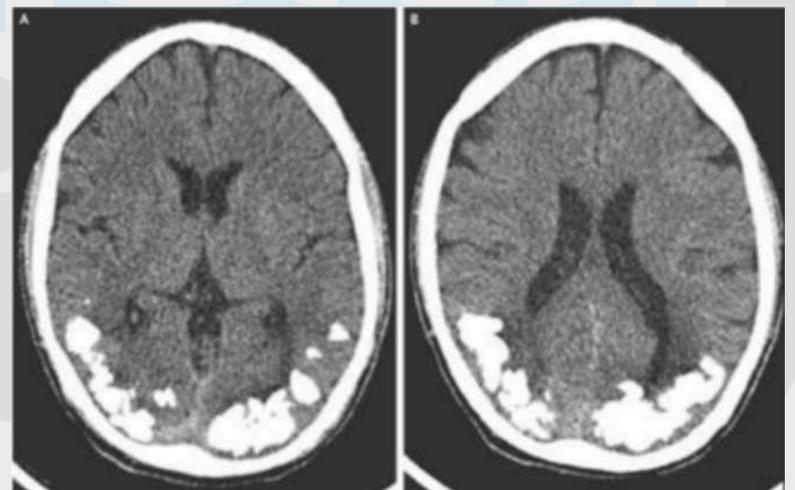
baby with type 1 dm come with DKA and was complain diarrhea and abdominal pain 5 month ago

A) Describe this CT scan:

**occipital lobe edema and calcification**

B) cause of abdominal

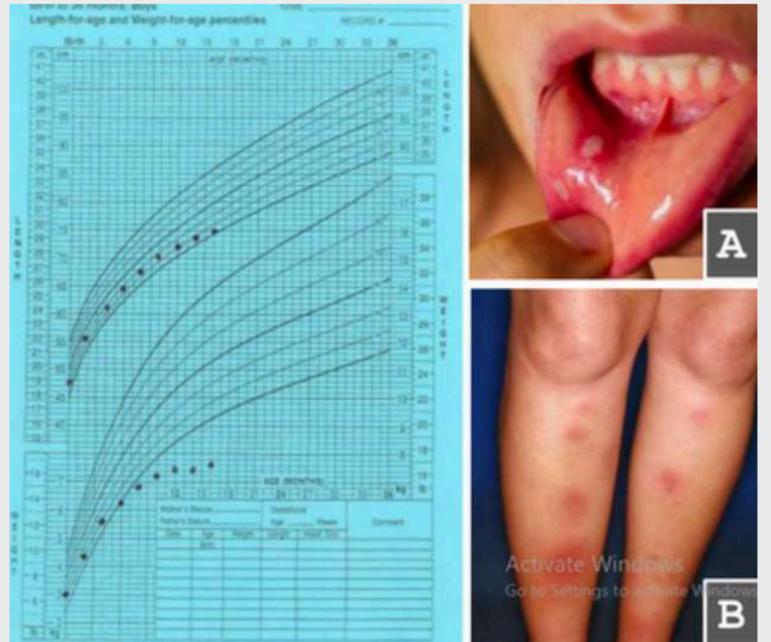
manifestation A: **celiac**



صلّى ع النبي وكمّل  
عليه الصلاة والسلام

# MALABSORPTION

presented to the clinic with the following growth chart and physical findings, he has a 6-month history of abdominal pain and bloody diarrhea. What does the growth chart show?



**Failure to thrive.**

What are the clinical findings shown in the pictures?

**A: Oral aphthous ulcer.**

**B: Erythema nodosum.**

What stool test is most sensitive to detect gut inflammation?

**Fecal calprotectin.**

If this patient after investigations turns out to have elevated ESR/CRP, severe iron deficiency, and low albumin, what would be the likely diagnosis?

**Crohn's disease.**

What investigation will you perform to confirm the diagnosis?

**Double endoscopy (upper and lower).**

What stool test would be helpful to explain the low albumin?

**Fecal Alpha-1-antitrypsin (to detect if there's protein losing enteropathy).**

If years after the diagnosis, the patient complained from painful eyes and blurring of vision, what would be the cause?

**Anterior uveitis.**

**If during the endoscopy, the distal ileum was**

# MALABSORPTION

Patient come with chronic diarrhoea  
what type of rash? **atopic dermatitis**  
diagnose? **Caw milk allergy**



Q: Chronic diarrhea since birth, rash:  
**acrodermatitis enteropathica**  
treatment: **zinc**

What is the Ddx?

**acrodermatitis enteropathica**  
treatment: **zinc**



# MALABSORPTION

young child presented with chronic diarrhea, abdominal pain, and weight loss.

What is the name of these skin lesions?

**Erythema nodosum**

2) Mention two things you will see on stool analysis:

**Fecal calprotectin**

**Fecal WBCs and RBCs**

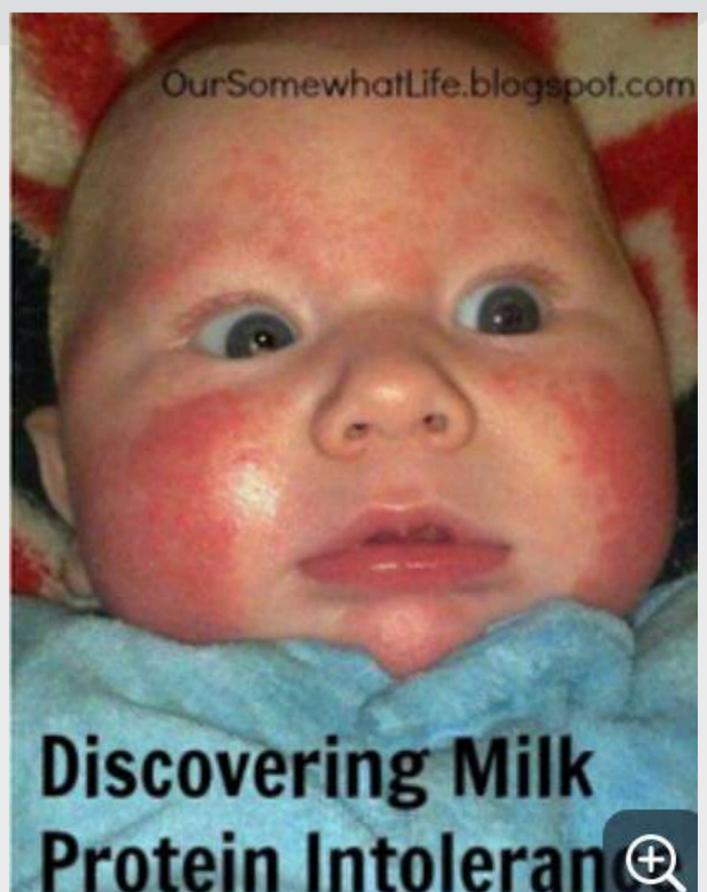
3) How to confirm the diagnosis?

**Endoscopy and biopsy**

**NOTE: Erythema nodosum associated mainly with Crohn's disease, but also can present in Celiac patients**

baby with erythematous face failure to thrive and have diarrhea from 2 w On regular cow's formula

- A. What is the cause of his symptoms? **Cow's milk allergy**
- B. Finding in the stool? **Esinophils**
- C. What is your suggestive formula For him? **Casein Hydrolysate formula (babylac HA / Nan HA) Or Amino acids based formula ( Neocate )**

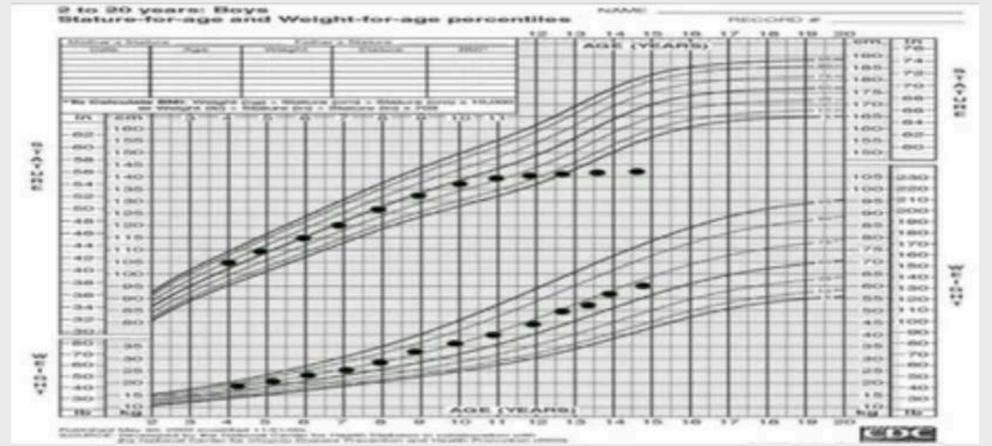


# MALABSORPTION

Your assessment: **short stature**

2- give two causes of this case:

**Celiac disease.**  
**familial (genetic)**  
**Hypothyroidism**



Diagnosis?

**Cows milk allergy**

Treatment ?

**Amino acids based formula**



13 years old girl complain of abdominal pain and other autoimmune diseases:

A- describe what you see:

**multiple aphthous ulcers**

B- single test to confirm

you're diagnosis: **anti ttG**



# GERD

Child with recurrent Opisthotonus position

1-What is the name of this condition?

**Sandifer Syndrome**

2-Mention 3 causes for this position

1-GERD

2-kernicterus

3-Meningitis



1.Dx?

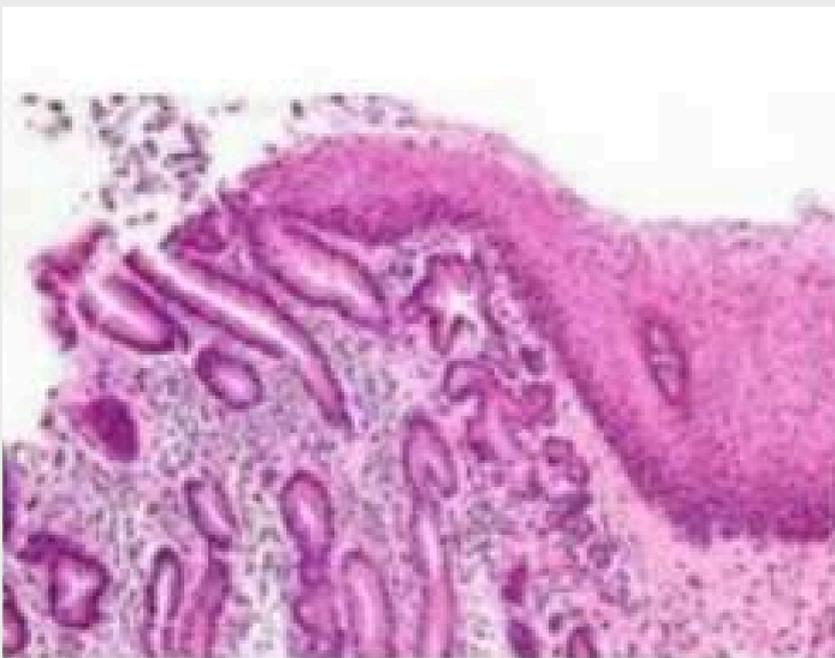
**GERD**

2.GI complication?

**Stricture and Esophagitis**

3. Type of formula?

**AR formula**

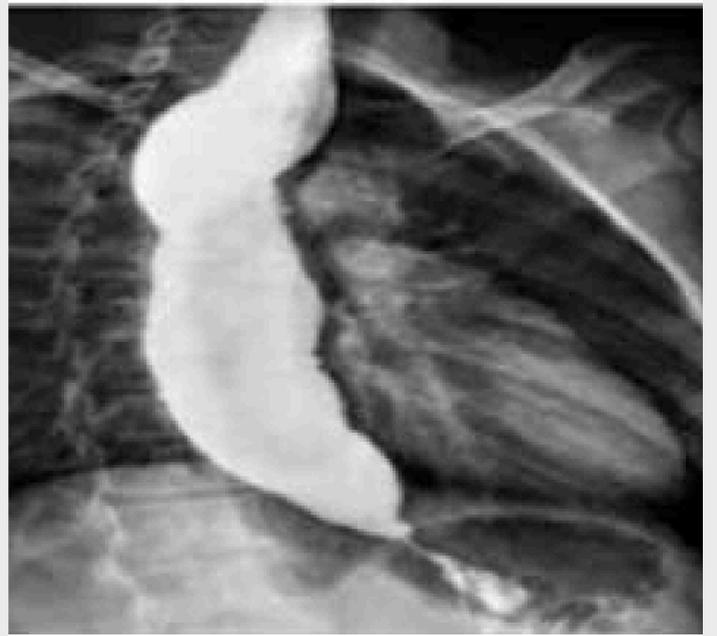


# GERD

• what is the type of this study?

**CONTRAST RADIOGRAPHIC STUDY**

**(USUALLY BARIUM)**



• what is the diagnosis?

**Achalasia Cardia.**

the classic "Bird's Beak"

appearance "Rat-tail" appearance

1-What's this sign?

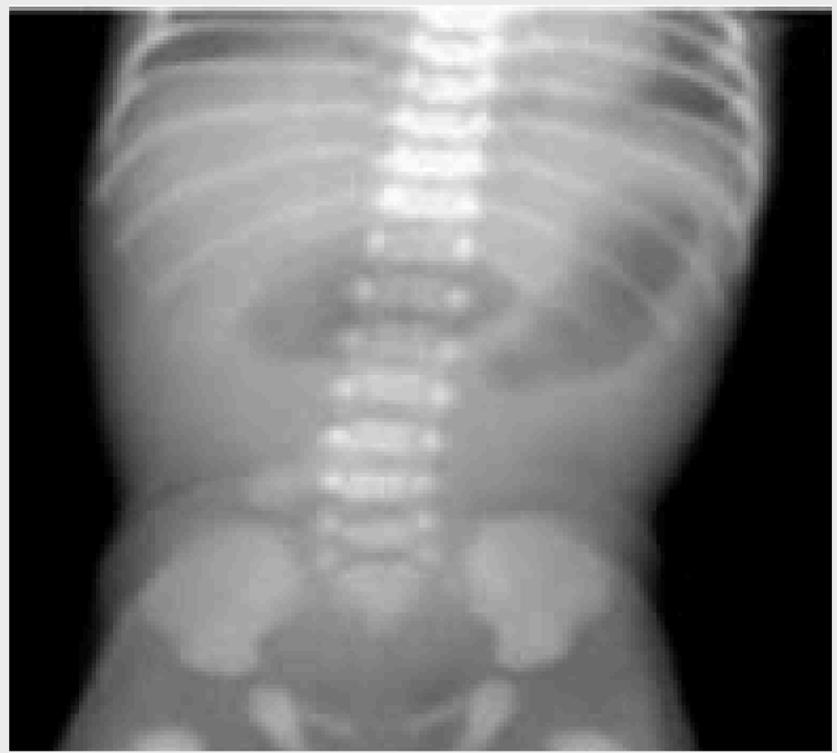
**Double-bubble sign.**

2-What's the most probable Dx?

**Duodenal Atresia.**

3-What other signs do you expect on examination?

**Abdominal distension, Jaundice.**



# INFANT FEEDING

## Station 1

1) Write two indications for this formula



GERD  
GER



Galatocemia

## Station 2

-What is the type of each formula ?



-Write one indication for each?(2points)

Hydrolyzed  
Cow milk allergy

Soy  
galcto....

## Station 3

What is the indication of the first formula?

Cow milk protein allergy

What type of first formula?

Amino acids based formula

What is the indication of second formula?

Galactosemia



## Station 4

1. What stool finding in a child who uses this formula?

Eosinophils and RBC

2. Give an alternative formula?

Hydrolyzed formula

3. Complication of this condition?

FTT



# INFANT FEEDING

## Station 5

-What is the indication



Lactose intolerance?



GERD

## Station 6

1) which type of formula? soy

2) mention 1 indication

Galactocemia



## Station 7

1) what is this formula ?

**Amino acid based**

2) Indication for it ?

**Cow milk protein allergy**



## Station 8

1) Diagnosis?

**Cows milk allergy**

2) Treatment ?

**Amino acid based**



## Station 9

What is the type and indication for each formula?

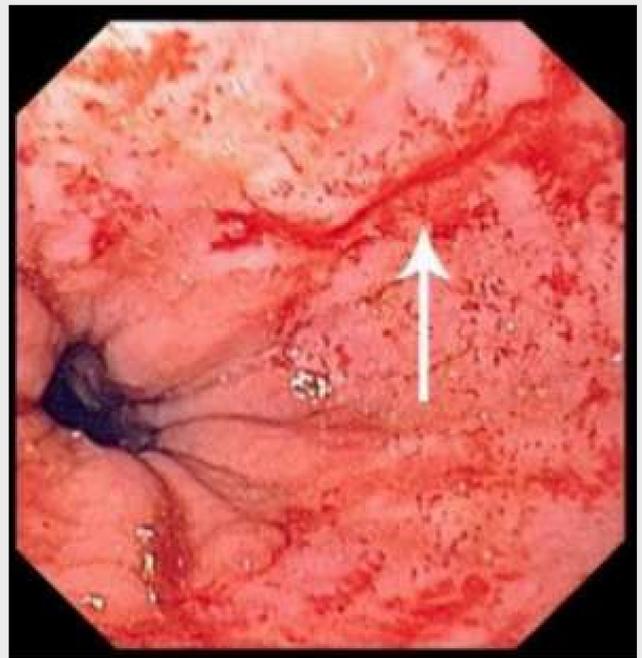


1. Anti-regurgitation (starch based) , GERD

2. Amino acid based , cows milk protein allergy

# GI BLEEDING

6 YEARS OLD FEMALE CAME DUE TO GI BLEEDING THIS MORNING AFTER RECURRENT FORCEFUL VOMITING, AND ENDOSCOPY REVEALS THIS! »



WHAT IS YOUR DIAGNOSIS?

**MALLORY WEISS SYNDROME**

2 BLOOD LABS YOU SHOULD ORDER IN ER?

1) CBC

2) BLOOD TYPE, CROSS MATCHING, COAGULATION PROFILE

X-RAY OF A NEONATE SHOWING INTESTINAL CHANGES.

WHAT IS THE DIAGNOSIS? »

**NECROTIZING**

**ENTEROCOLITIS (NEC)**



WHAT IS THE MAIN FINDING SEEN ON THE X-RAY? »

**PNEUMATOSIS INTESTINALIS**

# GI BLEEDING

A 30-WEEK PRETERM NEONATE, 1.3 KG, ON DAY 8 OF LIFE DEVELOPS ABDOMINAL DISTENSION, FEEDING INTOLERANCE, AND BILIOUS VOMITING. THERE IS BLOOD IN STOOLS AND INCREASING GASTRIC ASPIRATES AFTER RECENT ADVANCEMENT OF FORMULA FEEDS. THE BABY BECOMES LETHARGIC WITH APNOEA AND TEMPERATURE INSTABILITY.

WHAT'S YOUR DIAGNOSIS?

**NECROTIZING ENTEROCOLITIS**

MENTION ONE RISK FACTOR FOR THIS CONDITION?

**PREMATURE**

MENTION ONE CONSERVATIVE MANAGEMENT?

**NPO , GASTRIC DECOMPRESSION , ANTIBIOTIC**

INDICATION FOR SURGICAL MANAGEMENT?

**PNEUMOPERITONIUM**

WHAT'S THE SIGN ?

**TARGET SIGN**

WHAT'S THE DIAGNOSIS?

**INTUSSUSCEPTION**



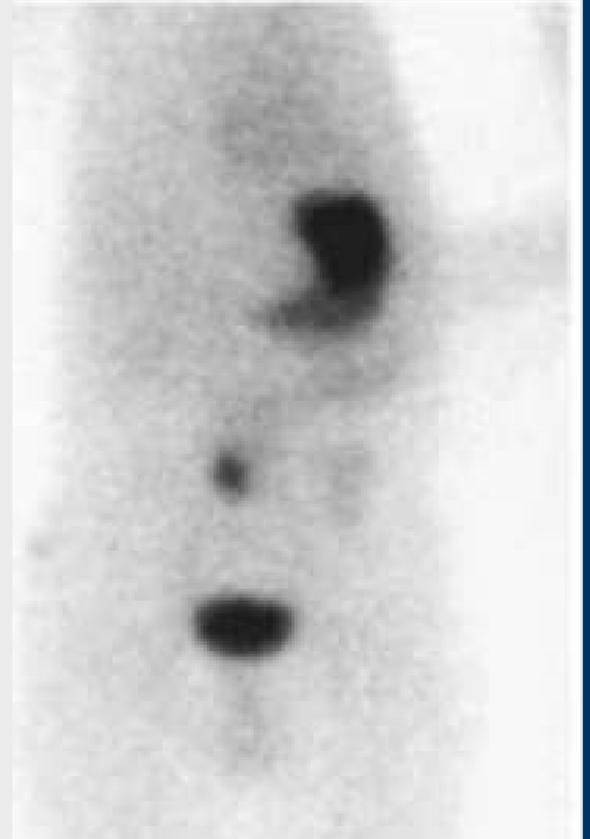
# GI BLEEDING

BABY COMPLAIN FROM PAINLESS LOWER  
GL BLEEDING WHAT IS THE NAME OF THIS  
STUDY ?

**MECKELS SCAN ( TECHNETIUM 99)**

WHAT IS THE TRAETMENT OF CHOICE?

**SURGICAL EXCISION**



NAME THIS SIGN

**TARGET SIGN**

DIAGNOSIS:

**INTUSSUSCEPTION**

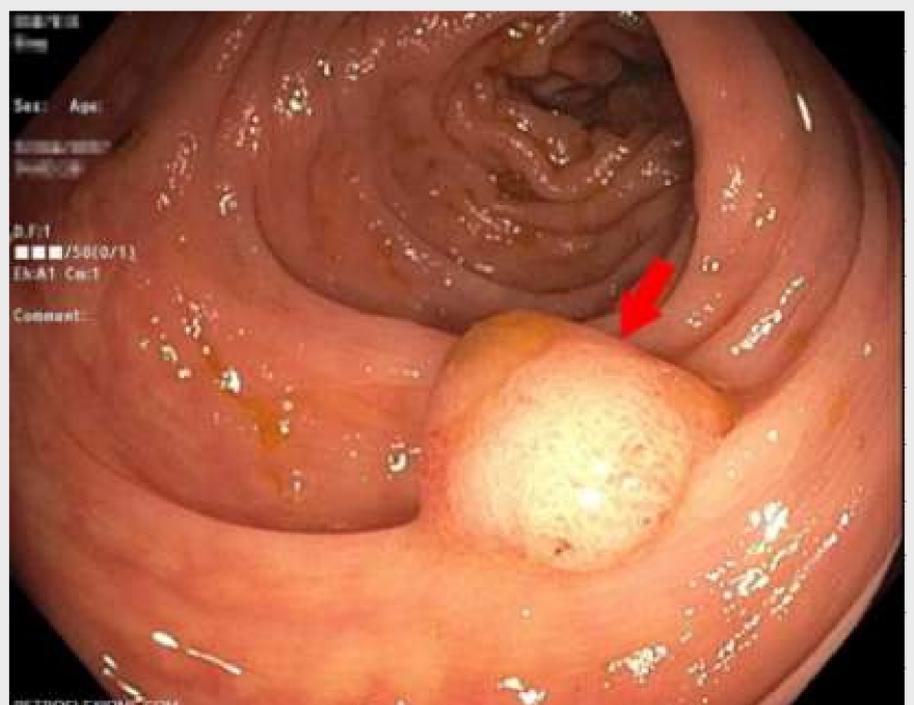


FINDING ?

**POLYP**

MANAGMENT ?

**SURGICAL REMOVAL**



# GI BLEEDING



**BABY PRESENT WITH HEMATOCAZIA ,ABDOMINAL DISTENSION AND VOMITING**

**WHAT IS THE DIAGNOSIS?**

**NECROTIZING ENTEROCOLITIS**

**WHAT IS THE FINDING IN THIS IMAGE ?**

**PNEUMATOSIS INTESTINALIS**

# ACUTE GASTROENTERITIS

The child came to the ER complain from vomiting and diarrhea for 3 days

1- What is the sign seen in the picture?

Decreased skin turgor

2- What is the degree of dehydration?

Severe dehydration

3- What is the first line in treatment with dose?

IV normal saline 0.9% 20 mg/kg as bolus



\*What is abnormal finding?

- o Presence of mucus and pus
- Presence of trophozoite and cyst (E.Hystolitica)
- Pesence of RBCs
- Offensive odor

\* What is the treatment?

- Trophozoite: metronidazole
- Cyst: luminal agent (iodoquinol or paromomycin)

Stool analysis	
Physical	
• Color:	Brown
• Odor:	Offensive
• Consistency:	Semi-formed
• Blood:	N/L
• Mucus:	+
Microscopy	
• R.B.Cs:	3-5
• Yeast:	N/L
• Starch:	++
• Vegetables:	+++
• Fat:	+++
• Protein:	N/L
• Parasite:	E.Histolatica
• Parasite Ova:	N/L
• Parasites Cyst:	E.Histolatica

• Stool analysis of a 4 month old child complaining of diarrhea 4 days duration

1- describe the findings

Normal stool analysis report

Soft consistency

No wbc

No blood

No mucus

2- what is the most likely causative organism?

Rotavirus

3- if diarrhea continues for 1 month what is the appropriate next step?

- Reducing Substance in stool
- Lactose free milk

# ACUTE GASTROENTERITIS

Vomiting diarrhea seizure  
with stool test

\* What is the organism?

• **Shigella**

\* What is the complication?

**HUS, Rectal prolapse,  
sepsis , seizures**

\* What is the treatment of choice?

• **Ceftriaxone , Ampicillin, TMP-SMZ.**

## Stool analysis

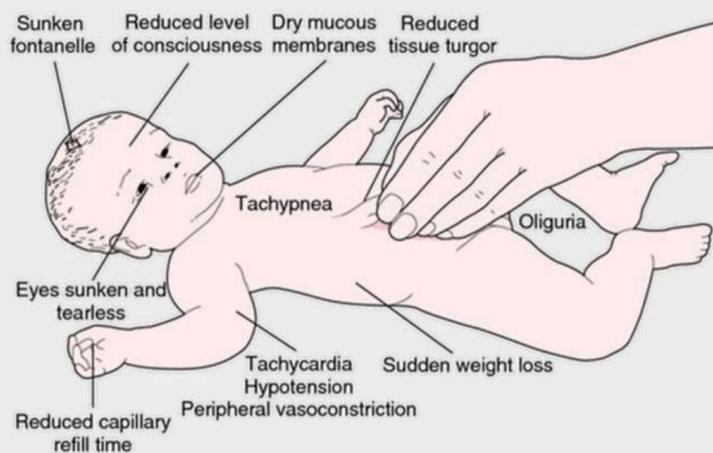
- WBC – positive
- Mucus – positive
- Blood – positive
- No cysts or trophozoites



A 7 years child with sever gastroenteritis

• What's the most important  
sign seen in the picture?

• **Sunken eyes**



ORS is recommend as the  
treatment of choice for  
children with mild-to-  
moderate GE



# HEPATITIS

**Patient with HX of abdominal pain and vomiting with highly elevated AST and ALT**

**1- what is the best investigation you would order?**

**Anti-HAV IgM Antibodies**

**2- what you would like to do for his 6 years brother?**

**vaccination**

**3- what you would like to do for his 8 months brother?**

**IVIG and vaccination**



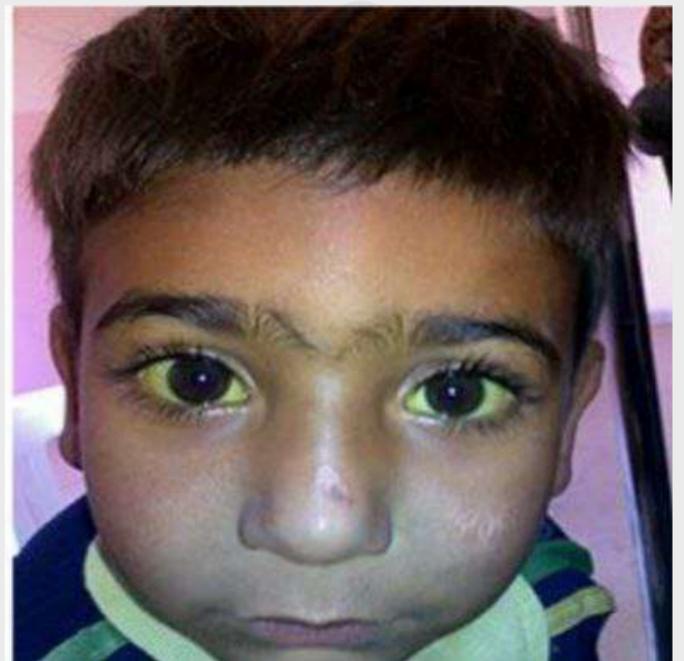
**RUQ pain with vomiting , diarrhoea and elevated in alkalin phophatase?**

**a) Diagnosis:**

**Acute Viral Hepatitis**

**b) Blood test:**

**Liver Function Tests (LFTs) and Serology (e.g., Anti-HAV IgM).**



# HEPATITIS

what is the best investigation you would order?

**Acute viral hepatitis**

When to give this vaccine in Jordan?

**Start at 12 months of age**



Station 6 - Total Bilirubin = 15mg/dl):

What investigations to order:

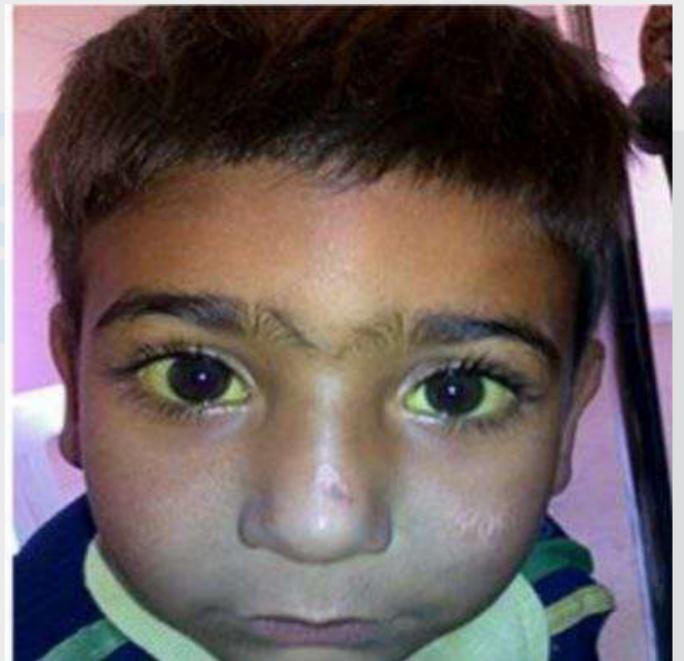
**Fractionated bilirubin (Direct vs. Indirect).**

**Abdominal Ultrasound.**

Write 2 lines of management:

**Supportive care (hydration and monitoring).**

**Isolation and post-exposure prophylaxis for close contacts.**



	Hbs Ag	HbsAb	HbcAb	IgM
1	Neg	Pos	Neg	Neg
2	Pos	Neg	Pos	Pos

What the diagnosis for the following cases :

- 1. Immunity secondary to vaccination hepatitis B**
- 2. Acute hepatitis B virus infection**

# COMMON CHROMOSOMAL ABNORMALITY

**Boy came to your office for neurodevelopment assessment**

**What is the karyotype?**

**Answer: 47, XY, +21**

**Give 2 gastrointestinal complications?**

**Answer: 1) Duodenal atresia  
2) Annular pancreas**



**Overweight child with short stature:**

**Questions:**

**What is the most likely diagnosis?**

**Prader-Willi syndrome**

**What is the treatment for his short stature?**

**Growth hormone (GH) therapy**



# COMMON CHROMOSOMAL ABNORMALITY

**Dysmorphic features: Di-George syndrome**

**2 associated complications:**

**Cardiac defects**

**Hypocalcemia (or Thymic hypoplasia)**

**Turner syndrome**

**A) Give 3 physical findings?**

**Webbed neck**

**Shield chest**

**Short stature**

**B) What's your treatment for growth restriction?**

**Growth hormone**

**C) What's your treatment for her hypogonadism?**

**Estriol, estradiol (Estrogen replacement therapy)**



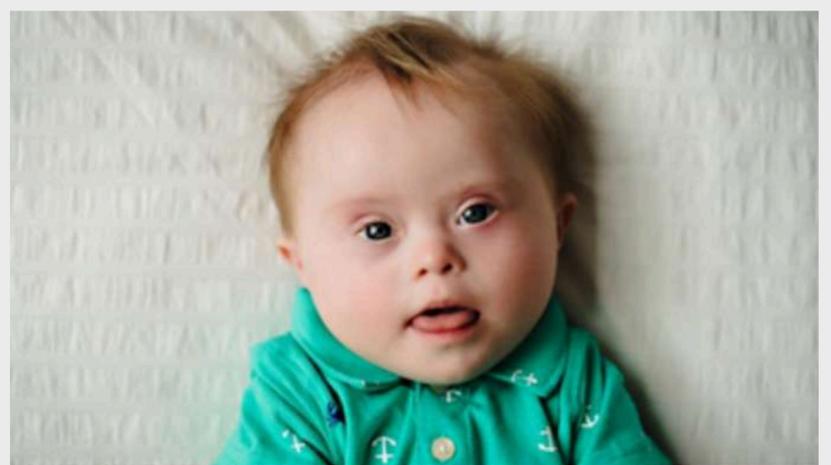
**[Down Syndrome Photo]**

**a) Write two dysmorphic features:**

**Answer: Flat facial profile, Up-slanting palpebral fissures (or Simian crease).**

**b) What is anomaly they will have?**

**Answer: Trisomy 21.**



# COMMON CHROMOSOMAL ABNORMALITY

**The tallest girl in her class  
What is the diagnosis?**

**Answer: Marfan syndrome.**

**Write one cardiac association you see in her?**

**Answer: Mitral valve prolapse (or Aortic root dilation).**



**A) Give two physical findings:  
Shield chest, webbed neck and lymph edema.**

**B) What is the chromosomal abnormality?**

**XO 45 chromosomes (Turner Syndrome).**



**Name of syndrome?**

**Williams syndrome.**

**Most specific cardiac abnormality?**

**Supravalvular Aortic Stenosis (SVAS).**



# COMMON CHROMOSOMAL ABNORMALITY

1) Mention one complication that appears in the neonatal period:  
**Hirschsprung disease (or Duodenal atresia).**

2) Mention two blood screening tests:

**CBC (to check for leukemoid reaction/leukemia).**

**TSH, T4 (to check for hypothyroidism).**



1- Mention 2 dysmorphic features in this picture:

**Epicanthal folds.**

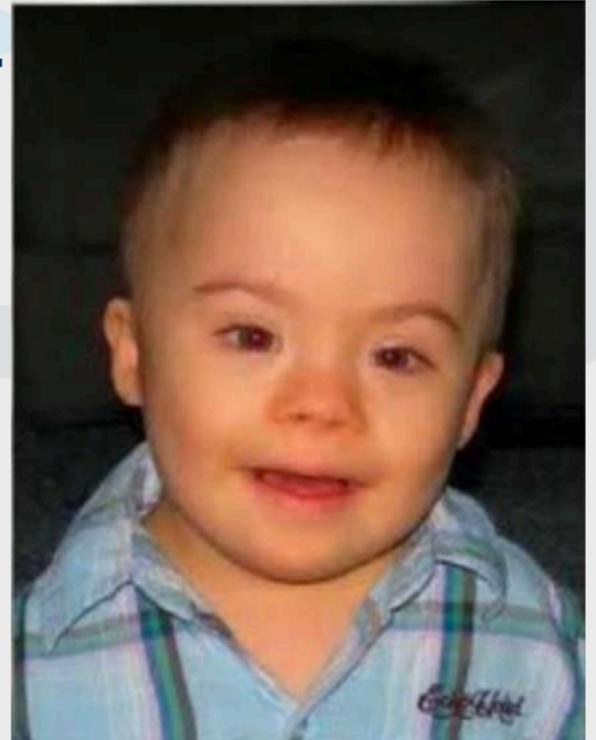
**Upward slant of eyes.**

**Low bridge nose.**

2- Mention 2 complications:

**AML / ALL (Leukemia).**

**Endocardial cushion defect (AVSD).**



Case: 5-year-old patient with autism and ADHD.

1- What is the cause?

**Fragile-X syndrome.**



# COMMON CHROMOSOMAL ABNORMALITY

1- What is the abnormality in the karyotype?

**Trisomy 21 (Down syndrome).**

2- Write two gastrointestinal anomalies would the patient have?

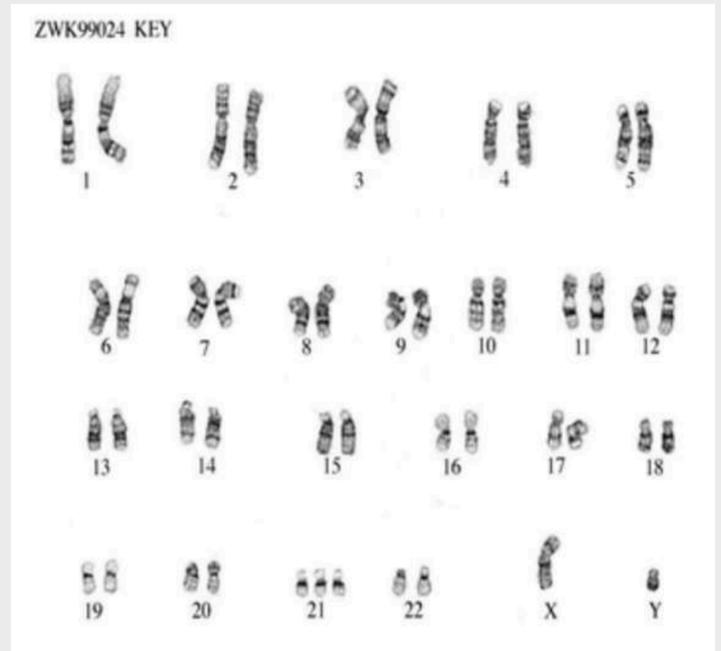
**Duodenal atresia / annular pancreas.**

Your differential diagnosis?

**Duodenal atresia (Double bubble sign).**

One risk factor for this condition?

**Down syndrome.**



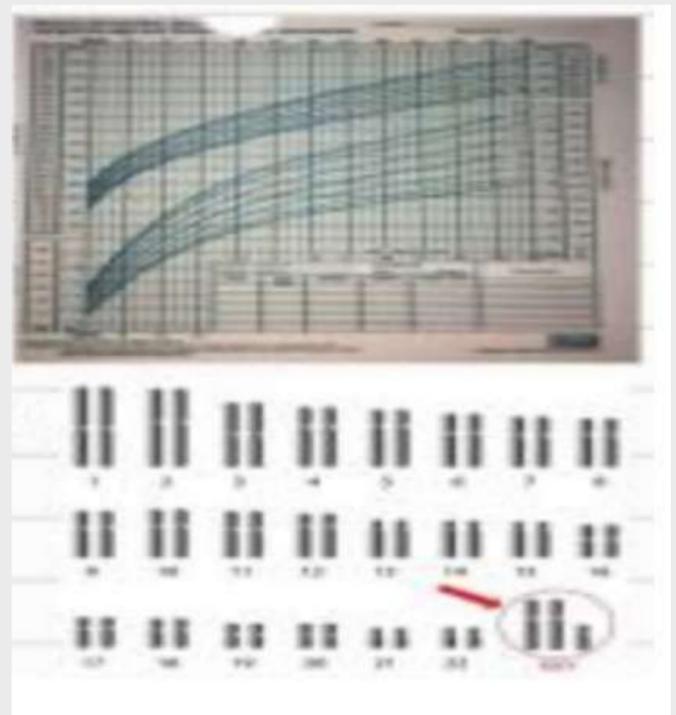
Growth Chart & Karyotype Section

1. At which percentile for weight and height?

**Tall stature (Above 95th percentile). From question you can know**

2. According to the growth chart findings and the karyotyping, what is your diagnosis?

**Klinefelter syndrome (47, XXY).**



# COMMON CHROMOSOMAL

## ABNORMALITY

15y old male patient presented with delayed maturity

A. What is your diagnosis?

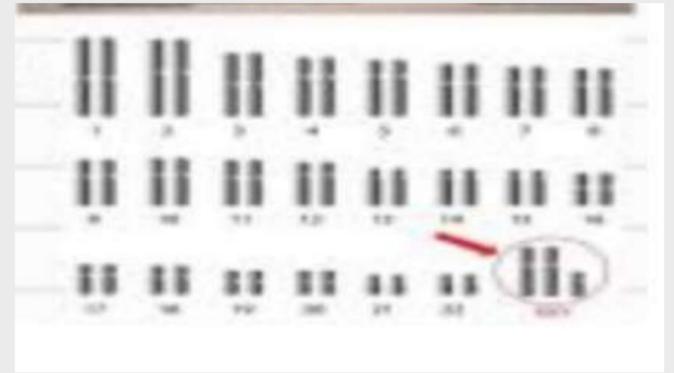
**Klinefelter syndrome.**

B. Write 2 physical findings:

**Gynecomastia, tall stature, small testes, and less facial/body hair.**

C. Write 2 abnormalities of this situation:

**Infertility and Hypergonadotropic hypogonadism (Low testosterone/High FSH & LH).**



1- WHATS the dx?

**Turner syndrome**

2- What is the cause of HTN?

**COA (Coarctation of the Aorta) or renal anomalies**



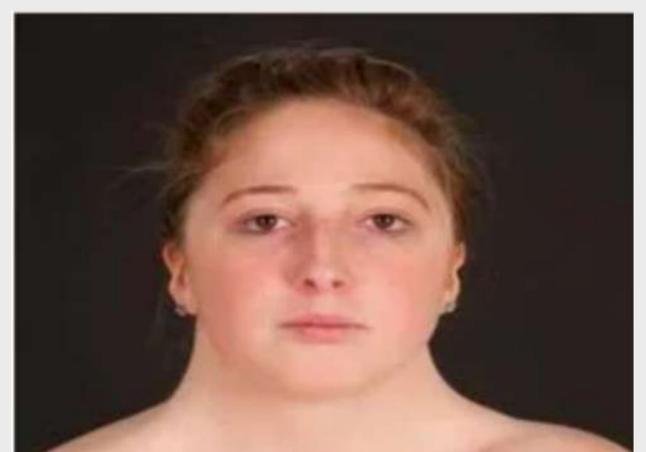
1- WHATS the dx?

**Turner syndrome**

2- mention two complications?

**coarctation of aorta**

**horseshoe kidney**



# COMMON CHROMOSOMAL ABNORMALITY

Sign in the pic: **Clinched fist /  
Overriding fingers > Edward**



Mention 2 another anomalies:  
**Rocker-bottom feet, prominent  
occiput.**

How to confirm your dx: **Karyotype**

Female presented with this lesion

1) Name of this lesion: **Aplasia  
cutis congenita**

2) In which syndrome: **Patau  
syndrome (Trisomy 13)**

3) Two other findings:

**Postaxial polydactyly**

**Midline facial defects such as:  
cyclopia (single orbit), cebocephaly  
(single nostril), cleft lip and palate.**



5 days old baby with late passage of  
meconium and no gas in the  
rectum:

1- what caused these signs?

**Hirschsprung disease**

2- other 2 complications with this  
syndrome (Down Syndrome)?

**Duodenal atresia, VSD**



# COMMON CHROMOSOMAL

## ABNORMALITY

1- Name 2 facial characters?

**Hypertelorism and epicanthic fold**

2- What is the most specific cardiac abnormality?

**AV canal (endocardial cushion defect)**



features with X-ray picture of Boot-shaped heart:

What are the findings in the X-ray?

**Answer: Boot-shaped heart (due to right ventricular hypertrophy) and absent thymic shadow.**

How to treat TET spells?

**Answer: Knee-chest position, oxygen, morphine, and IV fluids (Beta-blockers can also be used).**

What will cause his seizure?

**Hypocalcemia**

What will cause His recurrent infections?

**T-cell immunodeficiency**



# COMMON CHROMOSOMAL ABNORMALITY

**Mention the limb abnormality?**

**Rocker bottom feet**

**Overriding of fingers**

**What is the diagnosis?**

**Edward's syndrome**



**Write 2 dysmorphic features you see in this photo?**

**Answer: Micrognathia (small jaw) and low-set ears.**

**What is the diagnosis or the anomaly?**

**Answer: Edward's syndrome (Trisomy 18).**



# COMMON CHROMOSOMAL ABNORMALITY

What do you see in this x-ray? **Double bubble sign**

What is the diagnosis? **Deudenal atresia**

What other GI pathologies May be seen in this patient? **Annular pancreas, imperforate anus**

How to confirm dx? **Karyotyping**

If this patient presented 3 weeks later with cyanosis and shortness of breath, what is the cause? **AV canal "endocardiac cushion defect"**

After years this patient came with thrombocytopenia and limb pain, what is the diagnosis? **Leukemia**



A junior doctor examines the first child of a 28 year old woman as part of a routine "baby-check" prior to discharge from hospital. The baby is 20 hours old. The doctor notices that the baby is hypotonic and also finds a systolic murmur on auscultation of the heart. After further examination by a senior paediatrician the baby's chromosomes are analysed:

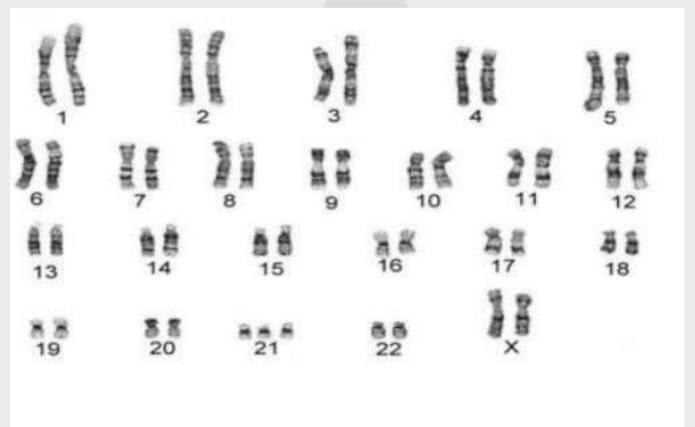
Questions & Answers:

1- What is the diagnosis?

**Trisomy 21 (Down syndrome)**

2-What is the most likely cardiac defect?

**Atrioventricular septal defect (AVSD)**



# DR.HADEEL :

## NEPHROTIC

1) Frothy urine, proteinuria +4, edema

**Nephrotic syndrome**

2 other criterion : **number of RBCs in urine, ascites, albumin level, hyperlipidemia**

2) Child present with frothy urine 1 week after URTI Findings;

Low albumin, Protein +4 , Normal blood pressure

What's the pathological type ?

**Minimal change disease (podocyte effacement)**

Mention 2 lines of treatment?

**Steroids**

**Albumin effusion**

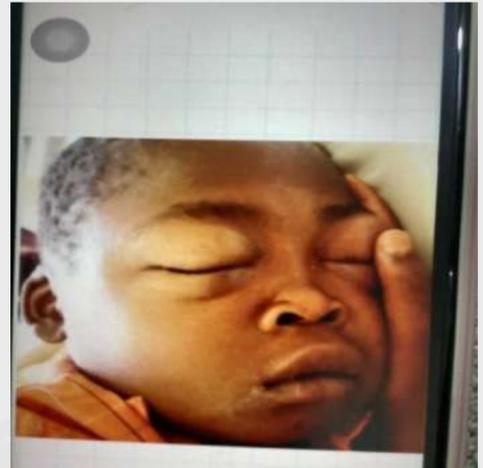
Mention 2 long term complications?

**Thrombosis**

**Infections**

If the child developed acute abdomen what's the appropriate next step?

**Peritoneal tap and broad spectrum antibiotic**



3) Nephrotic child, come with this presentation after 4 months of treatment:

Describe the face?

**Moon face**

What is the cause?

**Corticosteroids**



4) patient diagnosed with nephrotic syndrome from 6 months:

1. describe what you see : **moon face**

2. possible cause: **corticosteroids**



5) Patient known to have nephrotic syndrome,

Mention 3 lab tests to confirm the diagnosis:

**Urine dipstick/ 24 hr urine collection, urine sample (Upr/Ucr), albumin level**

6) 2 year old with urine analysis +4 protein, which of the following is least likely to be found on his physical exam?

**bilateral basal lung crepitations**



2 year old with urine analysis +4 protein, which of the following not consistent with a diagnosis?

**Platelet 38**

# NEPHRITIC

1) This child come with 2 day history of facial puffiness .  
What is your differential diagnosis ?

**Nephritic**



what the investigations that you can use to confirm your diagnosis?

**24 urine protein collection**

**Lipid profile**

**albumin level**

2) Patient came with red urine 2 days after having an upper respiratory infection



1. Diagnosis? **IgA nephropathy (Berger disease)**

2. Mention 2 abnormalities in labs tests associated with this condition:

**Hematuria and Proteinuria**

3) Hematuria after 2 weeks of URT

• Two ddx?

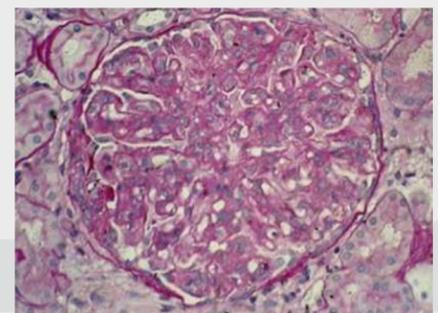
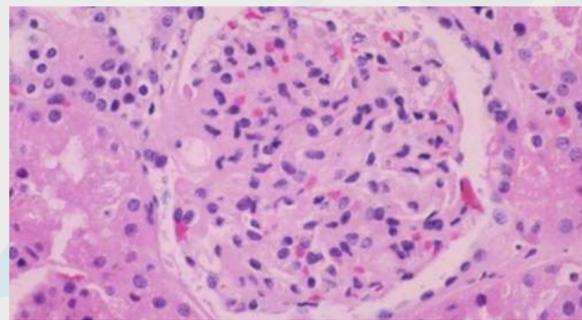
1. **PSGN**

2. **IgA nephropathy**

• Two Investigation to support diagnosis?

1. **C3 complement level**

2. **ASO, anti-DNase**



4) Child with history of URTI, came with red urine

what other symptoms or sign you can see in this patient ?

**Hematuria, Edema, Hypertension, Oliguria**

what is investigation to diagnose it ?

**C3 complement level, anti-DNAase, ASO titer, Urinalysis**

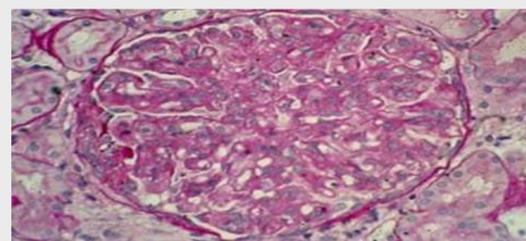
5) Hematuria and Hx of URTI 2 weeks ago

1- Mention 2 investigations to confirm Yr Dx

**C3 complement level, anti-DNAase**

2- Mention 2 acute complications

**HTN, fluid overload, hyperkalemia, hyponatremia, acidosis**



6) 7 years old patient, previously free, 2 days ago he started to complain of facial bluffness and hematuria

Investigation :

**Many investigation were provided but the most important are:**

**Elevated Cr and Urea**

**RBC cast**



# NEPHRITIC



7) 1- What is the most likely Dx?

**GN**

2- If there was a rash (as in image) what's the Dx ?

**HSP**

3- What do you expect the level of complement in this pt.?

**Normal C3 and C4**

4- Next best investigation if protein is +2 in dipstick?

**24-hour urine collection OR renal biopsy**

**Urine collection is the best answer**

5- Mention 3 acute complications?

**Fluid overload, uremia, acidosis, electrolyte disturbance ...etc**

6- Mention 2 management in hyperkalemia?

**Glucose + insulin, Beta agonist, calcium gluconate, bicarbonate**

7- Give 2 prognostic factors

**Proteinuria, HTN, crescents on biopsy**

8) RBC cast/protein +2/creatinine 1.7

1. if patient come with this scenario after 2 W of URTI, your Dx : **Post-streptococcal glomerulonephritis**

2. life threatening complication in case: **AKI/ Severe HTN/ Hyperkalemia**

3. two modalities for treatment of hyperkalemia: **cardiac stabilization by IV calcium gluconate, Insulin + glucose**

4. two modalities for treatment of HTN in this case: **Furosemide, Nifedipine**

5. if this patient come after 4 W with protein +4 /edema, your next step : **kidney biopsy**

# UTI

WHICH OF THE FOLLOWING IS MOST LIKELY TO BE FOUND ON IT

**HYPERTENSION**



**TWO FINDINGS ?**

**WRITE DOWN 2 COMPLICATIONS?**



**2 COMPLICATION ?**

**REFLUX NEPHROPATHY , RECURRENT UTI**

**MENTION 2 FINDING IN THE PIC**

**HYDRO- URETRO — NEPHROSIS & URETER  
TORSUITY**



**BABY COME TO ER FEVER , VOMITING & ABD PAIN , DIAGNOSED  
WITH UTI .**

**WHAT CAN YOU SEE IN DIPSTICK ? 3POINTS**

**BLOOD ,PROTEIN, NITRAT, GLU LEUKOCYTE ESTRASE,  
S.GRAVIDITY ,PH**

**TX?**



**ITS PYELONEPHRITIS So, ) PYELONEPHRITIS... EITHER REGIMEN; ® |V TREATMENT WITH 3RD  
GENERATION CEPHALOSPORIN LIKE CEFTRIAZONE (ROCEPHIN ) OR CLAFORAN ( CEFITAXIME) OR  
\* AMPICILLIN AND AMINOGLYCOSIDE (GENTAMICIN) -ORAL THIRD-GENERATION  
CEPHALOSPORINS SUCH AS CEFIXIME (SUPRAX) ARE AS EFFECTIVE AS PARENTERAL  
CEFTRIAZONE AGAINST A VARIETY OF GRAM-NEGATIVE ORGANISMS OTHER THAN  
PSEUDOMONAS, IT IS THE TREATMENT OF CHOICE FOR ORAL THERAPY FOR PYELONEPHRITIS.**

# UTI

IMAGING NAME ? **MCUG**

NAME 2 FINDING ?

**HYDROURETER AND & HYDRONPHROSIS**

NAME 2 COMPLICATION ?



CASE FOR UTI

1-MENTION 3 FINDING IN URINE ANALYSIS SUGGEST UTI

2-RF FOR RECUURENT UTI

3-MOST COMMON CAUSE OF UTI ? **ECOLI**

4-FURTHER INVX FOR THIS CASE? **DMSA AND MCUG**

WHAT IS THE NAME OF THE STUDY?

**MCUG (SHOW VUR)**

GIVE TWO CAUSES?

**POSTERIOR URETHRAL VALVE NEUROGENIC BLADDER**



WHAT ARE THE ANNUAL TESTS FOR FOLLOW UP?

**FUNDOSCOPY**

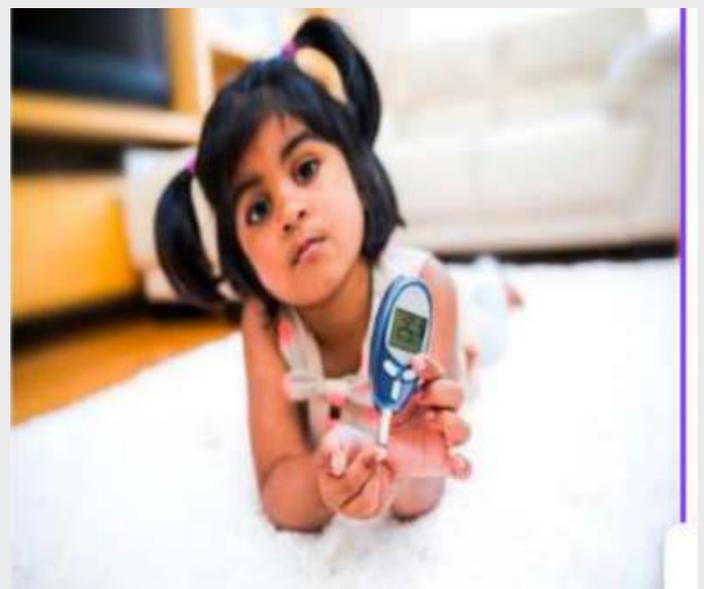
**KIDNEY FUNCTION TEST**

WHAT ARE THE MODALITIES OF TREATMENT?

**INTENSIVE INSULIN REGIMEN**

**(MDI, CSLI)**

**CONVENTIONAL INSULIN REGIMEN**



# UTI

US PICTURE WITH HISTORY GFR 22 WHAT IS THE ABNORMALITY? **HYDRONEPHROSIS**

WHICH STAGE OF CKD ? **STAGE 4**

WHAT ARE THE LABS OF CA,PTH,PO4?

**HYPOCALCEMIA, HYPERPHOSPHATEMIA, HYPER PARATHYROID**



CHILD PRESENTED WITH SYMPTOMS OF UTI, HIS WEIGHT 7.5 KG

MENTION 3 FINDINGS IN THIS TEST

**1-LEUKOCYTE ESTERASE AND NITRITE**

**2-WBCS MORE THAN 5 (HIGH)**

**3-PH LESS ACIDIC**

WHAT IS THE AMOUNT OF MAINTAINANCE FLUID FOR

THIS CHILD  **$100 \times 7.5 = 750\text{ML OR } .75 \text{ LITRE}$**



PATIENTS DO THESE 2 URINE ANALYSIS

PATIENT 1 : RBCS=2, THERE'S HIGH WBCS WITH URINARY SYMPTOMS

PATIENT 2: RBCS=5, THERE'S HIGH WBCS , ASYMPTOMATIC

WHAT'S YOUR DIAGNOSIS FOR PATIENT 1 AND PATIENT 2:

PATIENT 1: **UTI PYELONEPHRITIS**

PATIENT 2: **UTI CYSTITIS**

WHAT'S THE BEST TREATMENT FOR PATIENT 1 IF WE SHOULD ADMITTED PATIENT TO THE HOSPITAL:

**3 RD GENERATION CEPHALOSPORIN WITH AMPICILLIN**

# UTI

BOY ON DIALYSIS FROM A YEAR AGO , WITH SINGLE KIDNEY , WITH CREATININE HIGH

WHICH STAGE OF CHRONIC KIDNEY DISEASE:

**STAGE 5**

WHAT IS THE MOST COMPLICATIONS:

**METABOLIC ACIDOSIS**

**UREMIA**

**HYPERKALEMIA**

**DEVELOPMENTAL DELAY**



1-MENTION TWO FINDINGS SUGGEST GLOMERULAR INJURY? **HEMATURIA , PROTEINURIA**

2- MENTION 3 FINDINGS SUGGEST UTI?

**1. LEUKOCYTE ESTERASE**

**2. NITRITES**

**3. HEMATURIA**



DIPSTICK TEST PIC IN A UTI CASE FOR A HYPERACTIVE BABY THAT WEIGHT 8.3KG

A) TWO FINDINGS THAT CAN BE SEEN:

B) FLUID MAINTENANCE FOR HIM:

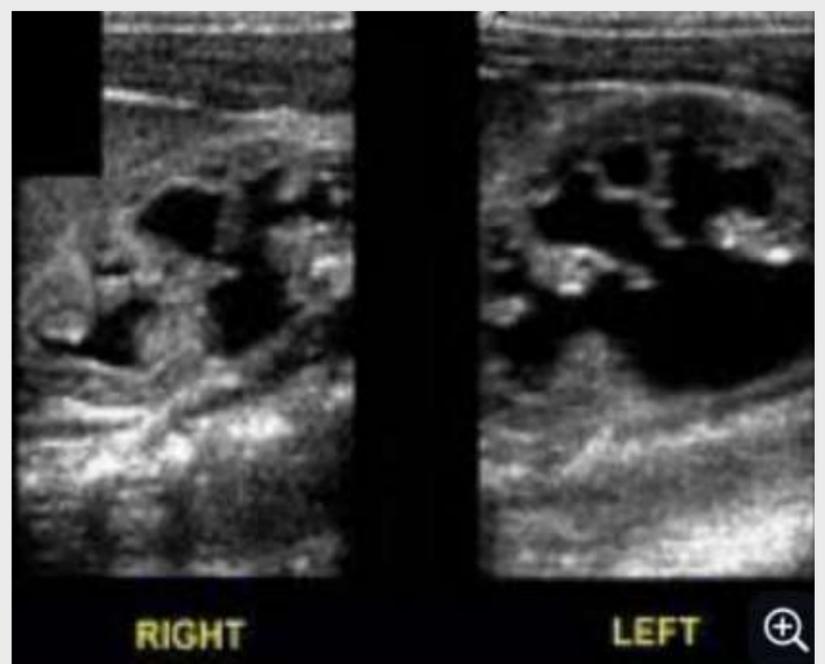


PATIENT COME WITH UTI, PROTEUS

MENTION 2 CAUSES

**VESICoureTERAL REFLUX, NEUROGENIC BLADDER , POSTERIOR URETHRAL VALVE**

TREATMENT



# UTI

VUR IMAGE FOR BABY COMPLIAN FROM FEVER

MENTION TWO FINDINGG ON URINE ANALYGIS SUPPORT THE UTI **LECKUEYTE ESTERAGE , NITRIATE**

MENTION TWO COMPLICATION

**RECUURENT UTI**

**REFLEX NEPHROPATHY**



A PATIENT WITH RECURRENT UTI AND THIS IS HIS MCUG, HE DEVELOPED A CHRONIC KIDNEY DISEASE AND HIS GFR IS 35

WHAT'S HIS STAGE OF CKD ? **STAGE 3**

WHAT'S THE CAUSE OF HIS CKD? **VUR**

MENTION TWO COMPLICATIONS TO BE FOUND IN THIS PATIENT FROM THE CKD ? **1-ANEMIA 2-RENAL OSTEODYSTROPHY**

WHAT'S YOUR TREATMENT FOR HIS CURRENT PROBLEM?

**3RD GEN CEFALOSPORINS**



WHAT IS SHOWN IN THE IMAGE?

**VESICOURETERAL REFLUX**

WHAT IMAGING MODALITY IS USED TO ASSESS FOR RENAL SCARRING?

**DMSA SCAN**



# UTI

WHAT IS THE NAME OF THIS IMAGING TECHNIQUE?

**VOIDING CYSTOURETHROGRAM (VCUG)**

WHAT IS THE MOST LIKELY DIAGNOSIS SHOWN?

**VESICoureTERAL REFLUX (VUR)**



الطب والجراحة

بجنتنة

**معلش عدّيت النص**



**• وهاذ تسريب لمنظرك الحالي**

# HSP

Q: 6 female patient develops rash, abdominal pain and hematuria, what is your diagnosis?

**HSP**

• One complication associated with this condition ?

**intussusception**

• Is skin rash recurrent after condition resolved?

**Yes (upto 6 weeks after)**



Baby come with this non blanchable rash on glass test

Write two differential diagnoses

**1. HSP**

**2. ITP**

What is the most important test to differentiate between DDX

**CBC**



Child complains of abdominal pain, and limbic :

► 1: dx ?

**Henoch-schönlein purpura**

2: skin manifestation percentage ?

**100%**

3: histological finding ?

**IgA deposition**

4: true or false, progression to end stage renal disease is 30% .

**False**



# HSP

Mention two needed investigation

1- To diagnose:

**Urine analysis  
& Renal biopsy**

2- DDx:

**CBC (low platelets/ITP)  
&  
PT/PTT (Protein S or C  
deficiency)**



Station 8

Showing this picture:

1. What is the name of the rash? /most likely diagnosis?

**>Palpable purpura/Henoch-Schönlein Purpura**

2. Give two possible complications.

**> Renal involvement (IgA nephropathy)**

**> Intussusception/gastrointestinal complications**



4 year old presents with rash abdominal pain and bloody stool?

1-What is the diagnosis?

**Hsp**

2-What is the cause of bloody stool?

**Intussusception**

3-mention 2 findings on urinalysis?

**Hematuria and proteinuria**



# DR. RANDA :

## DM

Child with dark, hyperpigmented patches over the neck



Questions:

Based on the image, what are the important investigations you would order for this patient?

**Fasting blood glucose**

**HbA1c**

**Fasting lipid profile**

**2hr plasma glucose during the OGTT**

What are the main lines of treatment?

(2 points)

**Lifestyle modification (diet, weight loss, exercise)**

**Metformin**

**acanthosis nigricans**

**DM type 2 ✓**

**long term complications related to weight**

**liver cirrhosis ✓**

**hypertension, ↓ exercise tolerance ✓**

**Station**

**Random sugar = 200**

**Write 3 diagnostic criteria other than in the photo?**

**Fasting plasma glucose  $\geq 126$  mg/dL.**

**2-hour plasma glucose during OGTT  $\geq 200$  mg/dL.**

**HbA1c  $\geq 6.5\%$ .**

**Write 2 associations with this disease?**

**Hashimoto's thyroiditis.**

**Celiac disease.**

# DM

come with polyuria and polydipsia, fasting glucose  $\geq 126$ :

1) mention 3 clinical presentation.

**Polyphagia (increased hunger).**

**Unexplained weight loss.**

**Fatigue/Blurred vision.**

2) what we do to rule out DM?

**Repeat Fasting Plasma Glucose (to confirm if  $\geq 126$  mg/dL).**

**Perform an HbA1c test.**

**Perform an Oral Glucose Tolerance Test (OGTT).**



This child came with polyuria and polydipsia :

1. Write the criteria for diagnosing DM?

**Symptoms of DM + random casual plasma glucose  $\geq 200$  mg/dL.**

**Fasting plasma glucose  $\geq 126$  mg/dL.**

**2hr plasma glucose during the OGTT  $\geq 200$  mg/dL.**

**HbA1c  $\geq 6.5$ .**

2. 2 acute complications?

**Hypoglycemia, DKA.**



Which type of DM?

**Type 1 Diabetes Mellitus.**

1- What is the type of insulin?

**Long acting (Lantus/Glargine).**

2- What is the duration of action?

**24 hours.**

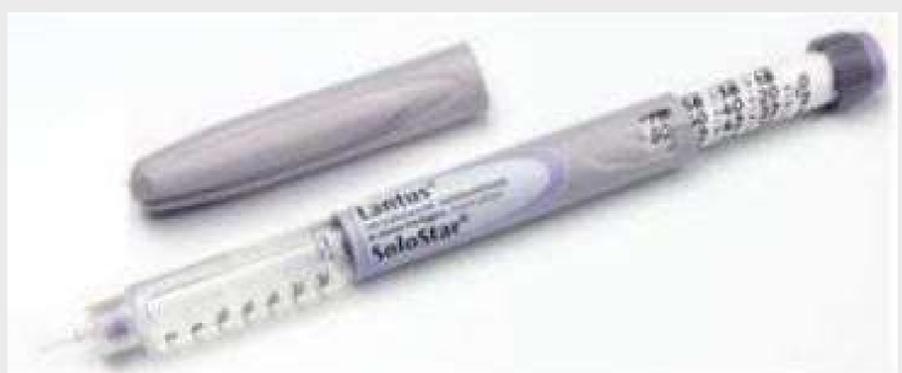
3- 4 diagnostic criteria for type 1 DM?

**Symptoms of hyperglycemia (polyuria, polydipsia, weight loss) + Random glucose  $\geq 200$  mg/dL.**

**Fasting plasma glucose  $\geq 126$  mg/dL.**

**2-hour post-load glucose  $\geq 200$  mg/dL during OGTT.**

**HbA1c  $\geq 6.5$ %.**



# GROWTH CHART

Q9: 22 MONTHS BOY COME TO WELL GROWTH CLINIC

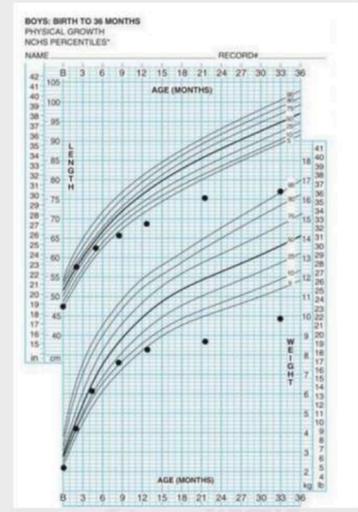
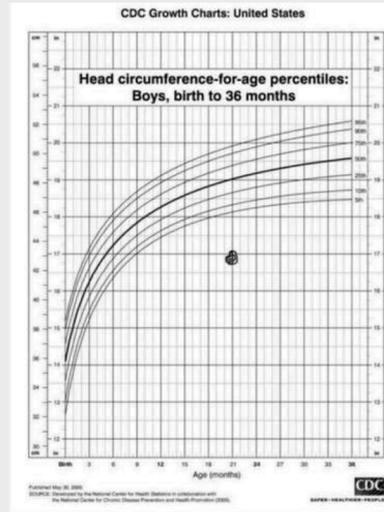
WHAT IS YOUR INTERPRETATION?

FTT 3

2 DDX:

1)CHROMOSOMAL

2)GENETIC



STATION 1

OVERWEIGHT CHILD WITH SHORT STATURE:

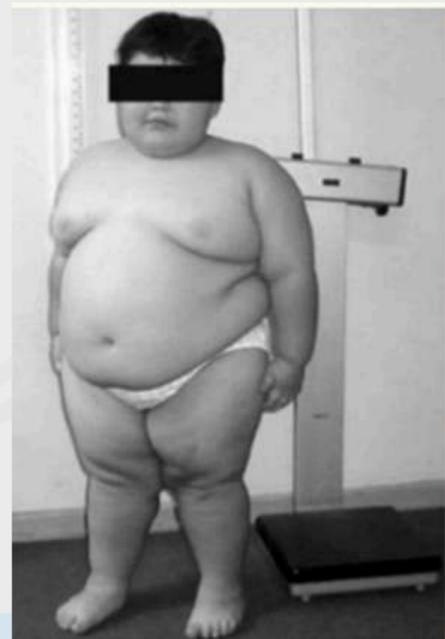
QUESTIONS:

1. WHAT IS THE MOST LIKELY DIAGNOSIS?

PRADER-WILLI SYNDROME

2. WHAT IS THE TREATMENT FOR HIS SHORT STATURE?

GROWTH HORMONE (GH) THERAPY



Q.9 CASE ABOUT SHORT STATURE , NO HISTORY OF CONSTITUTIONAL DELAY BUT THERE IS A PATHOLOGICAL CAUSE .

1) CALCULATE MPH

2) WHAT DO YOU SUSPECT ABOUT HER BONE AGE ?

3) WHAT DO YOU SUSPECT ABOUT GROWTH VELOCITY IF THERE IS GH DEFICIENCY?

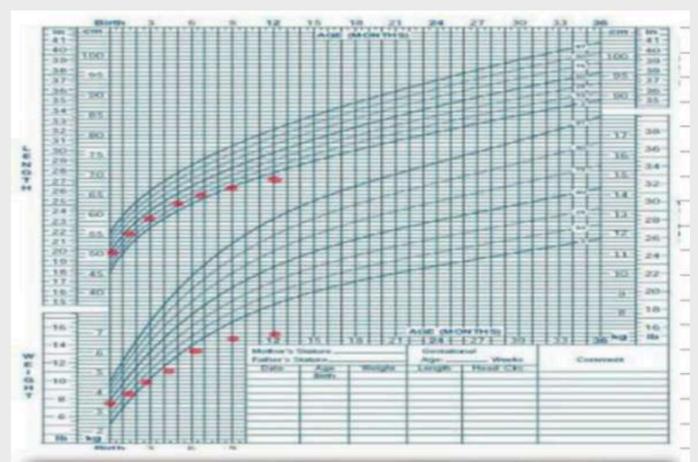
\*\* SORRY I FORGOT THE ANSWERS AND NUMBERS

WHAT IS THE CLINICAL FINDINGS?

FAILURE TO THRIVE TYPE 2

TESTS HELP IN DIAGNOSIS?

SWEAT CHLORIDE GENETIC



Q2)PLOTING ON GROWTH CHART

A- BOTH HEIGHT AND WEIGHT BELOW 5TH CENTILE

B- WHAT WE CALL THIS? FTT TYPE 2

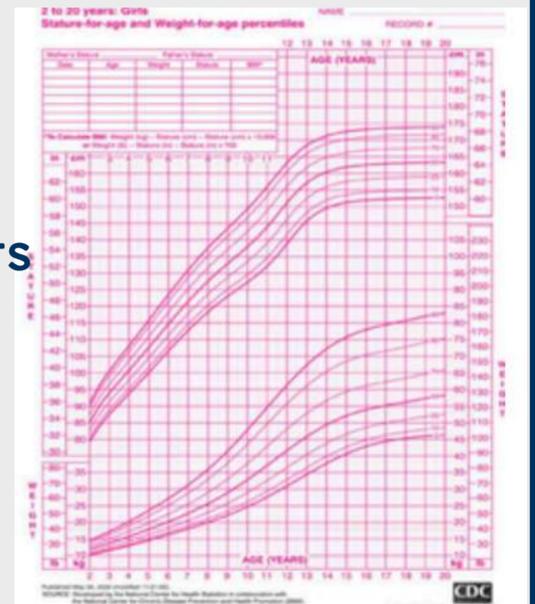
# GROWTH CHART

## STATION 11 (2POINTS)

WRITE THE PLOTTING EACH FINDINGS ON THE GROWTH CHARTS

1- 10YEARS OLD .WEIGHT 20KG , HEIGHT 120CM

2- 4YEARS .WEIGHT 14KG , HEIGHT 90 CM



4 YEARS OLD FEMALE HER WEIGHT WAS.. HER LENGTH WAS 90CM SHE COMPLAINING FROM CHRONIC DIARRHEA.

THERE'S GROWTH CHART YOU HAVE TO APPLY HER WEIGH AND LENGTH ON IT TO SEE IF THERE'S FAILURE TO THRIVE OR WITHIN NORMAL .

AFTER APPLY IT YOU CAN SEE THERE IS NO FAILURE TO THRIVE

\*WHAT ARE THE FINDINGS?

HEIGHT BETWEEN

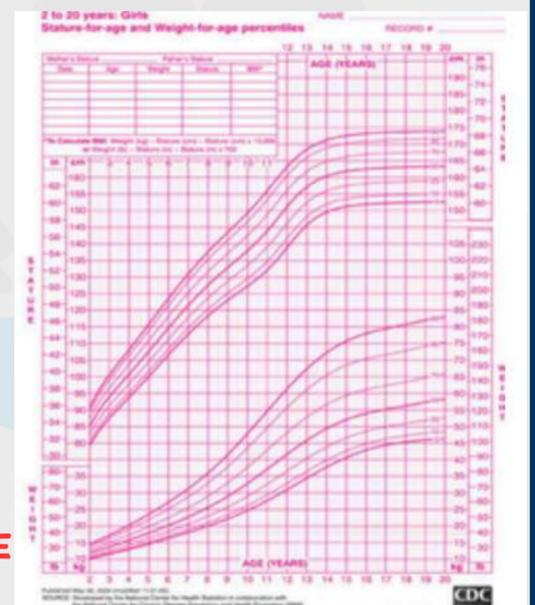
WEIGHT BETWEEN

\*WHAT IS THE MOST COMMON CAUSE:

TODDLER'S DIARRHEA

\*WHAT IS THE BEST MANAGEMENT:

RESTRICTION CARBOHYDRATE,SUGARS AND A LOT OF FLUID INTAKE



A 3 YEAR OLD FEMALE WEIGHT IS 10 KGS HEIGHT IS 85 CM

1.PLOT THE READINGS AND MENTION THEIR CENTILE?

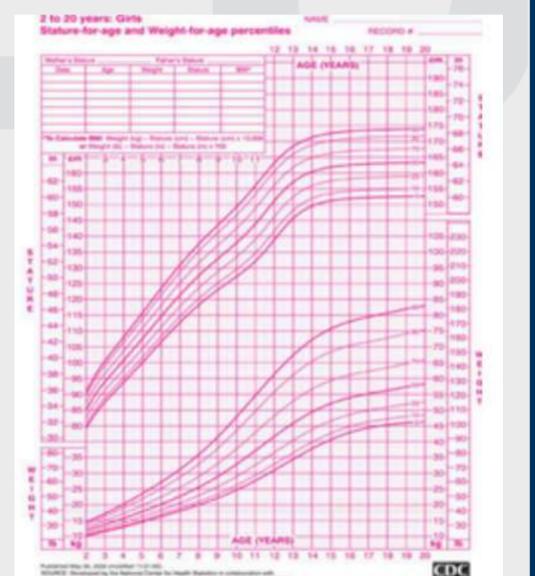
HEIGH LOWER THAN THE 3RD CENTILE.

WEIGHT LOWER THAN THE 3RD CENTILE

2.HOW WILL THE PATIENT PRESENT CLINICALLY:

SHORT STATURE, UNDERWEIGHT > STUNTED.

FFT TYPE 2



Q9: 15-YEAR-OLD MALE PATIENT PRESENT FOR EVALUATION OF SHORT STATURE, 2 YEARS AGO HE START TREATMENT WITH GH THERAPY.

MENTION 2 STIMULATION TESTS:

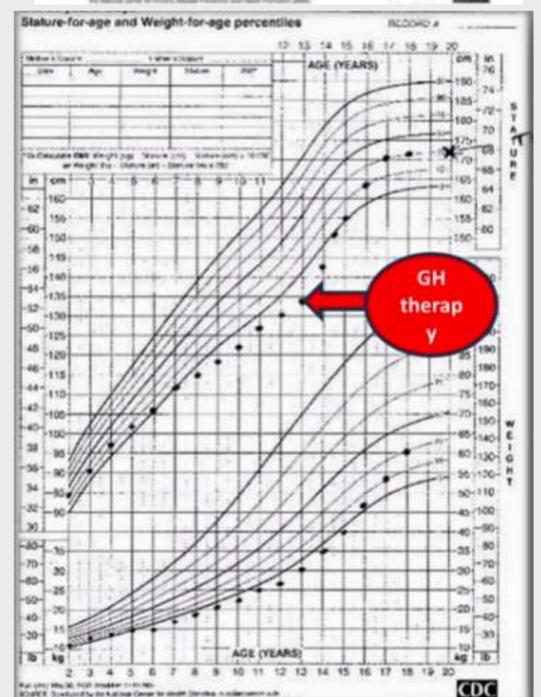
CLONIDINE TEST

EXERCISE STIMULATION TEST

2) BEFORE INITIATING TREATMENT, WHAT IS THE EXPECTED BONE AGE AND GROWTH VELOCITY?

BONE AGE: DELAYED

GROWTH VELOCITY: DECREASED



# GROWTH CHART

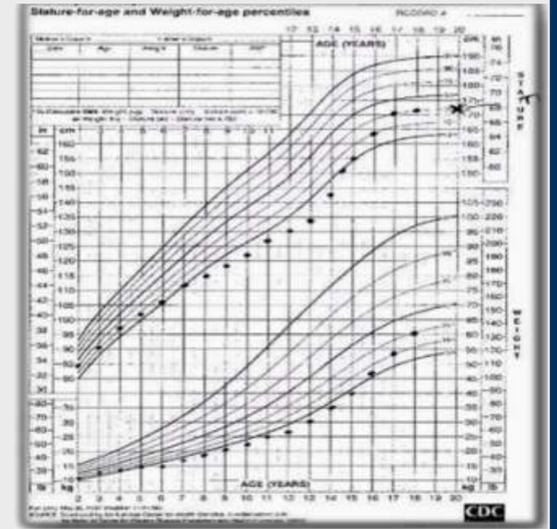
## STATION 1

1- WHAT IS THE CAUSE BEHIND HIS GROWTH DELAY?

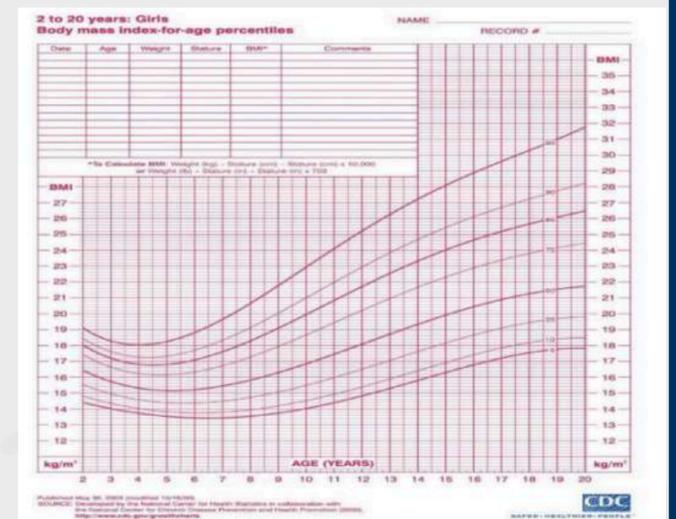
**CONSTITUTIONAL GROWTH DELAY**

2- WHAT INVESTIGATIONS WOULD YOU ORDER TO CONFIRM YOUR DIAGNOSIS?

**WRIST X-RAY**



4 YEARS OLD GIRL WEIGHT 18 KG AND HER HEIGHT 100 CM



12 M MALE CHILD HIS WHT :6 KG AND LENGTH :60

1- WHATS THE CENTILE FOR HIS WHT AND LENGTH

2- WHATS THE NAME OF THIS CONDITION ? **FTT**

3- IF HIS CONDITION ASS WITH RECURRENT CHEST INFECTION WHATS THE DX? **CF**

4-HOW YOU CAN CONFIRM YOUR DX ?

**SWEAT CHLORIDE TEST MORE THAN 60**

5-ACCORDING TO NATIONAL VACCINE PROGRAM

.WHAT'S THE VACCINES SHOULD BE GIVEN TO THIS AGE ? **MMR HAV**

6-EXTRAVACCINE NEEDED ?

**PNEUMOCOCCUS AND MENINGOCOCCUS**

10 MONTHS OLD BOY AND HIS HC IS 48

1-WHATS THE CENTILE

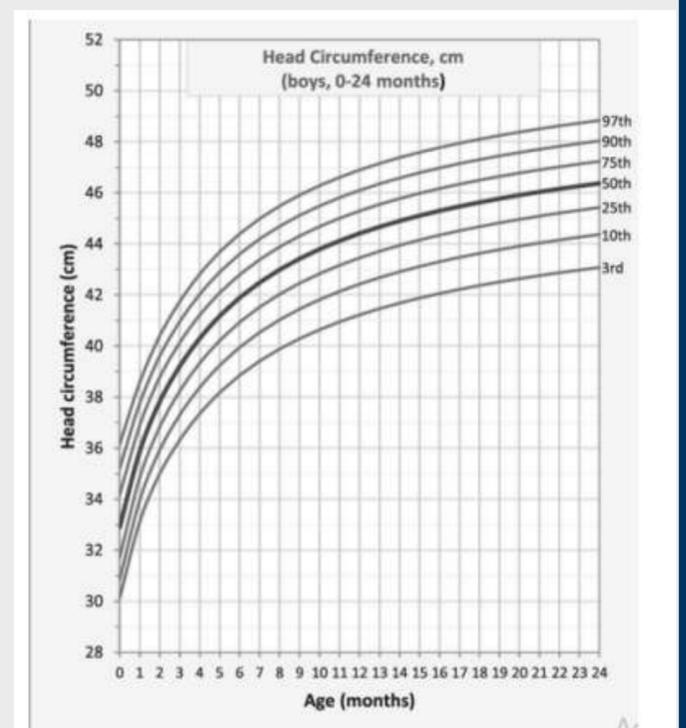
**ABOVE 97 CENTILE**

2- WHATS THE DX -

**MACROCEPHALY**

3- GIVE 2 CAUSES FOR YOUR DIAGNOSIS

**HYDROCEPHALUS - IC TUMOR**



# GROWTH CHART

ACCORDING TO THE GROWTH CHART : A 12 YEARS OLD FEMALE  
WEIGHT =35 KG, HEIGHT=135 CM.

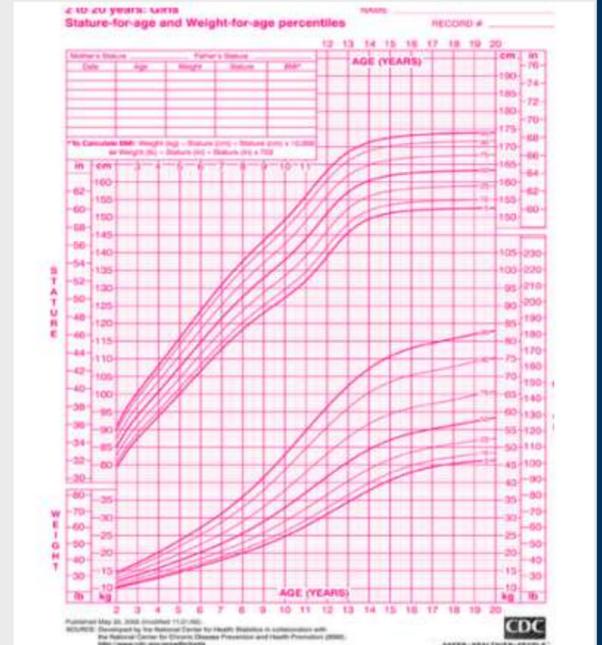
WHAT ARE THE FINDINGS?

WEIGHT=BETWEEN THE 10TH AND THE 25TH CENTILE

HEIGHT=BELOW THE 3RD CENTILE /SHORT STATURE

GIVE 2 CAUSE :

HYPOTHYROIDISM, CELIAC



4 YEARS OLD FEMALE , 20 KG ,105 CM :

-WEIGHT AND HEIGHT GROWTH CHART

1) HER HEIGHT IS ON ---PERCENTILE

2) HER WEIGHT IS ON ---PERCENTILE

-BMI GROWTH CHART

3) CALCULATE HER BMI ?

4) MENTION THE ABNORMALITY IN BM IF PRESENT ?

7 YEAR OLD MALE COMPLAINED OF CHRONIC DIARRHEA , HIS SISTER WAS  
DIAGNOSED WITH HASHIMOTO DISEASE.

THE GROWTH CHART OF PATIENT PRESENTED.

1- WHAT IS THE ABNORMALITY AT GROWTH CHATT?

SHORT STATURE

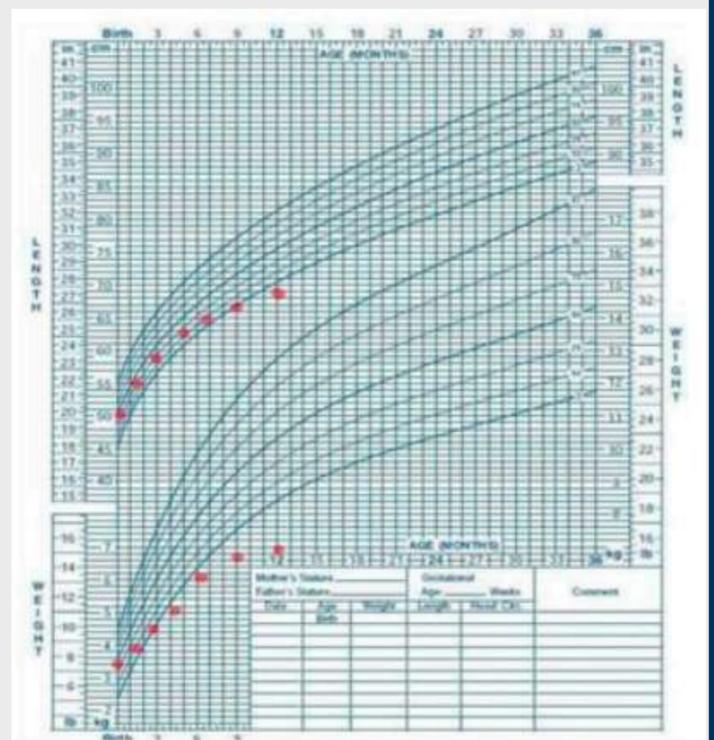
WEIGHT FOR AGE THAT FALLS BELOW THE(5TH ) FTT

2-WHAT IS THE DIAGNOSIS ?

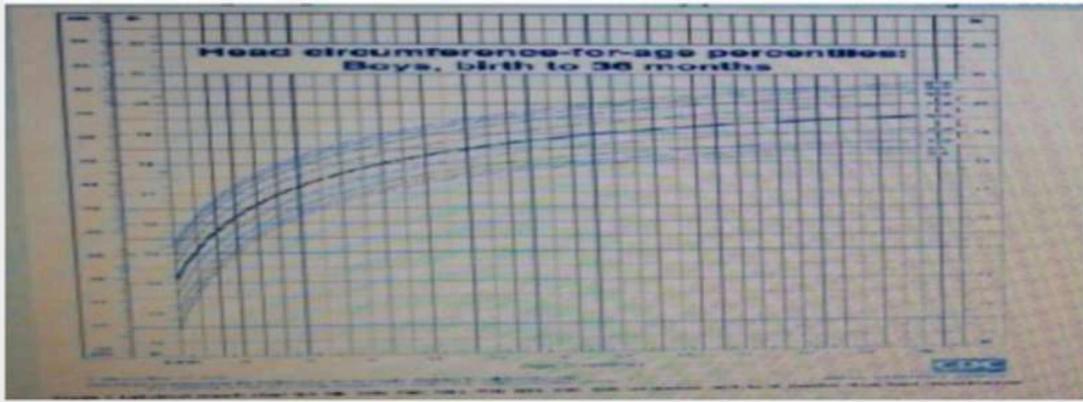
CELIAC DISEASE

3- WHAT IS THE TREATMENT?

GLUTEN FREE DIET



# GROWTH CHART



Q) YOU ARE THE GROWTH OF THE 2- MONTH OLD BOY PRODUCT OF TERM VAGINAL DELIVERY HIS HEAD CIRCUMFERENCE IS 36 CM.

NOW ALL THE FOLLOWING ARE POSSIBLE CAUSES (EXCEPT):

**HYDROCEPHALUS**

WHAT IS THE CLINICAL DIAGNOSIS :

**MICROCEPHALY**

Q) 2 MONTHS BABY WITH HEAD CIRCUMFERENCE 42 (GROWTH CHART)

1- PLOT HC ON GROWTH CHART? **ABOVE 95 PERCENTILE**

2- NAME OF THE SIGN? **MACROCEPHALY**

3- CAUSES?

**HYDROCEPHALUS (INCREASE ICP), CONGENITAL HYPOTHYROIDISM**

WHAT IS THE ABNORMALITY IN THIS CHART ?

**SHORT STATURE**

• IF THIS GIRL'S MOTHER HAD HER FIRST PERIOD AT 14 YEARS

WHAT IS THE CAUSE OF HER PROBLEM ?

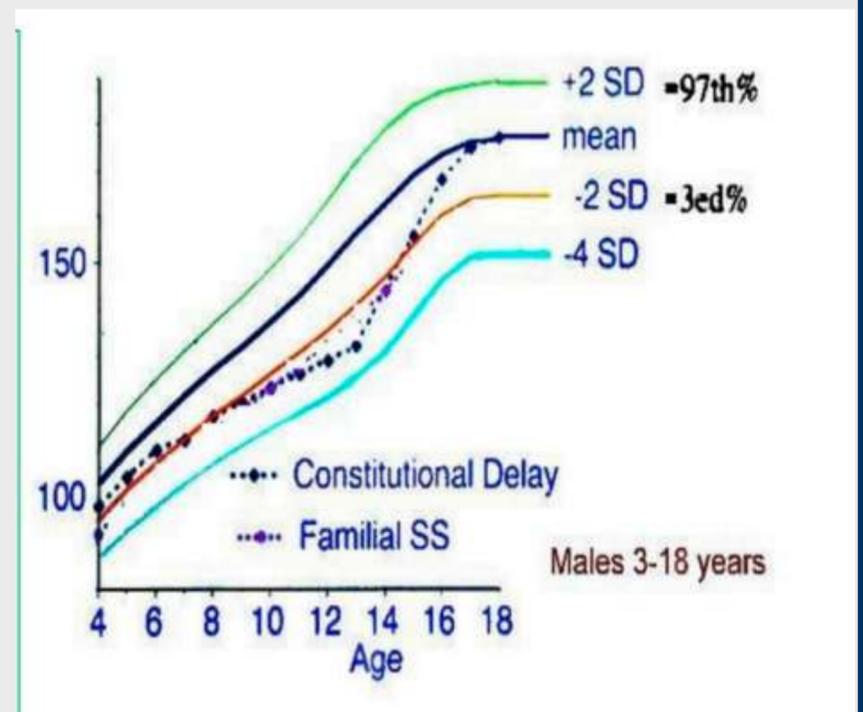
**CONSTITUTIONAL DELAY**

• HOW TO CONFIRM DIAGNOSIS ?

**BY WRIST X-RAY**

• WHAT IS THE TREATMENT?

**NO TREATMENT NEEDED , JUST WAIT**



# THYROID

QUESTION 3: 2.5-MONTH-OLD PRESENTS WITH CHRONIC CONSTIPATION.

• WHAT IS THE MOST LIKELY DIAGNOSIS?

**CONGENITAL HYPOTHYROIDISM**

• WHAT ARE 2 URGENT BLOOD TESTS YOU WOULD ORDER FOR THIS PATIENT TO EVALUATE HIS CONDITION?

**TSH, T3, T4**

**ELECTROLYTES (CA++)**

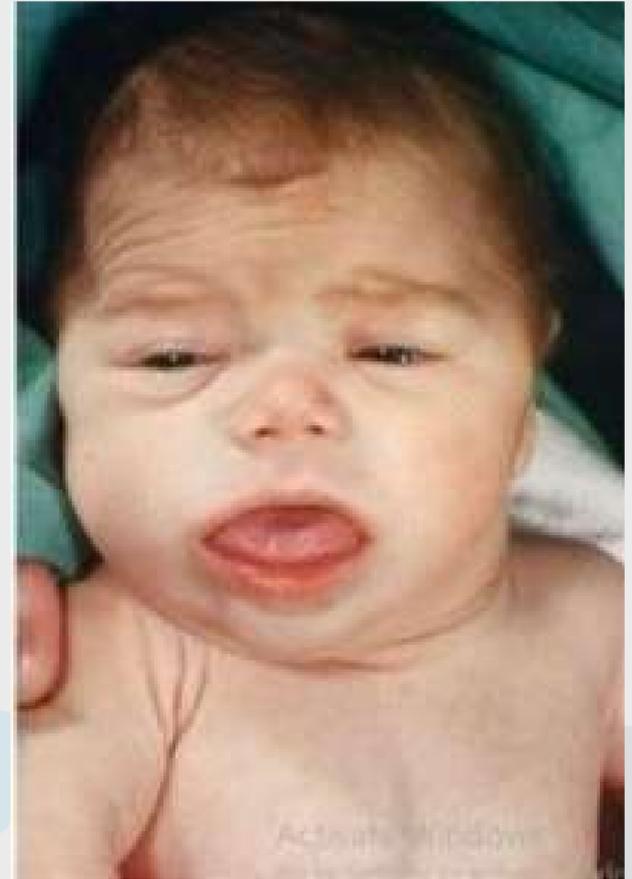
• WHAT IS A NEUROLOGICAL AND DEVELOPMENTAL COMPLICATION IF THIS CONDITION IS LEFT UNTREATED?

**MENTAL RETARDATION**

• ON PHYSICAL EXAMINATION WHAT WOULD BE NOTED FOR THESE

**POSTERIOR FONTANELLE: DELAYED CLOSURE**

**BONE AGE: DELAYED (LESS THAN CHRONOLOGICAL AGE)**



A. WHAT IS THE CAUSE OF THIS CONDITION.

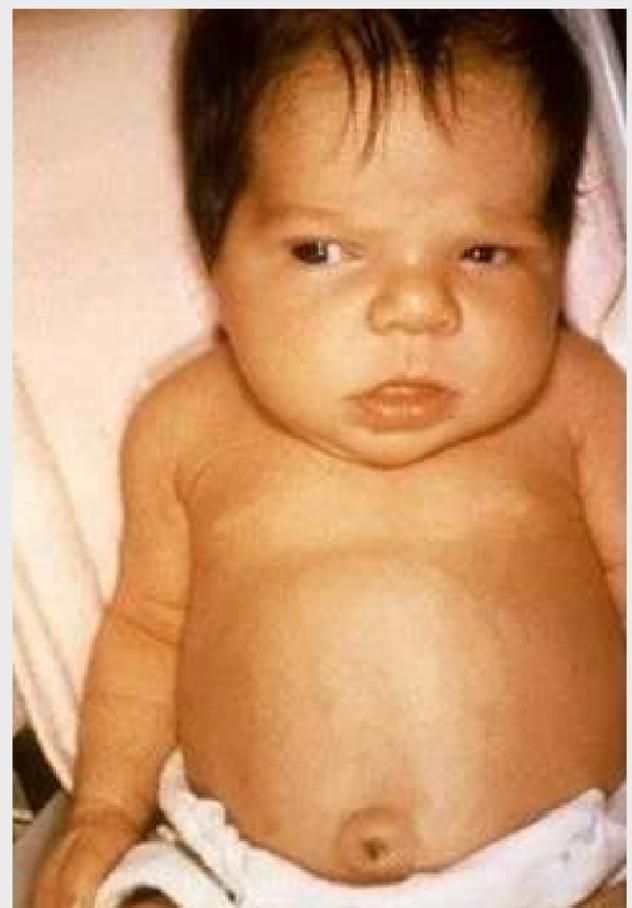
**CONGENITAL HYPOTHYROIDISM**

B. WHAT IS THE MOST COMMON CAUSE THIS CONDITION?

**THYROID DYSGENESIS**

C. WRITE 2 PHYSICAL FINDINGS?

**OPEN ANTERIOR AND POSTERIOR FONTANELLE + UMBILICAL HERNIA WITH LARGE ABDOMEN**



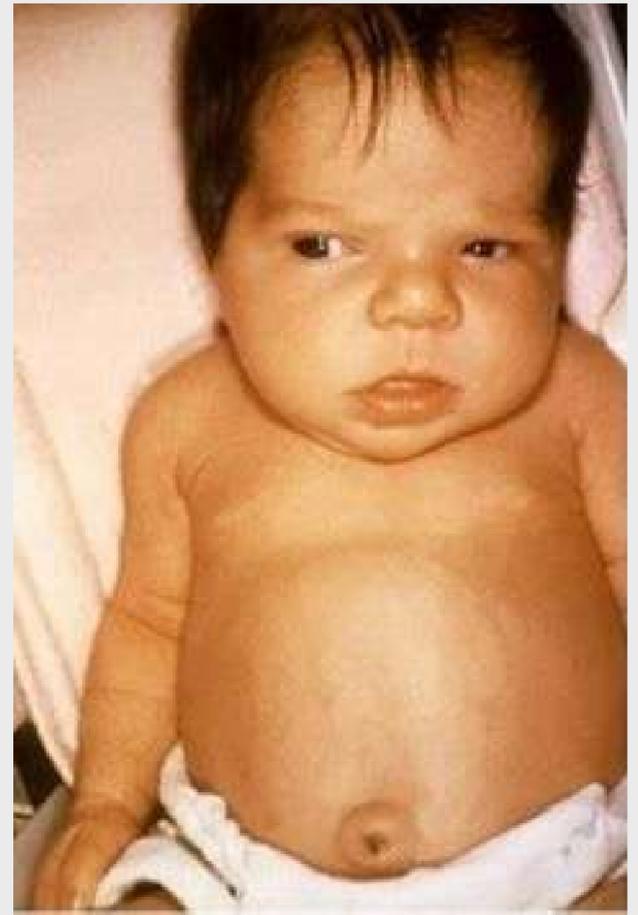
# THYROID

**Dx: CONGENITAL HYPOTHYROIDISM**

- IF HE HAVE GOITER WHAT THE COUSE?  
**DYSHORMONOGENESIS, ENDEMIC IODINE DEFICIENCY AND MATERNAL ANTITHYROID DRUG**

**TREATMENT:**

**LEVOTHYROXIN**



**WHAT IS THE MOST COMMON CAUSE OF THIS MANIFESTATIONS?**

**CONGENITAL HYPOTHYROIDISM\_THYRIOD DYSGENESIS**

**YOUR TREATMENT?**

**LEVOTHYROXINE**

**DIAGNOSIS:**

**TSH & T4**



الطبيب والجراحة

# CONGENITAL ADRENAL

## HYPERPLASIA

FEMALE PT COME WITH THIS PRESENTATION

1) WHAT'S THE DEFICIENT ENZYME?

**21 HYDROXALAZE**

2) WHAT IS THE STEROID USED TO TREAT THIS CASE?

**HYDROCORTISONE AND MINERCORTICOSTERIOD**

3) MENTION 2 OTHERS CLINICAL PRESENTATION?

**HYPOGLYCEMIA**

**HYPOTENSION**



2 WEEKS OLD BABY PRESENT WITH FEVER,  
LETHARGY ....

WHAT IS THE LAB INVESTIGATION TO DIAGNOSE?

**17 HYDROXY PROGESTERON LEVEL**

**11DEOXYCORTICOSTERONE AND CORTICOSTERON**

**KARYOTYPE, SRY GENE, ELECTROLYTES**

**MENTION TWO LINE OF TREATMENT**

**HIGH LEVEL OF CORTICOSTEROID (**  
**HYDROCORTISONE )**

**CALCIUM GLUCONATE IF PRESNT WITH**  
**(HYPERKALEMIA)**



# CONGENITAL ADRENAL

## HYPERPLASIA

BABY WITH THIS PRESENTATION OF GENITALIA, WHAT IS ELECTROLYTE CHANGES IN THIS BABY?

**HYPONATREMIA, HYPERKALEMIA**

2-WHAT IS THE LINES OF TREATMENT IN ACUTE STAGE?

**HYDROCORTISONE, FLUDROCORTISONE, SPIRONOLACTON**



SCENARIO OF 2 WEEK OLD PT. WITH VOMITING AND DIARRHEA  
PICTURE OF AMBIGUOUS GENITALIA, ... :  
(CASE OF CAH)

WHAT IS YOUR DIAGNOSIS? **CAH**

INVESTIGATIONS? **17-**

**HYDROXYPROGESTERONE , ELECTROLYTE LEVEL**

MANAGEMENT? **GLUCOCORTICOI,**

**MINERALOCORTICOID, FLUID**

MOST LIKELY CAUSATIVE ENZYME DEFICIENCY?

**21-ALPHA HYDROXYLASE**

WHAT CAUSES OF HIS SEIZURE?

**HYPO-NATREMIA, HYPO-GLYCEMIA**



# CONGENITAL ADRENAL HYPERPLASIA

2 WEEKS OLD FEMALE (XX) COMES TO THE ER, HYPOACTIVE ...

1- WHAT IS THE ENZYME THAT IS DEFICIENT?

**21-ALFA HYDROXYLASE**

2- WHAT ARE THE ABNORMAL ELECTROLYTES?

**HYPERKALEMIA, HYPONATREMIA**

3- WHAT IS THE MODE OF INHERITANCE?

**AR (AUTOSOMAL RECESSIVE)**

FEMALE PRESENTED WITH HIGH 17-HYDROXYPROGESTERONE, GIVE TWO PRESENTATION:

**AMBIGUOUS GENITALIA; COMPLETE FUSION OF THE LABIOSCROTAL FOLDS AND A PHALLIC URETHRA**

WHICH OF THE FOLLOWING IS THE BEST LONG-TERM TREATMENT OF HYPERKALEMIA

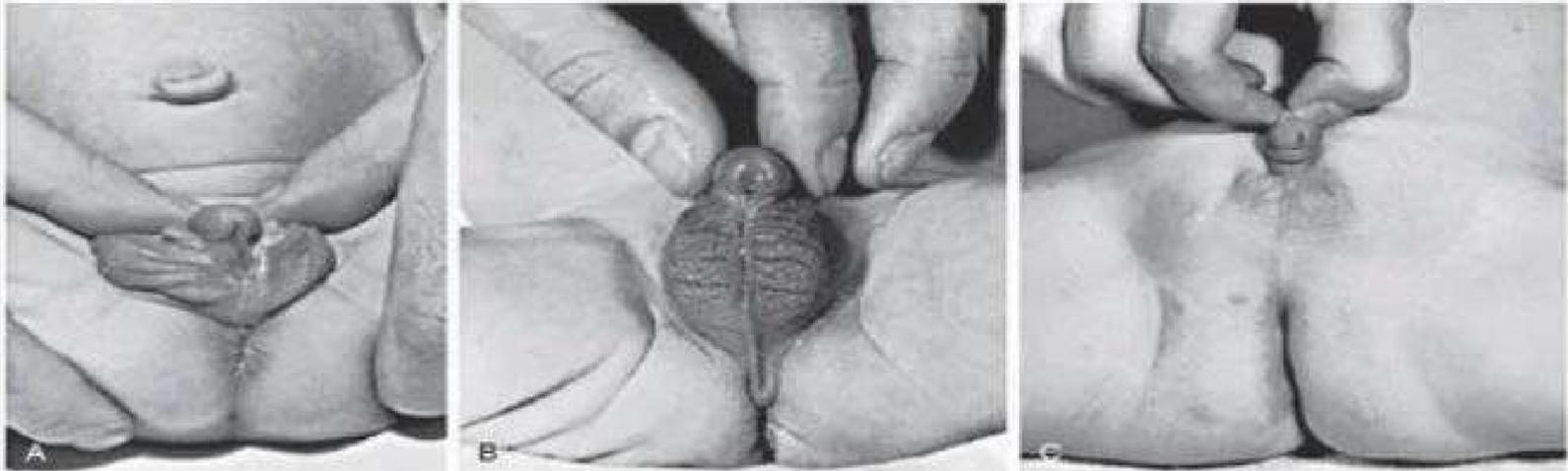
**FLUDROCORTISONE**

17-WHICH OF THE FOLLOWING IS THE DIAGNOSTIC TEST ?

**17-HYDROXYPROGESTERONE**



# CONGENITAL ADRENAL HYPERPLASIA



WHAT IS THE DIAGNOSIS ?

21-ALFA HYDROXYLASE DEFICIENCY

2-INVESTIGATION TO CONFIRM YOUR  
DIAGNOSIS ?

MEASURE 17- OH PROGESTERONE

1- WHAT IS THE DEFICIENT ENZYME IN  
THIS MALE PATIENT?

MALE / FOCUS

**17 HYDROXYLASE OR 3-BETA-  
HYDROXYSTEROID DEHYDROGENASE  
DEFICIENCY**

2- WHAT IS THE CLASSICAL  
PRESENTATION FOR CONGENITAL  
ADRENAL HYPERPLASIA?

**SALT WASTING AND AMBAGUAS GENTIALIA  
AND HYPOGLYCEMIA**



# PUBERTY

YEAR OLD WITH BREAST BUDDING

DIAGNOSIS: **PRECOCIOUS PUBERTY**

LAB INVESTIGATIONS:

**17-OH PROGESTERONE**

**LH AND FSH**

3 YEARS OLD FEMALE COMPLAINING FROM  
VAGINAL BLEEDING AND BONE PAIN:

WHAT IS THE NAME OF THIS LESION: **COAST  
MAINE / CAFÉ AU LAIT**

WHAT IS THE DIAGNOSIS: **MCCUNE-ALBRIGHT  
SYNDROME**



1- WHAT'S THE NAME OF THIS FINDING?

**CAFÉ AU LAIT SPOTS**

2- IF IT IS ASSOCIATED WITH PRECOCIOUS  
PUBERTY, WHAT'S THE DX?

**-ALBRIGHT SYNDROME**



# PUBERTY

7 YEARS OLD GIRL PRESENTED WITH DEVELOPED BREAST AND BLINDNESS , SKIN PIGMENTATION :

YOUR DX :

**PRECOCIOUS PUBERTY + BLINDNESS + CAFE AU LAIT = NF1 > OPTIC GLIOMA**



WHAT IS THE CAUSE OF PRECIOUS TELARCHE :

**ORGANIC/CENTRAL BRAIN LESION LEAD TO PREMATURE SECRETION OF GNRH .. OR HYPOTHALAMUS-PITUITARY-ADRENAL AXIS ACTIVATION ..**

DESCRIBE THE SKIN FINDINGS.

**CAFÉ AU LAIT SPOTS**

2- WHAT'S THE MODE OF INHERITANCE?

**AUTOSOMAL DOMINANT (AD)**



# RICKETS

Q1: PHOTOS OF A CHILD SHOWING WRIST DEFORMITIES, CHEST ABNORMALITIES AND EXCESS HAIR ON THE BACK

THE IMAGES AND QUESTION FORMAT AREN'T THE SAME AS THE EXAM, BUT THIS IS THE CLOSEST THING.:

1. GIVE TWO DIFFERENTIAL DIAGNOSES FOR THIS PRESENTATION:

**NUTRITIONAL RICKETS (VITAMIN D DEFICIENCY)**

**HYPOPHOSPHATEMIC RICKETS**

**CYSTIC FIBROSIS /**



2. WHAT WOULD YOU EXPECT FOR PARATHYROID HORMONE (PTH) LEVELS IN THESE PATIENTS?

**ELEVATED**

3. WHAT WOULD YOU EXPECT FOR ALKALINE PHOSPHATASE (ALP) LEVELS?

**ELEVATE**

Q2: ENDOCRINE

PATIENT WITH THIS SIGN AND VERY LOW VIT D, WRITE 4 FINDINGS YOU CAN SEE ON PHYSICAL EXAM

**1)CRANIOTABES 2) GENU( VALGUS OR VARUS)**

**3)WIDE WRIST & ANKLE . 4) RACHITIC ROSARY**



CASE OF RICKETS:

\*WHAT IS 2 ABNORMALITY LABS (OTHER THAN VIT D):

**HIGH PTH, LOW CA, P04, HIGH ALP**

\*WHAT IS YOUR MANAGEMENT:

**VITAMIN D WITH CA+ SUPPLEMENT**

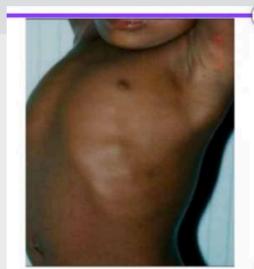


Q3: SUSPECT CHANGES IN

1-ALP : **HIGH**

2-CALCIUM :**LOW**

3-PARATHYROID HORMONES: **HIGH**



Q4: 1- WHAT IS THE SIGNS SEEN...

**SPLAYING, FRAYING, & CUPPING**

**KNEE VARUS / OSTEOPENIA**

2- GIVE TWO LAB INVESTIGATIONS YOU WOULD LIKE TO ORDER?

**VITAMIN D SERUM & CALCIUM SERUM**

3- WHAT IS THE MOST LIKELY DIAGNOSIS?

**RICKETS**

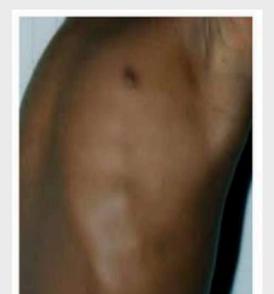


Q5: WHATS THE NAME OF THIS FINDING ?

**RACHITIC ROSARY**

2-IF PHOSPHATE IS HIGH/CA IS LOW /ALP NORMAL..WHAT'S THE TYPE OF RICKETS?

**RENAL INSUFFICIENCY**



# RICKETS

Q6: 1. Dx?

**RICKETS**

2. DAILY MAINTENANCE DOSE OF VIT D?

**400-600 IU/DAY**

3. IF THIS PATIENT HAS HYPOPO<sub>4</sub>, AMINOACIDURIA, AND GLYCOSURIA?

**FANCONI SYNDROME**



Q7: DESCRIBE THE FINDING?

**CUPPING IN THE DISTAL END**

2- LAB TEST?

**SERUM CALCIUM, VIT D, PTH**



Q8: A- WHAT IS THE MARKER THAT DETECT ACTIVITY OF THIS DISEASE?

**ALP**

B- MENTION 2 COMPLICATIONS OF THIS DISEASE ?

**SPASMOPHILIA**

**RICKETS TETANY**

**HYPERVITAMINOSIS D**



Q9: LONG CASE ( TYPICAL SENARIO OF CKD ) PATIENT CAME WITH HIGH CREATININE AND HIGH PHOSPHATE AND OTHER LAB FINDINGS, WHAT IS THE DIAGNOSIS ?

**CHRONIC KIDNEY DISEASE**

MENTION 2 COMPLICATIONS?

**ANEMIA, RENAL BONE MINERAL METABOLISM**

MENTION IMPORTANT INVESTIGATIONS THAT MUST BE DONE IN THIS PATIENT ?

**BLOOD PRESSURE MEASUREMENT, ECHOCARDIOGRAPHY**

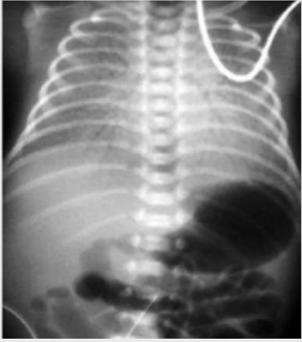
HOW TO TREAT THE BONE PROBLEM?

**PHOSPHATE BINDERS**

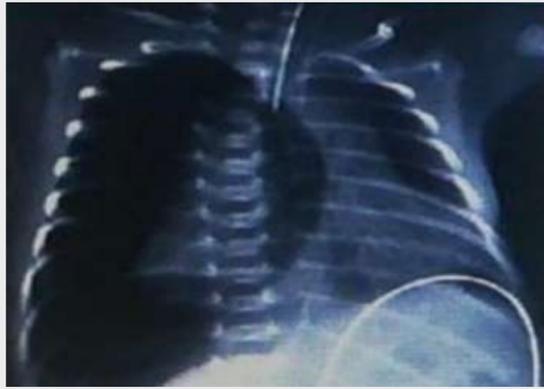
**RESTRICTION OF PHOSPHATE INTAKE**

**GIVE ACTIVE VIT D**

1) SHOWING THESE PICTURES,  
WHAT DOES EACH X-RAY SHOW?



**RESPIRATORY DISTRESS  
SYNDROME**



**PNEUMOTHORAX**



**DIAPHRAGMATIC HERNIA**

2) A 28 WEEKS CHILD WITH FLARING AND RETRACTIONS  
ANSWER THE FOLLOWING:

1. ABG READINGS?

**HYPOXEMIA, HYPERCAPNIA, METABOLIC AND RESPIRATORY ACIDOSIS**

2. FUNCTIONAL RESIDUAL CAPACITY? **DECREASED**

3. LUNG COMPLIANCE? **DECREASED**

4. BEST TREATMENT? **OXYGEN (INTUBATION), SURFACTANT,  
INFECTION CONTROL**



3) NEWBORN IN THE NICU WITH SEVERE RESPIRATORY DISTRESS;  
WHAT IS THE NAME OF THIS TEST?

**TRANS-ILLUMINATION TEST**

WHAT IS THE PROBABLE DIAGNOSIS?

**LEFT-SIDED PNEUMOTHORAX**

WHAT ARE 2 CLINICAL SIGNS SEEN IN A NEWBORN  
THAT WOULD MAKE YOU PERFORM THIS TEST?

**TACHYPNEA, RETRACTIONS, GRUNTING, NASAL FLARING, CYANOSIS, DECREASED BREATH SOUNDS  
ON THE AFFECTED SIDE**

WHAT IS YOUR MANAGEMENT?

**CHEST TUBE INSERTION/ NEEDLE DECOMPRESSION**



4) A BABY IS BORN AT 32 WEEKS GESTATIONAL AGE VIA EMERGENT CS DUE TO PRETERM LABOR  
WEIGHING 1.5 KG, SOON AFTER BIRTH, THE BABY DEVELOPED RESPIRATORY DISTRESS, AND THE  
FOLLOWING VALUES ARE THE ABGs COLLECTED AT 30 MINUTES OF LIFE; PH= 7.1, PCO<sub>2</sub>= 62.  
PO<sub>2</sub>= 32 MMHG, HCO<sub>3</sub>= 18, BASE DEFICIT= -12, LACTATE= 4, X-RAY FOR THE CHEST IS SHOWN

WHAT ARE 3 RADIOLOGICAL FINDINGS IN THE X-RAY?

**GROUND GLASS OPACIFICATION**

**AIR BRONCHOGRAM**

**REDUCED LUNG VOLUME**

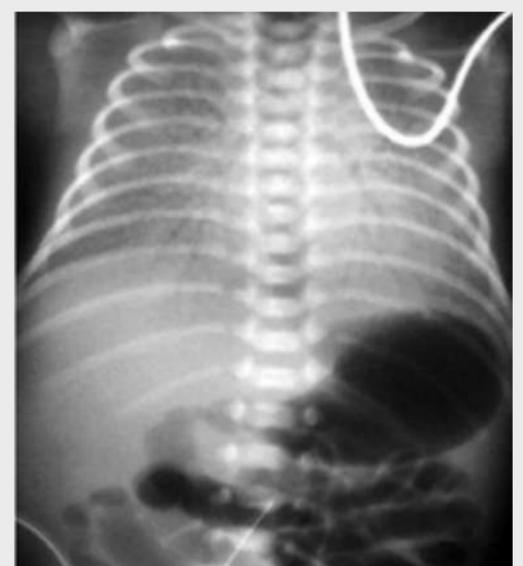
WHAT IS THE MOST LIKELY DIAGNOSIS?

**RDS**

WHAT ARE TWO DIFFERENTIAL DIAGNOSIS?

**MECONIUM ASPIRATION**

**TRANSIENT TACHYPNEA OF NEWBORN**



# RDS

WHAT IS THE INTERPRETATION OF THE ABGs?

**RESPIRATORY ACIDOSIS**

**MIXED WITH METABOLIC ACIDOSIS**

**HYPOXEMIA**

WHAT IS YOUR INITIAL MANAGEMENT?

**ABC: ENSURE PATENT AIRWAY, SUCTION OF MOUTH AND NOSE.**

**O2 ADMINISTRATION VIA NASAL CANNULA, IF FAILED, CPAP, IF FAILED MECHANICAL VENTILATION.**

**SURFACTANT ADMINISTRATION IF FAILED CPAP.**

**SEPTIC WORKUP AND ANTIBIOTICS**

WHAT ARE TWO ACUTE COMPLICATIONS OF THIS CONDITION?

**ALVEOLAR RUPTURE, INFECTION, INTRACRANIAL HEMORRHAGE, PERI-VENTRICULAR**

**LEUKOMALACIA, PDA, NEC, GI PERFORATION, APNEA OF PREMATURITY, PULMONARY HEMORRHAGE**

5) A 30-WEEK PRETERM NEONATE, 1.3 KG, ON DAY 8 OF LIFE DEVELOPS ABDOMINAL DISTENTION,

FEEDING INTOLERANCE, AND BILIOUS VOMITING. THERE IS BLOOD IN STOOL AND INCREASING

GASTRIC ASPIRATES AFTER RECENT ADVANCEMENT OF FORMULA FEEDS

THE BABY BECOMES LETHARGIC WITH APNEA AND TEMPERATURE INSTABILITY.

WHAT'S YOUR DIAGNOSIS?

**NEC**

MENTION ONE RISK FACTOR FOR THIS CONDITION?

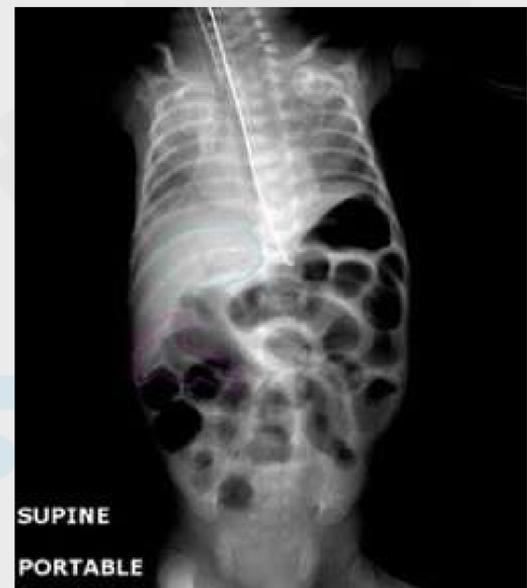
**PREMATURITY**

MENTION ONE CONSERVATIVE MANAGEMENT?

**NPO, GASTRIC DECOMPRESSION, ANTIBIOTIC**

INDICATION FOR SURGICAL MANAGEMENT?

**PNEUMOPERITONEUM**



6) C/S BABY, HIS BIRTH WEIGHT IS 4 KG, LETHARGIC AND DELAY PASSAGE OF MECONIUM

ASSOCIATED WITH ABNORMAL MOVEMENT (JITTERINESS)

WHAT'S THE CONDITION PRESENT IN THIS IMAGE?

**SHORT LEFT COLON SYNDROME**

WHAT IS THE CAUSE OF JITTERINESS?

**HYPOGLYCEMIA, HYPOCALCEMIA**



7) REMATURE 34 WEEKS

WHAT'S THE NAME OF THIS SIGN?

**FOOTBALL SIGN**

WHAT'S THE MOST LIKELY DX.

**NEC LEADS TO PNEUMOPERITONIUM**



8) WHAT IS THE INITIAL MANAGEMENT IF THE BABY DEFINED AS

DEPRESSED RESPIRATORY EFFORT, POOR MUSCLE TONE,

AND/OR HEART RATE <100 BPM: **IMMEDIATE RESUSCITATION**

**(START POSITIVE PRESSURE VENTILATION BY BAG AND MASK)**

MENTION 2 COMPLICATIONS:

**ARDS**

**PERSISTENT PULMONARY HTN**

**PNEUMOTHORAX**

**PNEUMOMEDIASTINUM**



# RDS

8) PREMATURE BABY 28 WEEK WITH LOW BIRTH WEIGHT:

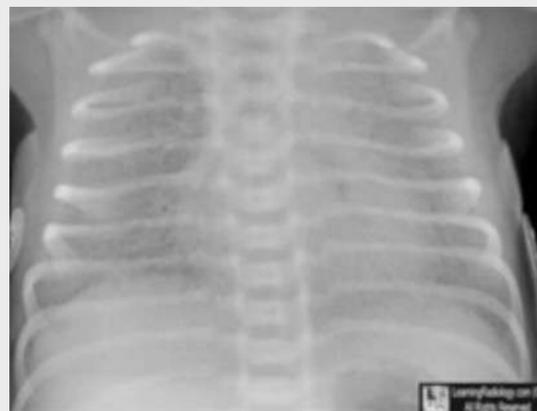
WHAT'S THE NAME OF THIS SIGN?

**GROUND GLASS APPEARANCE**

**AIR BRONCHOGRAM**

WHAT'S YOUR MANAGEMENT?

**MECHANICAL VENTILATION WITH SURFACTANT THERAPY (INDICATIONS TO GIVE SURFACTANTS: GESTATIONAL AGE <30 WEEKS)**



9) A POST TERM NEONATE

DIAGNOSIS? **MECONIUM ASPIRATION SYNDROME**

WHAT'S YOUR MANAGEMENT? **OXYGEN, SUCTION, RESPIRATORY SUPPORT (CPAP/VENTILATION)**

COMPLICATIONS? **PERSISTENT PULMONARY HYPERTENSION OF THE NEWBORN (PPHN), PNEUMOTHORAX, RESPIRATORY FAILURE, HYPOXIA LEAD TO BRAIN INJURY, DEATH IS SEVERE CASES)**



10) WHAT'S THE MANAGEMENT IN THIS CASE?

**THIS IS DIAPHRAGMATIC HERNIA  
INTUBATION & OXYGEN**



11) BABY PRESENT WITH HEMATOCHEZIA, ABDOMINAL DISTENSION AND VOMITING

WHAT'S THE DIAGNOSIS?

**NECROTIZING ENTEROCOLITIS**

WHAT'S THE FINDING OF THIS IMAGE?

**PNEUMATOSIS INTESTINALIS**

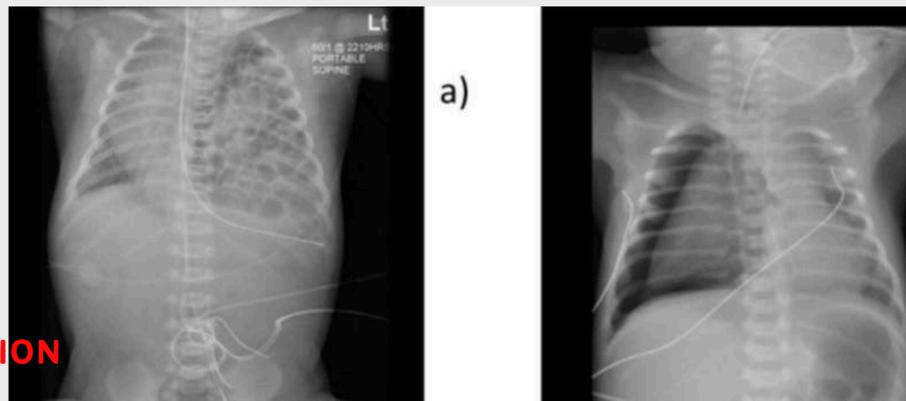


12) DIAGNOSIS FOR EACH ONE?

**CONGENITAL DIAPHRAGMATIC HERNIA,  
2ND PICTURE: TENSION PNEUMOTHORAX**

WHAT IS THE IMMEDIATE MANAGEMENT FOR EACH?

**CDH: ENDOTRACHEAL INTUBATION + NG TUBE  
TENSION PNEUMOTHORAX: NEEDLE DECOMPRESSION  
AND CHEST TUBE INSERTION**



13) WHAT'S THE DX AND MANAGEMENT?

**DIAPHRAGMATIC HERNIA  
INTUBATION AND OXYGEN**



# JAUNDICE

7 DAYS NEONATE WITH JAUNDICE, TSB 15, DIRECT= 7

WHAT IS THE TYPE OF JAUNDICE?

**POST HEPATIC / OBSTRUCTIVE / CONJUGATED TYPE**

2 DDX?

**BILIARY ATRESIA**

**CHOLEDOCHAL CYST**

2 INVESTIGATIONS?

**US**

**HIDA SCAN**



MOTHER 0- BABY 0+ JAUNDICE

LAB INVESTIGATIONS:

**CBC**

**COOMBS TEST**

TWO LINES OF MANAGEMENT:

**PHOTOTHERAPY**

**EXCHANGE TRANSFUSION**

38 WEEKS BORN INFANT ADMITTED TO NICU

DUE TO SEPSIS, AND NEONATAL JAUNDICE

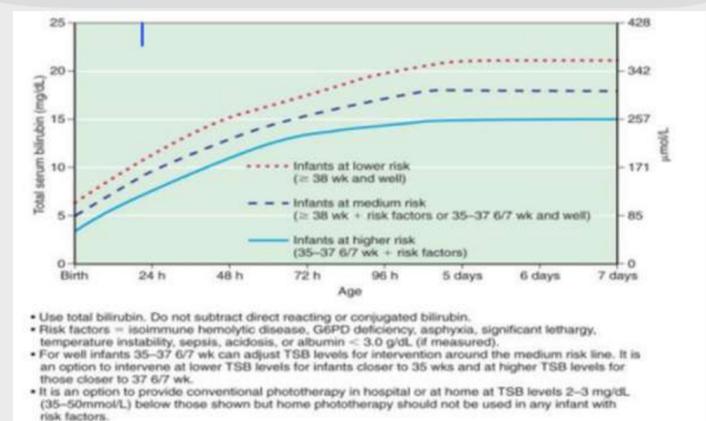
AT 24HR ACCORDING TO THIS GRAPH

ANSWER THE FOLLOWING QUESTIONS:

A- WHAT IS THE RISK? **INTERMEDIATE RISK**

B- WHEN TO START PHOTOTHERAPY? **ABOVE**

**10 MG/DL**



GIVE 3 NON INFECTIOUS CAUSES OF JAUNDICE:

**GALACTOSEMIA, TYROSINEMIA, A1-ANTITRYPSIN DEF**

2- GIVE ONE DRUG THAT CAUSE JAUNDICE:

**ACETAMINOPHEN**



# JAUNDICE

**NEONATE: 35 WEEK GESTATIONAL AGE INFANT ADMITTED FOR SEPSIS AND JAUNDICE HIS MOTHER BLOOD GROUP BE NEGATIVE AND HE IS B POSITIVE, COOMBS TEST IS POSITIVE.**

**A) ACCORDING TO THE CRITERIA OF EXCHANGE TRANSFUSION AT WHICH LEVEL OF BILIRUBIN SHOULD WE EXCHANGE? ANSWER: 15 MG/DL (BASED ON HIGH-RISK CURVE FOR 35 WEEKS AND SEPSIS).**

**B) MENTION A SERIOUS NEUROLOGICAL COMPLICATION? ANSWER: ACUTE BILIRUBIN ENCEPHALOPATHY.**

**C) MENTION TWO LONG TERM COMPLICATION? ANSWER: 1- CHOREOATHETOID CEREBRAL PALSY, 2- SENSORINEURAL HEARING LOSS.**

**AT SECOND DAY OF LIFE OF THIS CHILD HE PRESENTED WITH SEIZURE, POOR SUCKING, HYPOTONIA.**

**1- WHAT ARE THE TESTS YOU SHOULD PERFORM?**

**RANDOM BLOOD SUGAR  
SERUM BILIRUBIN LEVEL  
CBC**

**2- WHAT IS THE CAUSE OF SEIZURE?**

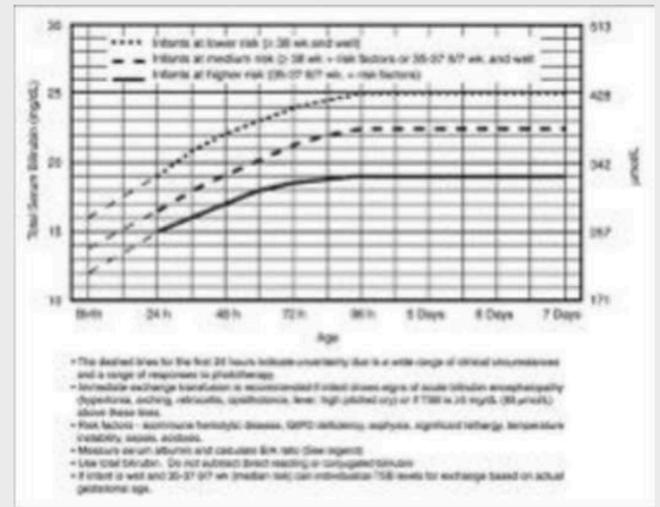
**KERNICTERUS**

**MENTION 2 CAUSES FOR THIS CONDITION SEEN IN 2 MONTHS OLD BABY WHO HAS ELEVATED INDIRECT BILIRUBIN LEVELS.**

**HEMOLYTIC CAUSES: (HEMOLYTIC BLOOD DISEASES..G6PD, HEREDITARY SPHEROCYTOSIS, SICKLE CELL)**

**CONJUGATION DISORDERS: (CRIGLER-NAJJAR SYNDROME TYPE 1)**

**HEMATOMA**



# JAUNDICE

WHAT'S THE DX.?

**NEONATAL JAUNDICE**

2-WHEN IT'S SEEN?

**WHEN BILIRUBIN LEVELS > 5 MG/DL**



MENTION TWO DISEASES REQUIRES SUCH A TREATMENT?

**CEPHALOHEMATOMA, CRIGLER NAJJAR TYPE 1 "CONJUGATION DISORDER", G6PD "HEMOLYTIC DISEASE"....**



A BABY ON PHOTOTHERAPY, MENTION 4 CAUSES FOR JAUNDICE.

**G6PD DEFICIENCY**

**HEREDITARY SPHEROCYTOSIS**

**HEMATOMA**

**CRIGGLAR- NAJJAR SYNDROME**



WHAT'S THIS TYPE OF TT?

**PHOTOTHERAPY**

2-WHAT'S THE MECHANISM OF ACTION IN THE BODY?

**TRANSFORM UNCONJUGATED BILIRUBIN TO WATER SOLUBLE FORM TO EXCRETE IT OUT OF THE BODY IN URINE**



# JAUNDICE

A 3 DAYS OLD PATIENT IS PUT UNDER  
PHOTOTHERAPY FOR HIS JAUNDICE AND  
OTHERWISE HE IS NORMAL.  
MENTION 2 CAUSES FOR THIS CONDITION.

**ANY CAUSE OF INDIRECT**

**HYPERBILIRUBINEMIA**

**SEPSIS**

**HEMOLYSIS**

**CRIGGLER NAJJAR**

**ETC**



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# COMMON PROBLEMS IN NEONATE

A post-term neonate is born through thick meconium-stained amniotic fluid. The infant is non-vigorous, appearing limp with depressed respiratory effort and a heart rate <100 beats per minute



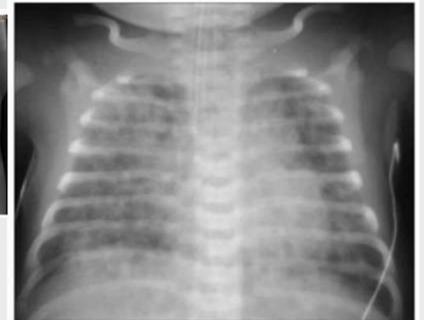
What is the diagnosis?

**Meconium Aspiration Syndrome**

What is the immediate action?

**Direct laryngoscopy, endotracheal intubation, and suctioning of the trachea to clear meconium before the infant takes his first breath.**

A post-term infant is born through thick meconium-stained amniotic fluid and develops severe respiratory distress, cyanosis, and a barrel-shaped chest immediately after birth.



Mention two complications of this condition (Meconium Aspiration Syndrome)

**Persistent Pulmonary Hypertension of the Newborn (PPHN)**

**Acute Respiratory Distress Syndrome (ARDS) (due to surfactant inactivation and chemical pneumonitis)**

**Air leak syndromes (e.g., Pneumothorax, Pneumomediastinum)**

**Secondary bacterial pneumonia**

A newborn delivered via a difficult labor involving shoulder dystocia is noted to have decreased spontaneous movement of the right arm. Physical examination reveals localized swelling and crepitus over the shoulder girdle



What is the finding in the x-ray?

**-Clavicular fracture (typically a mid shaft fracture with or without displacement)**

Write two clinical manifestations in this infant?

**.Asymmetrical Moro reflex (absent or decreased on the affected side)**

**.Brachial plexus injury (e.g., Erb's palsy, manifested by the "waiter's tip" hand position)**

**.Crepitus or bony irregularity upon palpation of the clavicle**

**.Pseudo-paralysis (lack of voluntary movement due to pain)**

A newborn delivered via difficult vaginal extraction presents with a weak hand grip and drooping of the eyelid (ptosis) on the same side. The Moro reflex is present in the shoulder but the grasp reflex is absent



What is the name of injury?

**Klumpke Palsy**

Mention two risk factors.

**Shoulder dystocia**

**Macrosomia (Large for gestational age, often associated with maternal diabetes)**

**Breech delivery**

**Instrumental delivery (Forceps or vacuum extraction)**

What is the name of this abnormality?

**Klumpke's Palsy**

Risk factors for this condition?

1. Large baby.
2. Breech delivery (bottom first).



A patient presents with sudden onset of facial weakness. On examination, the patient is unable to wrinkle the left side of their forehead, has incomplete closure of the left eye, and the angle of the mouth is deviated to the right side.



What is the diagnosis?

**Left Lower Motor Neuron (LMN) lesion of the facial nerve (e.g., Bell's Palsy).**

What are the findings?

- Incomplete left eye closure (lagophthalmos)**
- Mouth angle deviation to the right (opposite) side**
- Loss of forehead wrinkling on the left side**
- Loss of nasolabial fold on the left side**

A newborn delivered via a difficult labor involving shoulder dystocia is noted to have decreased movement of the right arm. On examination, the clinician performs the Moro maneuver.



What do you see in this picture?

**Asymmetrical Moro reflex (absent or decreased abduction and extension of the right arm).**

Two causes for this condition?

- Erb's palsy**
- humerus fracture**

\*What you see in this picture:

Asymmetrical moro reflex

\*what is the cause of this:

Clavicular fracture

Erb's palsy



A newborn delivered via difficult vacuum extraction presents with a diffuse, fluctuant scalp swelling that crosses the suture lines. The swelling is noted to shift with head movement and is associated with signs of hypovolemic shock.



What is the diagnosis?

**Subgaleal Hematoma**

Complications?

**anemia , jaundice, seizures**

What are 2 lines of management?

**Volume Resuscitation: Immediate administration of intravenous fluids (Normal Saline boluses) or blood products to manage hypovolemic shock.**

**Management of Jaundice: Monitoring of serum bilirubin levels and initiation of Phototherapy as the hematoma resolves and releases bilirubin.**

**Observation: Serial measurements of head circumference and monitoring of hematocrit**

Q1: Name of this fracture ?

Linear fracture



Basilar skull fracture



Depressed Fracture



• if the last photo came with intractable seizure what is your management ?

Surgical elevation

# INFANT OF DIABETIC MOTHERS

NEWBORN BABY, BIRTH WEIGHT 4.5 KG

WHAT'S THE NAME OF THE PATHOLOGY LEADING TO THIS PICTURE ?

**DIABETIC MOTHER , FAMILIAL , TWIN TO TWIN TRANSFUSION,**

MENTION 2 COMPLICATIONS OF THIS PATHOLOGY

**SHOULDER DYSTOCIA , PROLONGED JAUNDICE , RDS,**



INFANT OF DIABETIC MOTHER ,,GESTATIONAL WEIGHT IS 4.5KG PR

WHAT IS THE DIAGNOSIS ?

**SMALL LEFT BOWEL SYNDROME**

MENTION 2 CAUSES OF SEIZURE IN THIS INFANT

**1-HYPOCALCEMIA 2-HYPOGLYCEMIA**



MAROSOMIA (ABOVE 4.2KG)INFANT OF DIABETIC MOTHER

WHAT IS THE MOST COMMON CAUSE OF THE INFANT SYMPTOMS ?

**OBSTRUCTIVE CARDIOMYOPATHY**

WRITE 2 GI MALFORMATION IN THIS CONDITION?

**DUODENAL ATRESIA + SMALL LEFT COLON SYNDROME**



WHAT IS THE DIAGNOSIS?

**DUODENAL ATRESIA**

DESCRIBE THE FINDINGS ON XRAY?

**DOUBLE BUBBLE SIGN**

MENTION ONE RISK FACTOR?

**INFANT OF DIABETIC MOTHER/DOWN SYNDROME**



# INFANT OF DIABETIC MOTHERS

4.3 KG NEONATE PRESENTED WITH HYPOGLYCEMIA AND FAILURE TO PASS MECONIUM, BARIUM ENEMA WAS PERFORMED.



WHAT IS THE DIAGNOSIS ?

**LEFT SMALL BOWEL SYNDROME**

WHAT IS THE UNDERLYING PATHOLOGY ?

**INFANT OF DIABETIC MOTHER**

INFANT OF DIABETIC MOTHER HISTORY BIRTH WEIGHT 4000 G

3 PICTURES FOR IODM:

- CAUDAL DYSPLASIA (CAUDAL REGRESSION SYNDROME)
- MYELOMENINGIOCELE
- TRANSIENT HCM

CAUSE OF THESE DEFECTS? **IODM**



IF THIS PATIENT CAME WITH SEIZURES AND HIS BLOOD SUGAR WAS 25 WHAT'S IS YOUR FIRST TWO URGENT STEP OF MANAGEMENT? **1- ABC 2- IV ACCESS**



WHAT OTHER TWO DRUGS YOU CAN USE FOR HIM?

**1-GLUCAGON 2-SOMATOSTATIN 3-CORTISOL**

TERM BABY TO A MOTHER COMPLAINED OF PLOYHYDROMINOS , PREECLAMPSIA, AND PREVIOUS TWO MACROSOMIC BABY:

WHAT IS THIS CONGENITAL ANOMALY?

**CAUDA EQUINA REGRESSION SYNDROME**

WHAT IS THE CAUSE PROVIDED BY THE HISTORY?

**INFANT OF DIABETIC MOTHER**



# INFANT OF DIABETIC MOTHERS

INFANT OF DIABETIC MOTHER , SEIZURES

**MACOSOMIA**

MANAGMENT OF THE SEIZURES?

**DEXTROSE**

**CORRECT ELECTROLYTES**

WHAT ELECTROLYTES ABNORMALITIES / BLOOD

**HYPOGLYCEMIA**

**HYPOMAGNESEMIA**

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# DR. SHAWAWRH :

## ETHEXEMATOUS DISEASE & INFECTION

### STATION 1

1) PT COME WITH CORYZA AND FEVER

2) PT COME WITH THIS ITCHY RASH SPARING PALMS AND SOLES

\_WHAT'S THE DIAGNOSIS FOR EACH ?

**1-MEASLES. 2-CHICKEN POX**

\_VACCINE TIME FOR EACH?

**1-12AND 15 MONTHS**

**2-12MONTHS, 4 YEARS**



### STATION 2

PATIENT WITH TONSILLAR ULCERS, PHARYNGITIS, AND SPLENOMEGALY.

1. WHAT IS THE MOST LIKELY DIAGNOSIS?

• **INFECTIOUS MONONUCLEOSIS**

2. WHAT WOULD YOU EXPECT TO SEE ON THE PERIPHERAL BLOOD SMEAR?

> **ATYPICAL (REACTIVE) LYMPHOCYTES**



### STATION 3

WHAT IS THE MICROORGANISM CAUSING THIS IMAGE?

**VARICELLA ZOSTER VIRUS**

2. WHAT IS THE TREATMENT?

**COOL BATHS, CALAMINE, TOPICAL ANTIPYRETIC, IF IMMUNE COMPROMISED ANTIVIRAL, VARICELLA ZOSTER IMMUNOGLOBULINS**

3. DESCRIBE THE RASH?

**POLYMORPHOUS RASH WITH LESIONS AT DIFFERENT STAGES OF HEALING AND NEWLY FORMED**



### STATION 4

A CHILD WITH FEVER AND THESE ARE THE PICTURES

1. WHAT ARE THESE SIGNS SHOWN?

**ERYTHEMA MARGINATUM**

**SUBCUTANEOUS NODULES**

2. WHAT IS THE DX?

**RHEUMATIC FEVER**



# ETHEXEMATOUS DISEASE & INFECTION

## STATION 5

DISEASE IS BIPHASIC AND HAS TRIPHASIC RASH

1-WHAT IS THE MEDICAL NAME OF THIS DISEASE ?

**ERYTHEMA INFECTIOSUM**

2- WHAT IS THE CAUSATIVE ORGANISM?

**PARVOVIRUS B19**

3- MENTION 2 COMPLICATIONS OF THIS DISEASE

1. **APLASTIC CRISIS**
2. **HYDROPS FETALIS**



## STATION 6

WHAT IS THE TYPE OF RASH?

**VESICLES**

WHAT IS THE DIAGNOSIS?

**FOOT HAND MOUTH DISEASE**

WHAT IS THE ORGANISM CAUSED ?

**COXSACKIE VIRUS A**



## STATION 7

1)YOUR DIFFERENTIAL DIAGNOSIS?

**CHICKEN POX**

2)DESCRIBE THE LESION ?

**VESICLES WITH DIFFERENT AGE AND CRUST**

3)YOUR TREATMENT?

**SUPPORTIVE**



## STATION 7

1)YOUR DIFFERENTIAL DIAGNOSIS?

**INFECTIOUS MONONUCLEOSIS**

2)DESCRIBE WHAT YOU SEE IN THIS BLOOD FILM?

**ATYPICAL LYMPHOCYTES**

3)MOST COMMON ORGANISM ?

**EBV**

4)IF THIS PATEINT DEVELOP RASH AFTER GIVE HIM

**ANTIBIOTICS.**

5)WHAT TYPE OF THIS ANTIBIOTICS?

**AMOXICILIN**



# ETHEXEMATOUS DISEASE & INFECTION

## STATION 8

CASE OF HSV LESIONS :

1)NAME OF THE TEST AND NAME OF THE FINDING ?



2)YOUR MANAGEMENT AND THE DURATION OF TREATMENT ? (DEPEND ON THE TYPE OF HSV IN THE SCENARIO )

3)MOST AFFECTED LOBE?

**TEMPORAL LOBE**

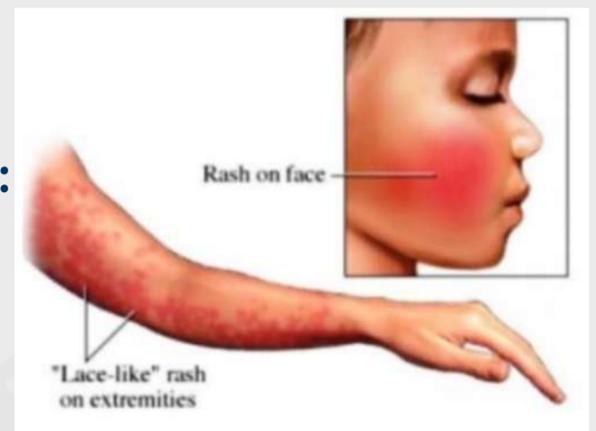
## STATION 9

THE DISEASE IS BIPHASIC AND THE RASH IS TRIPHASIC.

WRITE DOWN THREE COMPLICATIONS OF THIS DISEASE :

**APLASTIC ANEMIA**

**ARTHRALGIA / ARTHRITIS**



## STATION 10

1)WHAT IS THE MICROBE CAUSES OF THIS CONDITION??

**VARICELLA-ZOSTER VIRUS**

2)WHAT IS THE TREATMENT IF THE PATIENT IS IMMUNOCOMPROMISED ??

**INTRAVENOUS ACYCLOVIR**



## STATION 11

WHAT'S THE NAME OF THIS FINDING

**ERYTHEMA MARGINATUM**

2) NAME OTHER 2 FINDINGS

**SUBCUTANEOUS NODULES**

**POLYARTHRITIS**

3) MENTION 2 INVESTIGATION TO REACH THE DIAGNOSIS

**ALSO TITER , DNAES**

## STATION 12

2) TWO DDX WITH TREATMENT FOR EACH ONE:

**KAWASAKI DISEASE - IV IG , ASPIRIN**

**SCARLET FEVER - PENICILLIN**



# ETHEXEMATOUS DISEASE & INFECTION

## STATION 12

ALL OF THE FOLLOWING ARE TRUE EXCEPT ?



**RASH NOT ITCHING**

## STATION 13

21- 6 YEAR OLD MALE PATIENT PRESENTED WITH LIMPING AND THE FOLLOWING SKIN LESION, WHAT ARE THE INVESTIGATION YOU NEED TO CONFIRM YOUR DIAGNOSIS



• **ECG**

WHAT IS THE DIAGNOSIS?

**ERYTHEMA MAGRINATUM**

## STATION 14

PROTEIN 90 WBC 5000 NEUTROPHIL 90% GLUCOSE 40

- DIAGNOSIS : **BACTERIAL MENINGITIS**
- NAME OF TEST: **GRAM STAIN**
- ORGANISM: **N. MENINGITIDES**
- HYPOTENSION WE GIVE NORMAL SALINE NOT RESPOND WHY ?



**WATERHOUSE FRIDRECHSON SYNDROME---** ADRENAL HEMORRHAGE >> NO CORTISOL

- MANAGEMENT: **IV FLUID CORTISOL DOPAMINE**
- ANTIBIOTICS OF CHOICE

**3RD GENERATION CEPHALOSPORIN AND VANCOMYCIN**

- SEIZURE NOT RESPONDING TO ANTIEPILEPTIC:

**SIADH AS A COMPLICATION**

## STATION 15

WHEN THE VACCINE IS GIVEN FOR THIS RASH?

**10 - 12 -18 MONTHS(MEASLES)**



## STATION 16

MENTION TOW DIFFERENTIAL DIAGNOSIS OF THIS CONDITION

1. **SCARLET FEVER**
2. **KAWASAKI**



# ETHEXEMATOUS DISEASE & INFECTION

## STATION 17

- WRITE WHAT YOU SEE IN EACH PHOTO ?
- 1-URTICARIA
- 2-ANGIOEDEM



## STATION 18

3 YEARS OLD MALE PRESENTED TO ED WITH FEVER /COUGH ON EXAMINATION HEPATOSEPLENMEGALY IS FOUND WITH CERVICAL LAP

- WHATS CAUSATIVE ORGANISM? **EBV**
- WHATS THE COMPLICATION? **SPLEEN RUPTURE**
- INVX FOR CONFIRMATION OF YOURS DX?



## STATION 19

1 YEAR OLD CHILD COMES WITH FEVER 3 DAYS DURATION ,CORYZA, SKIN RASH AND CONJUNCTIVITIS

- 1-GIVE 3 QUESTIONS YOU WOULD ASK IN HX
- **NOT SURE-VACCINE HX, DISTRIBUTION OF RASH,**
- **THE DURATION BET FEVER AND RASH**
- 2-TX
- **SUPPORTIVE: FLUIDS /ANTIPYRETICS**
- **VITAMIN A**



## STATION 20

FEVER FOR 2 DAYS WITH THROAT PAIN AND LYMPHADENOPATHY WITHOUT RHINORRHEA

1- WHAT IS THE DIAGNOSIS?

**TONSILLITIS**

2-WHAT IS THE CAUSATIVE ORGANISM?

**GROUP A BETA HEMOLYTIC STREP PNEUMONIA**

3- MENTION 2 SYSTEMIC COMPLICATION FOR THIS CONDITION

**RHEUMATIC FEVER**

**POST STREP GLOMERULONEPHRITIS**



## STATION 21

HE HAS FEVER SINCE 1 WEEK, AND CONJUNCTIVITIS.

-WRITE DOWN 2 MODALITIES OF TREATMENT OF THIS PATIENTS?

**SUPPORTIVE**

**VITAMIN A**



## STATION 22

MENTION 2 COMPLICATIONS

**PNEUMONIA, ENCEPHALITIS**



## STATION 23

AT WHICH AGE SHOULD RECEIVE THE VACCINE

**9 MONTHS**

WHAT IS THE DIAGNOSIS?

**MEASLES**

WRITE DOWN 2 IMMUNOLOGICAL COMPLICATIONS ?

**ITP ,,BACTERIAL SUPER INFECTION**



# ETHEXEMATOUS DISEASE & INFECTION

## STATION 24

18 MONTH CHILD WITH RASH, RUNNY NOSE AND CONJUNCTIVITIS.

1. TWO DDX: **MEASLES AND KAWASAKI**
2. DISTRIBUTION OF RASH: **CEPHALOCAUDAL**
3. VACCINES IN JORDAN AT WHAT AGE?
  - **9, 12, 18 MONTHS**



## STATION 25

Q18 : LOW GRADE FEVER ..

- TYPE OF VACCINE : **VARICELLA > LIVE ATTENUATED**
- TIME OF VACCINATION: **12 MONTH UP TO 4 YEARS**
- 2 COMPLICATION: **ENCEPHALITIS, CELLULITES, ..**
- TX IF SEVERE : **IV ACYCLOVIR**



## STATION 26

FEVER AND VOMITING WITH WHITE SPOTS IN HIS MOUTH

1) OUT FE QUESTIONS YOU WOULD LIKE TO ASK

- **IS THERE COUGH?**
- **IS THERE RUNNY NOSE (CORYZA)?**
- **IS THERE RED EYES OR PHOTOPHOBIA?**
- **DID THE CHILD RECEIVE THE MMR VACCINE OR HAVE CONTACT WITH A SICK CHILD?**



2) ASK EDUT MIESIONS YOU WOULD LIKE

- **EYE LESIONS: CONJUNCTIVITIS, PHOTOPHOBIA**
- **SKIN RASH: WHEN DID IT START AND WHERE DID IT BEGIN? (USUALLY FACE → SPREADS DOWN)**

3) MENTION 2 FINDINGS IN THIS PATIENT

- **KOPLIK SPOTS INSIDE THE MOUTH**
- **MACULOPAPULAR RASH STARTING FROM THE FACE AND SPREADING TO THE BODY**

4) DISEASEN TO GIVE VACCINE AGAINST THIS

- **MEASLES VACCINE (PART OF MMR VACCINE)**

# DR. MOHAMMED :

## CONGENITAL HEART DISEASE

1. FULL TERM NEWBORN WITH CENTRAL CYANOSIS NOT RESPONSE TO 100% O<sub>2</sub>.

• WHAT'S THE MOST LIKELY DIAGNOSIS?

**TRANSPOSITION OF GREAT ARTERY**

• MENTION BLOOD TEST TO DIFFERENTIATE BTW CARDIAC AND RESPIRATORY CAUSES?

**ABGS OR DEOXYHEMOGLOBIN (I'M NOT SURE WHICH ONE IS RIGHT)**

• MENTION THE RESULT OF THAT'S TEST IF CARDIAC CAUSE?

**AT LEAST 5 g/dL**

• IMMEDIATE DRUG IN THIS CASE?

**PROSTAGLANDIN**

• MENTION TWO COMPLICATIONS IF THIS ANOMALY LEFT WITHOUT SURGICAL CORRECTION?

**RVH**

**ARRHYTHMIA**



SHOWING THIS PICTURE:

CHEST X-RAY OF AN INFANT.

QUESTIONS:

1. WHAT IS THE MOST LIKELY DIAGNOSIS?

➤ **TRANSPOSITION OF THE GREAT ARTERIES (TGA)**

2. WHAT IS THE MAIN TREATMENT FOR THIS CONDITION?

➤ **PROSTAGLANDIN (ALPROSTADIL)**



[3] CXR, GALLOP, CYANOTIC

**TAPVR**

INVESTIGATION

**ECHOCARDIOGRAM**

A 3 DAYS OLD CHILD WITH THIS CLINICAL PICTURE

1. GIVE 2 POSSIBLE CAUSES?

**SEPSIS, CYANOTIC HEART DISEASE (TRUNCUS ARTERIOSUS, TRICUSPID ATRESIA, ETC)**

**((RDS IS NOT A CAUSE BECAUSE RDS PRESENTS IMMEDIATELY AFTER BIRTH NOT AFTER 3 DAYS)))**

2. WHAT 2 INVESTIGATIONS ARE POSSIBLE?

**ABGS, HYPEROXIA TEST, CHEST X-RAY, ECHOCARDIOGRAM**



DIAGNOSIS ?

**TETRALOGY OF FALLOT**

HOW TO MANAGE

**KNEE-CHEST POSITION**

**SUPPLEMENTAL O<sub>2</sub>**

**FLUID BOLUS I.V.**

**MORPHINE I.V.**

**NAHCO<sub>3</sub> TO CORRECT METABOLIC ACIDOSIS (**

**PHENYLEPHRIN**

**B-BLOCKER**



# CONGENITAL HEART DISEASES

A 2-YEAR-OLD MALE PATIENT PRESENTED WITH HIS MOTHER COMPLAINING THAT HE NEEDS TO SQUAT DOWN AFTER WALKING A CERTAIN DISTANCE AND HE BECOMES BREATHLESS AND CYANOSED. X-RAY OF THE CHEST IS SHOWN IN THE IMAGE



? WHAT IS THE DIAGNOSIS

**TETRALOGY OF FALLOT**

\* GIVE 2 CARDIAC ANOMALIES THAT ARE PRESENT IN THIS DISEASE?

\* (ANY 2 OF THESE)

\* **PULMONARY STENOSIS**

\* **OVERRIDING AORTA**

\* **RIGHT VENTRICULAR HYPERTROPHY**

\* **VSD**

6) MURMURS

A) MACHINE LIKE MURMUR, BOUNDING PULSE?

**PDA**

B) EJECTION SYSTOLIC MURMUR HEARD IN THE UPPER LEFT STERNAL BORDER ?

**ASD/HOCM**

C) REGARDING DIGEORGE SYNDROME WHAT CONGENITAL HEART DISEASE WOULD YOU FIND?

**TOF**

ECG FOR HYPERKALEMIA:

\* A) ECG FINDINGS?

1- **PEAKED T WAVE**

2- **PROLONGED PR**

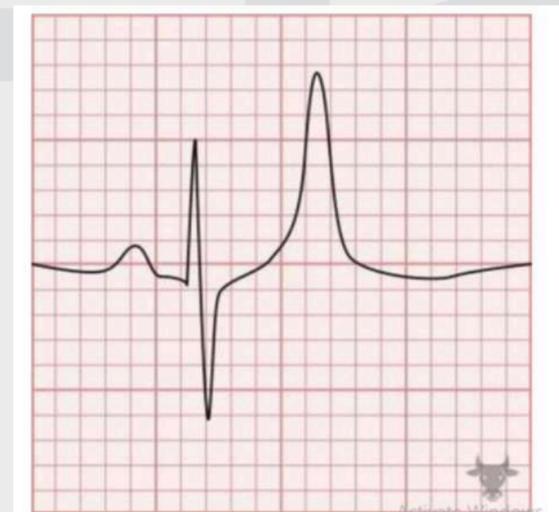
\* B) WHAT'S THE ELECTROLYTES DISTURBANCE CAN CAUSE THIS CASE?

**HYPERKALEMIA**

\* C) NAME 2 DRUG FOR TREATMENT?

1- **CALCIUM GLUCONATE**

2- **INSULIN & GLUCOSE**



WHAT IS THE DISEASE ?

**TETRALOGY OF FALLOT**

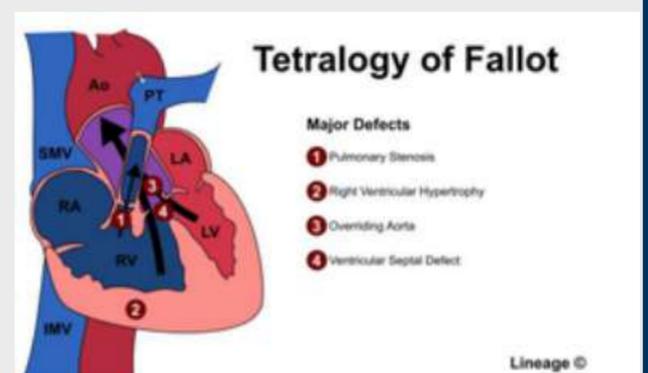
WHAT IS ABNORMALITIES SEEN IN THIS DISEASE?

**OVER-RIDING AORTA**

**PULMONARY STENOSIS**

**BENTRICULAR SEPTAL DEFECT**

**RIGHT VENTRICULAR HYPERTROPHY**



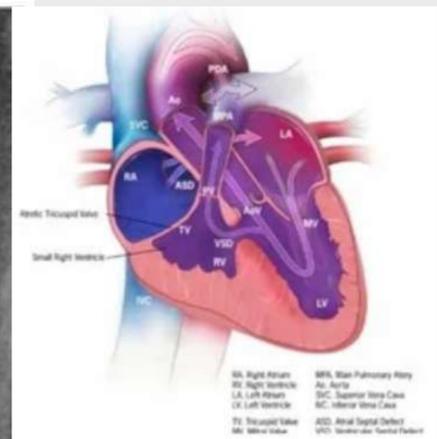
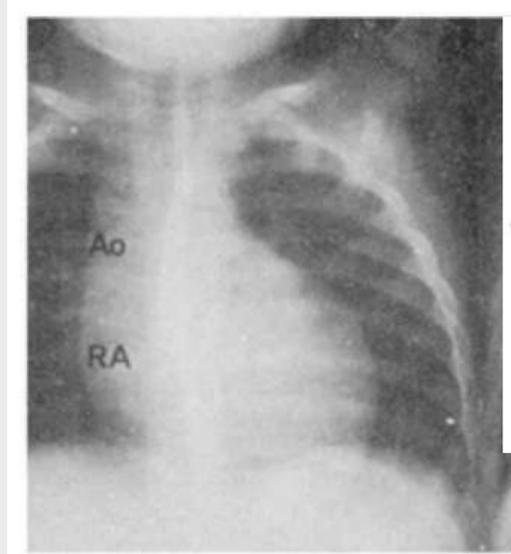
# CONGENITAL HEART DISEASES

FINDINGS ON X- RAY:

**CARDIOMEGALY**

1ST DRUG TO GIVE IS?

**PGE1**



MENTION 2 COMPONENTS OF THIS?

**PULMONARY STENOSIS,**

**VENTRICULAR HYPERTROPHY**

IF THE PT CAME TO ER WITH HYPERCYNATIC PILLS, WHAT DO YOU DO FOR RESUSCITATION ?

**KNEE-CHEST POSITION**

**SUPPLEMENTAL O2**

**FLUID BOLUS I.V.**

**MORPHINE I.V.**

**NAHCO3 TO CORRECT METABOLIC ACIDOSIS**

**PHENYLEPHRIN**

**B-BLOCKER**



WHAT IS THE CAUSE FOR EACH SITE:

1- EJECTION SYSTOLIC MURMUR:

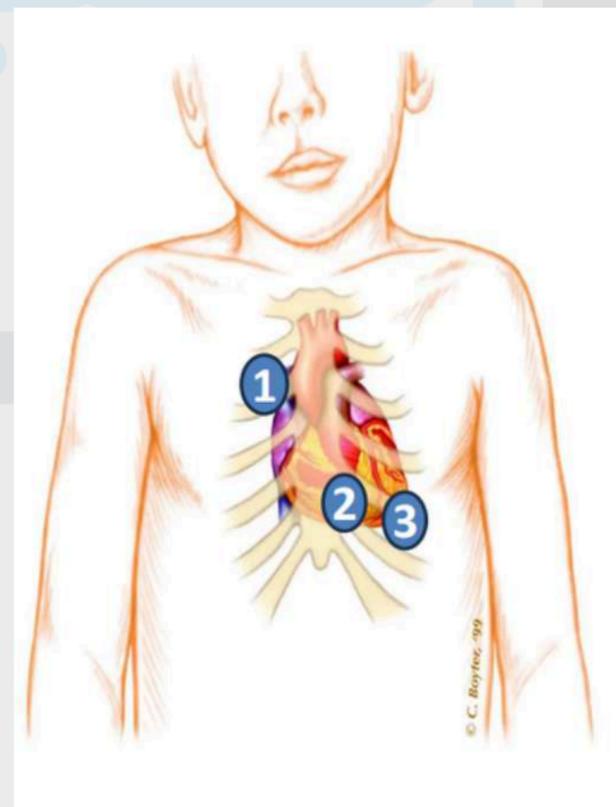
**AORTIC STENOSIS**

2) PANSYSTOLIC MURMUR:

**VSD**

3) EJECTION SYSTOLIC MURMUR:

**MVP**



HOLOSYSTOLIC MURMUR

A. WHAT IS THE MOST COMMON CARDIAC DEFECT CAUSE THIS CONDITION?

**VSD**

B. IF THE PATIENT IS TRISOMY 21 WHAT IS YOUR DX?

**AVSD**

C. WRITE ONE INDICATION FOR SURGERY

**FAILURE OF MEDICATION**

**IF THE SIZE OF THE DEFECT IS LARGER THAN 10 MM**



# CONGENITAL HEART DISEASES

Q11:

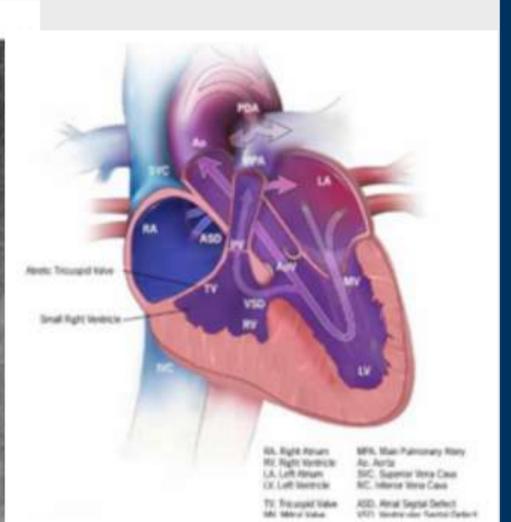
- A. VENTRICULAR SEPTAL DEFECT (VSD)
- B. ENDOCARDIAL CUSHION (AVSD)
- C. EISENBERG SYNDROME (REVERSE OF THE SHUNT TO BE RIGHT TO LEFT SHUNT) / CONGESTIVE HEART FAILURE

FINDINGS ON X- RAY:

**CARDIOMEGALY**

1ST DRUG TO GIVE IS?

**PGE1**

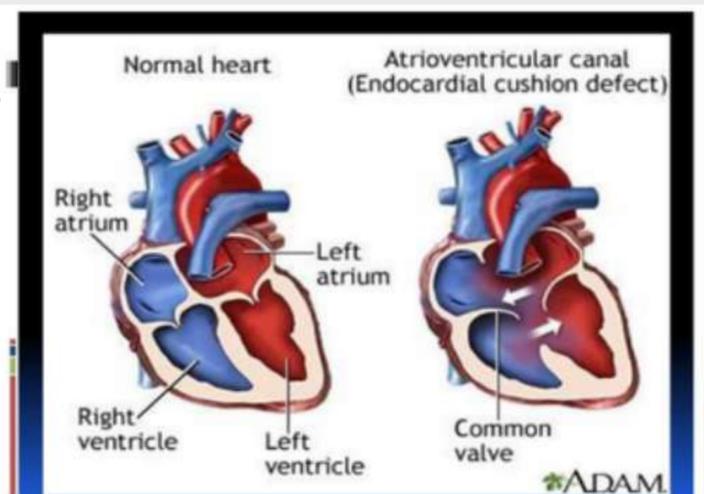


1-WHAT IS THE HEMATOLOGICAL DISORDER IN THIS PATIENT ?

**ALL, AML**

2- NAME THE HEART DEFECT YOU SEE:

**ENDOCARDIAL CUSHION DEFECT**



1-MENTION TWO CARDIAC ABNORMALITIES THAT CAUSE EARLY CYANOSIS:

**TRICUSPID ATRESIA, TOF**

2-HOW DO DIFFERENTIATE BETWEEN RESPIRATORY AND CARDIAC HYPOXIA:

**HYPEROXIC TEST**



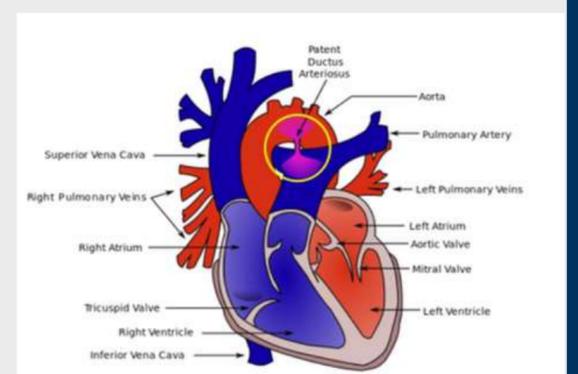
1-WHAT IS THE CARDIAC ANOMALY?

**PDA**

2-GIVE ONE THERAPEUTIC INTERVENTION?

**INDOMETHACIN**

**SURGICAL LIGATION OF PDA**



THIS IMAGE REPRESENT A CASE OF UNTREATED VSD. NOW, SHE HAS DEVELOPED THIS COMPLICATION.

1-THIS COMPLICATION IS:

**CENTRAL CYANOSIS DUE TO EISENMENGER SYNDROME**

**N.B. ANSWERING: "CENTRAL CYANOSIS" ALONE IS NOT ENOUGH.**

2-MENTION TWO SIGNS THAT YOU WILL SEE IN THE HANDS OF THIS CHILD?

**PERIPHERAL CYANOSIS**

**FINGER CLUBBING**

**IMAGINE:**

A CLOSE VIEW OF THE LIPS AND MOUTH OF A GIRL AGED APPROXIMATELY 3 YEARS. SHE HAS BLUISH DISCOLORATION OF HER LIPS.

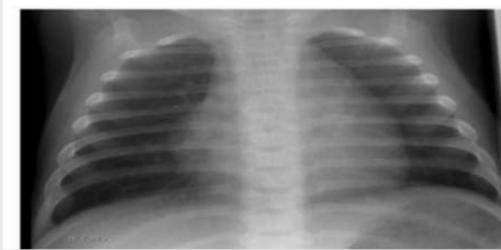
# CONGENITAL HEART DISEASES

1-WHAT IS YOUR INTERPRETATION FOR THIS X-RAY?

**CARDIOMEGALY**

2-WHAT IS THE MOST COMMON CAUSE FOR IT IN THIS CHILD?

**ENDOCARDIAL CUSHION DEFECT**



A 4 MONTHS OLD BOY, HAS RECURRENT CYANOTIC SPELLS WITH CRYING AT EARLY MORNING, ACCORDING TO HIS X-RAY

• THE MOST COMMON LESION TO CAUSE THIS PRESENTATION

**TETRALOGY OF FALLOT**

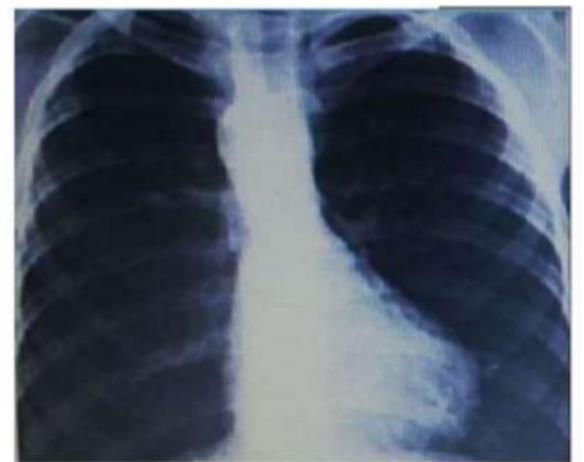
2- MANAGEMENT OF CYANOTIC SPELLS?

**KNEE CHEST POSITION**

**O<sub>2</sub>**

**BETA BLOCKERS**

**MORPHINE**



1-WHAT'S YOUR DX.?

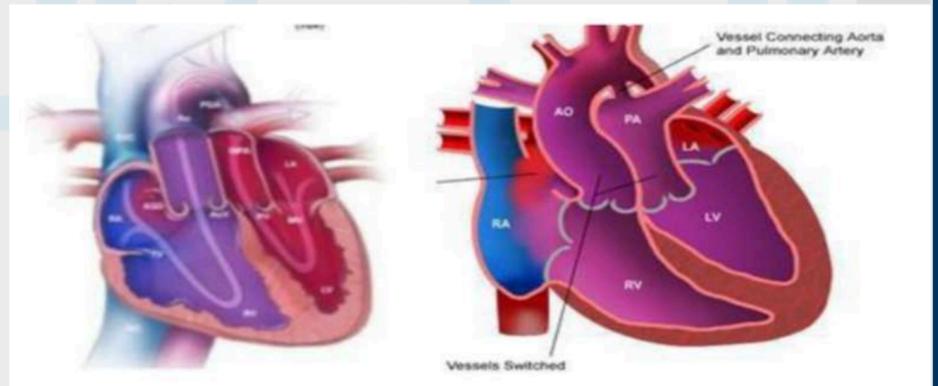
**TRANSPOSITION OF GREAT VESSELS**

2-WHAT'S THE MOST COMMON PRESENTATION IN NEONATES?

**CYANOSIS.**

3-WHAT DO YOU GIVE IMMEDIATELY AFTER BIRTH?

**PROSTAGLANDIN (PG E1).**



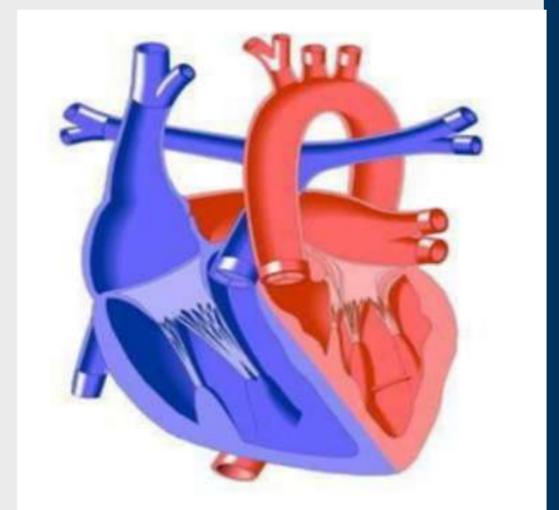
1 DAY OLD NEONATE HE WAS CYANOSED WITH O<sub>2</sub> SAT OF 75% AND PAO<sub>2</sub> = 85 MMHG

1-WHAT'S THE CXR FINDING?

**EGG-ON-STRING.**

2-WHAT'S THE CAUSE OF HIS CYANOSIS?

**TGA (TWO PARALLEL CIRCUITS)**



1-WHAT'S YOUR DX?

**PDA.**

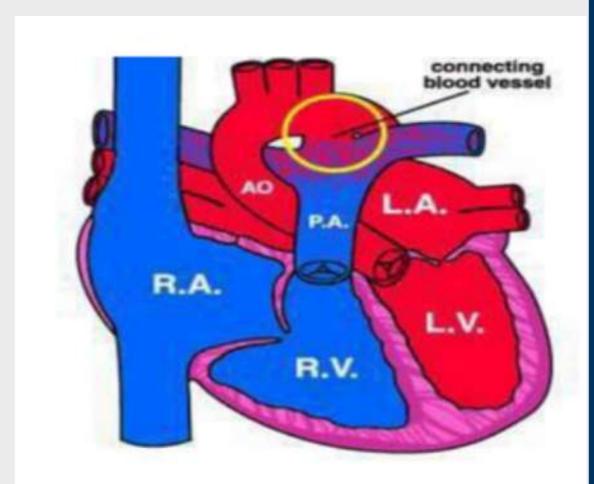
2-MENTION 2 SIGNS ON PHYSICAL EXAM.

**HYPERTENSION.**

**RADIO-FEMORAL DELAY.**

**MACHINERY MURMUR AT INFRA-CLAVICULAR AREA.**

**BOUNDING PULSE.**



# CONGENITAL HEART DISEASES

4 YEARS HEALTHY BOY

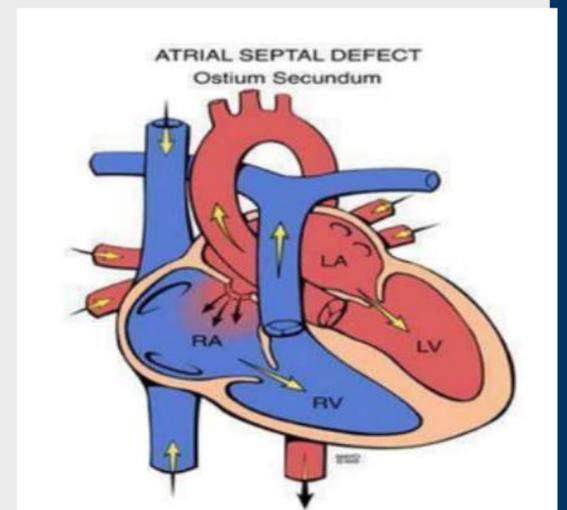
1-WHAT'S THIS?

**ASD**

2-GIVE 2 FINDINGS UPON EXAMINATION?

**EJECTION SYSTOLIC MURMUR.**

**FIXED SPLITTED S2.**



1-WHAT IS THE DISEASE?

**TOF.**

2-GIVE 3 FINDINGS OF CVS PHYSICAL EXAM.

**EJECTION SYSTOLIC MURMUR.**

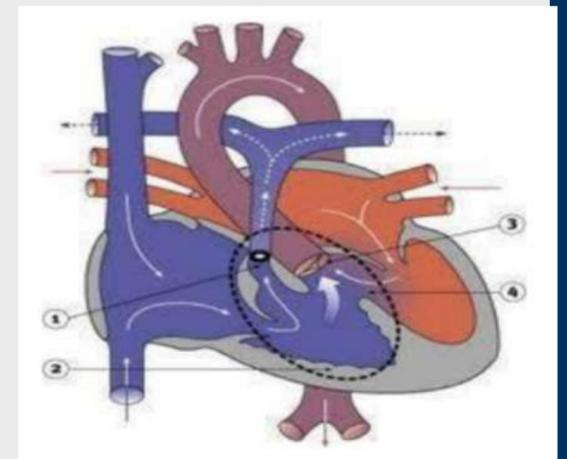
**THRILLS.**

**SINGLE S2.**

**CYANOSIS.**

3-GIVE 2 COMPLICATIONS.

**CLUBBING, FTT.**



1-A CHILD WITH DOWN SYNDROME HAS THIS CXR, ON EXAMINATION THERE A SYSTOLIC MURMUR WITH NO S3. WHAT IS THE RADIOLOGICAL DIAGNOSIS?

**CARDIOMEGALY**

2-WHAT IS THE MOST LIKELY CAUSE?

**ENDOCARDIAL CUSHION DEFECT (AV CANAL, VSD, ASD)**



A 3 MONTHS OLD BABY PRESENTED WITH TACHYPNEA , AND FAILURE TO GAIN WEIGHT. A CONTINUOUS MURMUR IS HEARD , WHAT IS THE MOST LIKELY DIAGNOSIS ?

**PDA**



A 16 YEAR OLD GIRL CAME TO YOUR CLINIC WITH PRIMARY AMENORRHEA & DELAYED PUBERTY

1-WHAT IS THIS SYNDROME, WHAT IS THE CHROMOSOMAL PATTERN?

**TURNER SYNDROME, 45 XO**

2-WHICH CARDIAC LESION DO YOU WANT TO RULE OUT?

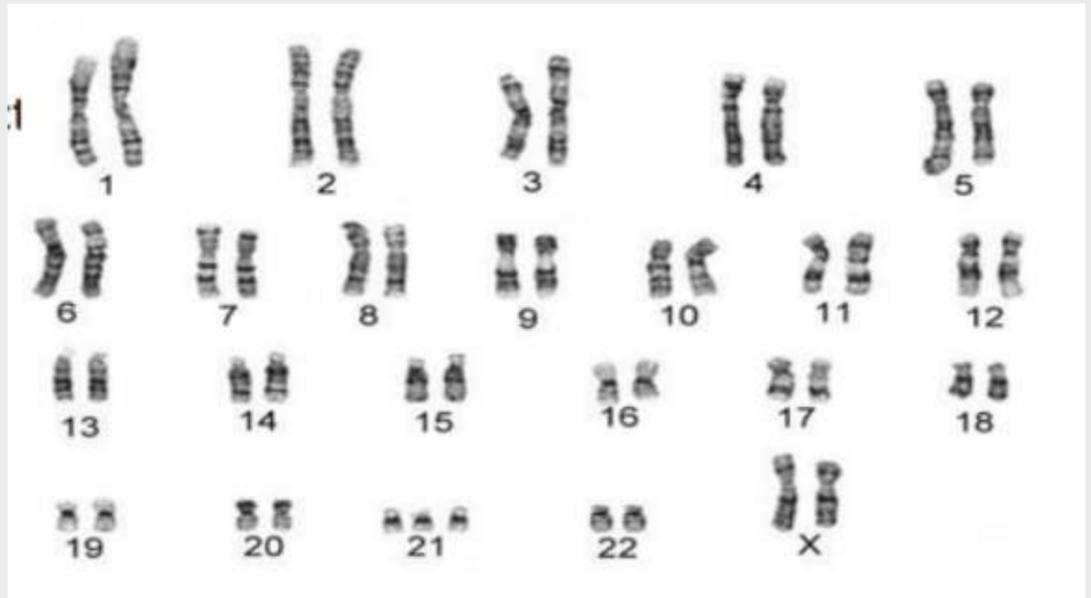
**COARCTATION OF THE AORTA**



# CONGENITAL HEART DISEASES

A JUNIOR DOCTOR EXAMINES THE FIRST CHILD OF A 28 YEAR OLD WOMAN AS PART OF A ROUTINE "BABY-CHECK" PRIOR TO DISCHARGE FROM HOSPITAL. THE BABY IS 20 HOURS OLD.

THE DOCTOR NOTICES THAT THE BABY IS HYPOTONIC AND ALSO FINDS A SYSTOLIC MURMUR ON



AUSCULTATION OF THE HEART. AFTER FURTHER EXAMINATION BY A SENIOR PEDIATRICIAN THE BABY'S CHROMOSOMES ARE ANALYSED

1- WHAT IS THE DIAGNOSIS?

**TRISOMY 21 (DOWN SYNDROME)**

2-WHAT IS THE MOST LIKELY CARDIAC DEFECT?

**ATRIOVENTRICULAR SEPTAL DEFECT (AVSD)**

A 4 MONTHS OLD BOY, HAS RECURRENT CYANOTIC SPELLS WITH CRYING AT EARLY MORNING, ACCORDING TO HIS X-RAY:

1. THE MOST COMMON LESION TO CAUSE THIS PRESENTATION

**TETRALOGY OF FALLOT**

2. MANAGEMENT OF CYANOTIC SPELLS?

**KNEE CHEST POSITION**

**O<sub>2</sub> (OXYGEN)**

**BETA BLOCKERS**

**MORPHINE**



WHAT IS THE DISEASE?

**TETRALOGY OF FALLOT**

WHAT IS ABNORMALITIES SEEN IN THIS DISEASE?

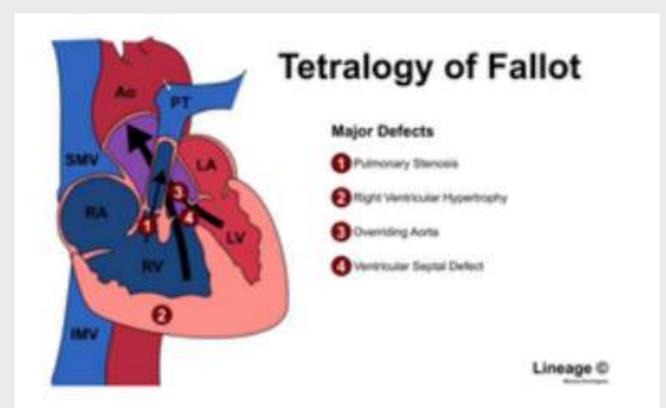
(THE DOCTOR WANTED THEM **IN ORDER** ACCORDING TO THE NUMBERING IN THE DIAGRAM):

1- **PULMONARY STENOSIS**

2- **RIGHT VENTRICULAR HYPERTROPHY**

3- **OVERRIDING AORTA**

4- **VSD (VENTRICULAR SEPTAL DEFECT)**



# CONGENITAL HEART DISEASES

3 MONTHS OLD INFANT CAME TO THE ER WITH SHORTNESS OF BREATH, TACHYPNEA, AND FAILURE TO THRIVE.

1- WHAT IS THE FINDING IN THIS CHEST X-RAY?

**CARDIOMEGALY**

2- WHAT IS THE MOST LIKELY DIAGNOSIS?

**ACYANOTIC CONGENITAL HEART DISEASE (VSD)**



CXR SHOWING CARDIOMEGALY, WITH CONTINUOUS MACHINERY LIKE MURMUR?

CAUSE : **PDA**

MEDICAL CHOICE : **INDOMETHACIN OR IBUPROFEN**

RISK FACTOR : **PRETERM BIRTH**

INFANT CAME TO YOU WITH CYANOSIS

1) MENTION 2 FINDINGS ON THE X RAY: **SNOWMAN IN A SNOWSTORM**

(**CARDIOMEGALLY, PULMONARY CONGESTION**)

2) WHAT'S YOUR DIAGNOSIS: **TOTAL ANOMALOUS PULMONARY VENOUS RETURN**



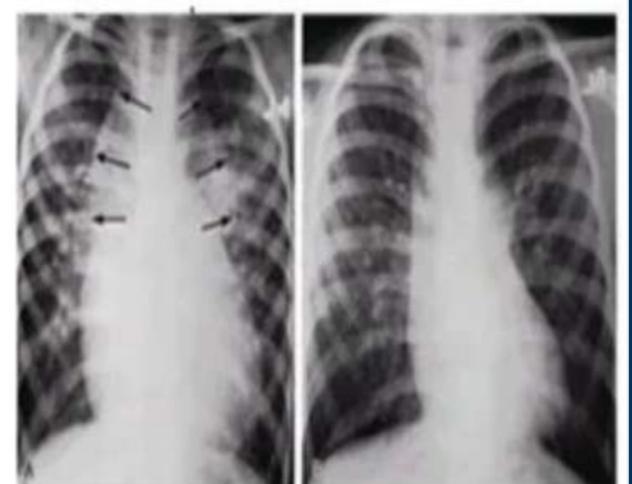
LONG CASE SCENARIO

1) TWO FINDINGS ;

**SNOWMAN IN A SNOWSTORM**

(**CARDIOMEGALLY, PULMONARY CONGESTION**)

2) DIAGNOSIS : **TOTAL ANOMALOUS PULMONARY VENOUS RETURN**



# CONGENITAL HEART DISEASES

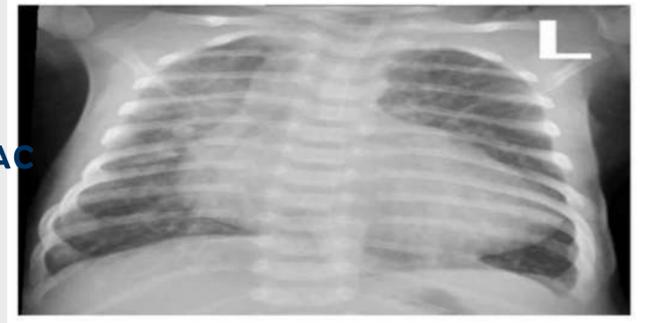
MENTION TWO CARDIAC ABNOR

MALITIES THAT CAUSE EARLY CYANOSIS:

**TGA, TRICUSPID ATRESIA.**

HOW DO YOU DIFFERENTIATE BETWEEN RESPIRATORY AND CARDIAC HYPOXIA:

**HYPEROXIC TEST.**

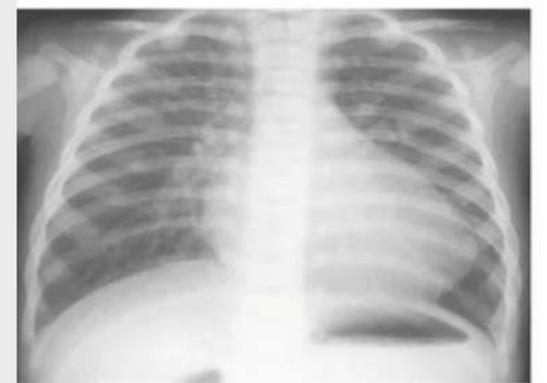


WHAT'S THE CXR FINDING?

**EGG-ON-STRING.**

2- WHAT'S THE CAUSE OF HIS CYANOSIS?

**TGA (TWO PARALLEL CIRCUITS).**

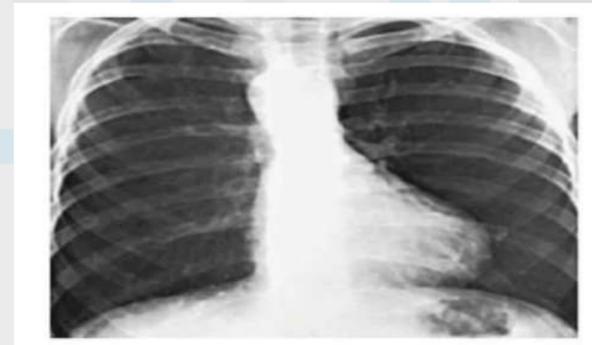


1- YOUR DDX

**TOF (TETRALOGY OF FALLOT).**

2- MENTION 2 LINES OF MANAGEMENT

**KNEE-CHEST POSITION (SQUATTING), MORPHINE, PHENYLEPHRINE, OXYGEN.**



3 WEEKS OLD NEONATE PATIENT PRESENTED WITH CYANOSIS

WHAT IS THE FINDING IN THIS CXR?

**CARDIOMEGALY.**

MENTION 2 HEART ABNORMALITIES?

**TA (TRUNCUS ARTERIOSUS), TAPVR (TOTAL ANOMALOUS PULMONARY VENOUS RETURN).**



MENTION TWO CARDIAC ABNOR

MALITIES THAT CAUSE EARLY CYANOSIS:

**TOF, TRICUSPID ATRESIA.**

HOW DO YOU DIFFERENTIATE BETWEEN RESPIRATORY AND CARDIAC HYPOXIA:

**HYPEROXIC TEST.**



# KAWASAKI

Q1) what is the sign associated with this disease in these 4 picture ?

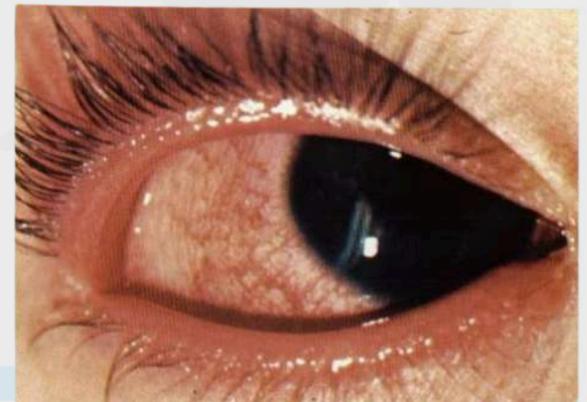
- 1-non-purulent conjunctivitis
- 2-hand-foot edema & erythema
- 3-Coronary artery aneurysms
- 4-skin Desquamating rash



Q2) 4-year-old patient has fever for 1 week duration with polymorphous rash.

1- What is the signs seen in the pictures?

**Conjunctival non-suppurative injection**  
**Indurated (edema) and erythema of the hands**



2- What is the serious complication could occur in this patient?

**Coronary artery aneurysm**

Q3) pic of Kawasaki presentation

1-What's the name of each sign in the pictures ?

- desquamation
- Non exudative bilateral conjunctivitis
- Strawberry tongue

2- 2 line of Tx : **aspirin, IV IG**

# KAWASAKI

Q4)According to the image :

1-Which this stage ?

**Subacute Stage** (also known as the Second Phase)

2-What other things we can see in this stage?

- **Thrombocytosis**
- **Development of Coronary Artery Aneurysms**
- **Resolution of fever**

3-What is the Side effects for treatment?

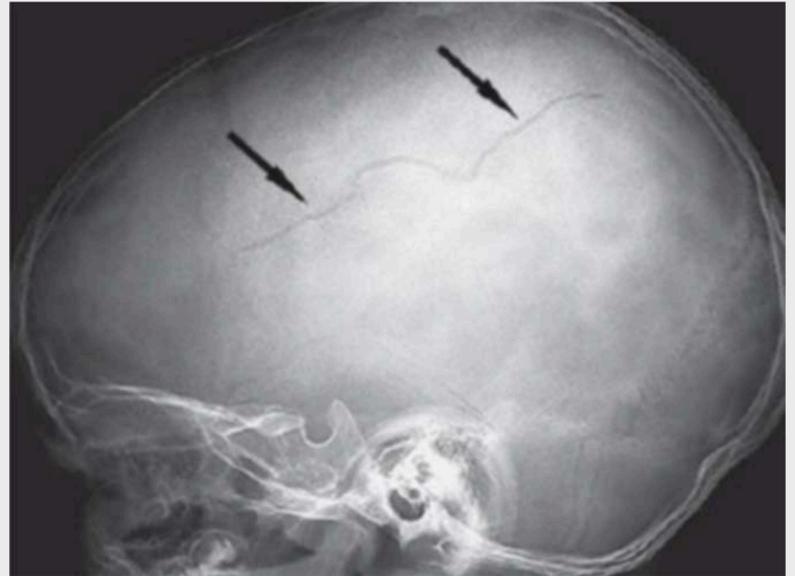
- **Infusion Reactions**
- **Hemolytic anemia**
- **GI upset**



# OTHERS

NAME THIS FRACTURES ?

**LINEAR FRACTURE**



**BASILAR SKULL FRACTURE**



**DEPRESSED FRACTURE**



IF THIS PHOTO CAME WITH  
INTRACTABLE SEIZURE WHAT IS YOUR  
MANAGEMENT ?

**SURGICAL ELEVATION**

# OTHERS

STATION

SHOWING THIS PICTURE:

**PATIENT WITH TONSILLAR ULCERS,  
PHARYNGITIS, AND SPLENOMEGALY.**

QUESTIONS:

WHAT IS THE MOST LIKELY DIAGNOSIS?

**INFECTIOUS MONONUCLEOSIS**

WHAT WOULD YOU EXPECT TO SEE ON THE  
PERIPHERAL BLOOD SMEAR?

**ATYPICAL (REACTIVE) LYMPHOCYTE**



STATION

BABY WITH LYMPHOPENIA WHAT'S THE  
DIAGNOSIS?

**DIGEORGE DISEASE**

WHAT'S THE CONTRAINDICATED VACCINE?

**LIVE ATTENUATED VACCINE**



Q: HEPATOMEGAL , FTT?

DIAGNOSIS:

**GALACTOSEMIA**

TREATMENT :

**GALACTOSE FREE DIET**



# OTHERS

## NEONATOLOGY

WHAT'S THE PROCEDURE IN THE PIC?

### ENDOTRACHIAL INTUBATION

2 INDICATIONS?

FAILED CPAP

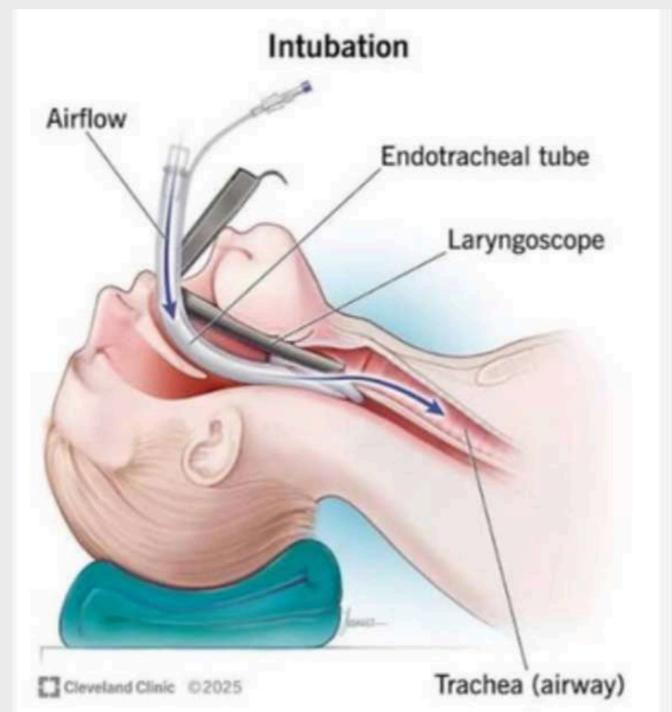
APGAR <3

HOW TO ENSURE THE CORRECT PLACE?

LARYNGOSCOPE

COSENDATION

BABY NOT CRY



10-DAY-OLD INFANT PRESENTS TO THE PEDIATRIC EMERGENCY DEPARTMENT WITH FEVER, IRRITABILITY, AND POOR FEEDING. THE MOTHER REPORTS THAT THE BABY HAS BEEN IRRITABLE SINCE BIRTH AND HAS BEEN FEEDING POORLY. ON EXAMINATION, THE INFANT APPEARS LETHARGIC, WITH A HIGH FEVER OF 38.9°C (102°F), AND MULTIPLE VESICULAR LESIONS ON THE SCALP.



WHAT IS THE CAUSATIVE ORGANISM OF THIS CASE?

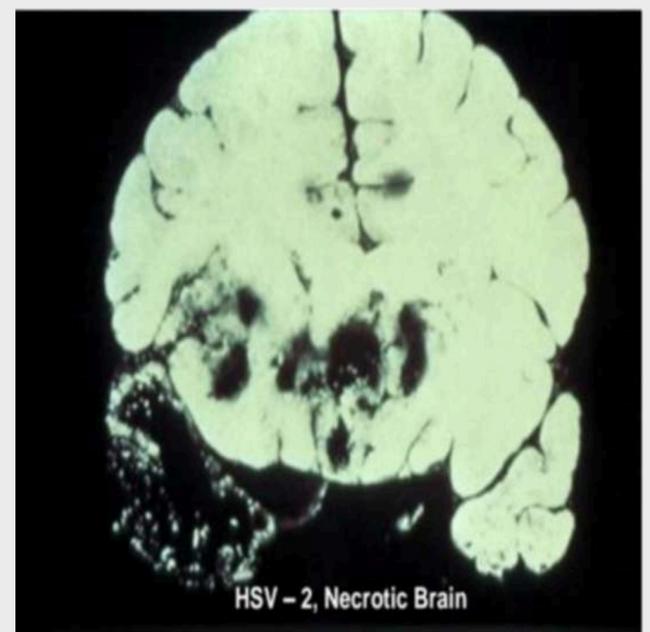
HSV

WHAT IS THE TREATMENT?

IV ACYCLOVIR FOR 14 TO 21 DAYS

MENTION ONE PRECAUTION BEFORE GIVING THE DRUG?

ENSURE ADEQUATE HYDRATION TO PREVENT PRECIPITATION OF DRUG IN KIDNEYS



# OTHERS

## QUESTION :

A 2-YEAR-OLD PATIENT WITH DOWN SYNDROME PRESENTS WITH DIFFICULTY PASSING STOOL. AN ABDOMINAL X-RAY IS SHOWN BELOW.

- WHAT IS THE SIGN IN THIS X-RAY?

**FECAL IMPACTION / GASLESS RECTUM.**

- GIVE 2 BLOOD TESTS THAT HELP IN ASSESSING HIS PRESENTATION THAT HE IS AT PARTICULAR RISK FOR.

- **TSH, T3, T4**
- **CELIAC SCREEN (ANTI-TISSUE TRANSGLUTAMINASE ANTIBODY)**

- ON AUSCULTATION, THE PATIENT HAS A HEART MURMUR. WHAT IS THE MOST LIKELY CARDIAC MALFORMATION IN HIS CASE?

**AVSD IS THE MOST FREQUENTLY ASSOCIATED.**



## HIRSCHSPRUNG DISEASE:

- 6-YEAR-OLD BOY WITH CHRONIC CONSTIPATION SINCE INFANCY

- A) WHAT IS YOUR DIAGNOSIS?

- **HIRSCHSPRUNG DISEASE**

- B) HOW TO CONFIRM YOUR DIAGNOSIS?

- **BIOPSY**



# OTHERS

## INTUBATION:

ENDOTRACHEAL TUBE IN A NEWBORN, HIS GA: 38 WEEKS, WEIGHT: 3 KG

- A) SIZE ACCORDING TO THIS BABY?
  - **3.5**
- B) PROBABLE LENGTH FOR BABY?
  - **9 CM**
- C) HOW TO CONFIRM ITS TRUE POSITION?
  - 1. DIRECT LARYNGOSCOPE**
  - 2. CHEST EXPANSION**
- D) 3 INDICATIONS OF INTUBATION:
  - 1. CONGENITAL DIAPHRAGMATIC HERNIA**
  - 2. LOW APGAR SCORE <3**
  - 3. NEWBORN WITHOUT DETECTABLE HEART RATE**



1) NAME THE TEST:

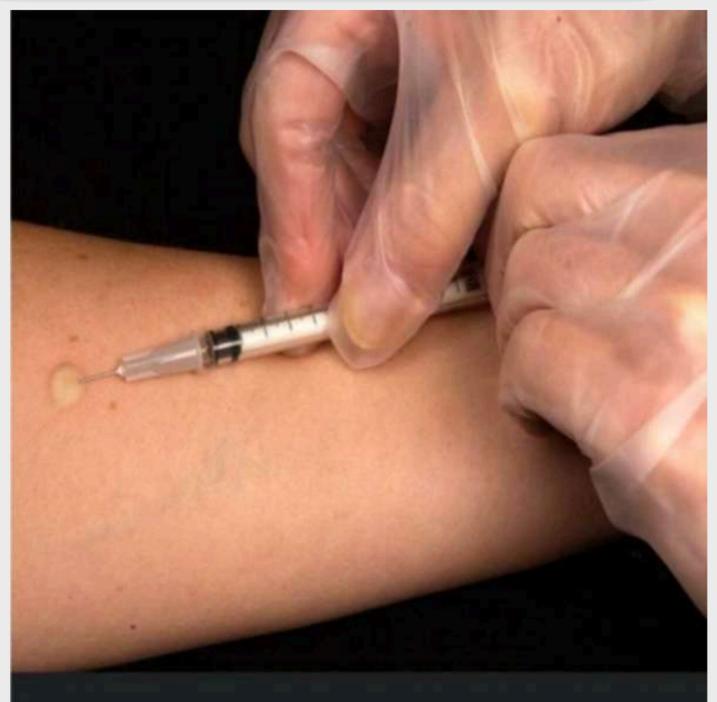
**TUBERCULIN TEST**

2) WHEN TO READ?

**AFTER 48-72 HOURS**

3) WHEN IS IT CONSIDERED POSITIVE?

- **15 MM IN HEALTHY INDIVIDUALS**
- **10 MM IN PATIENTS WITH CHRONIC ILLNESS / LESS THAN 4 YEARS OLD**
- **5 MM IN HIV PATIENTS AND IMMUNOCOMPROMISED**



# OTHERS

**Q: WHAT IS THIS CALLED:**

**NORMAL SALIN 0.9% ISOTONIC  
CRYSTALLOID**

**Q: TWO INDICATION ?**

- 1) DEHYDRATION**
- 2) MAINTENANCE FLUID THERAPY**



**Q: WRITE WHAT YOU SEE IN EACH PHOTO?**

- 1. URTICARIA (HIVES)**
- 2. ANGIOEDEMA**



**A 3 YEAR OLD WITH CONSTIPATION FOR 2 YEARS.  
THE X-RAY IS SHOWN**

**1. WHAT IS THE CAUSE?**

**HIRSCHSPRUNG'S DISEASE**

**2. WHAT IS THE TREATMENT?**

**SURGERY (RESECTION AND REANASTOMOSIS)**



# OTHERS

FEVER FOR 2 DAYS WITH THROAT PAIN AND  
LYMPHADENOPATHY WITHOUT RHINORRHEA:

1- WHAT IS THE DIAGNOSIS?

**TONSILLITIS**

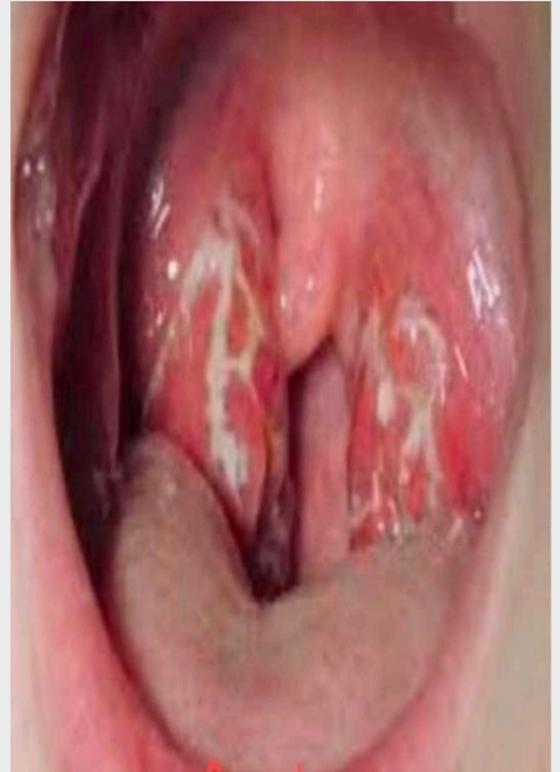
2- WHAT IS THE CAUSATIVE ORGANISM?

**GROUP A BETA HEMOLYTIC STREP PYOGENOUS**

3- MENTION 2 SYSTEMIC COMPLICATION FOR THIS  
CONDITION

**1- RHEUMATIC FEVER**

**2- POST STREP GLOMERULONEPHRITIS**



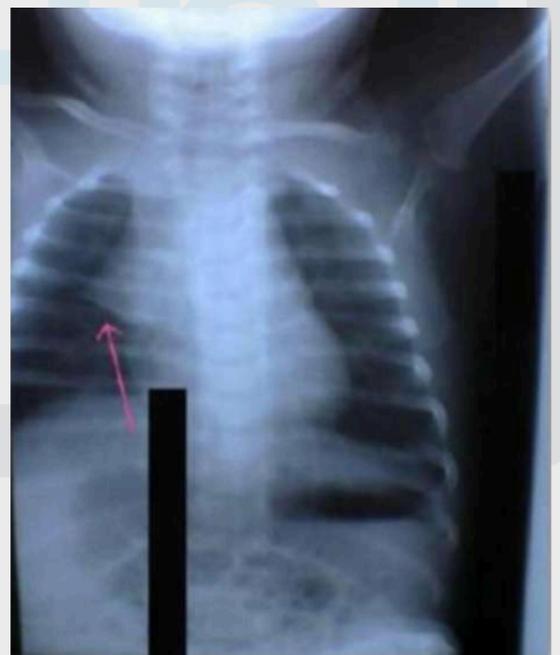
Q: THYMUS SHADOW

• WHAT'S THE NAME OF THIS SIGN?

**SAIL SIGN OF THYMUS.**

• WHAT'S THE MOST LIKELY DX.?

**NORMAL X-RAY.**



**RESUSCITATION :**

.PT WITH SEVER BLEEDING, 20KG

FLUIDS TO RESSUCTATION?

**20ML/KG=400ML**

FLUIDS BEEN USED?

**NORMAL SLAINE IN RESSUCTATION**

## OTHERS

15Y OLD MALE PRESENTED WITH BONE PAIN  
FROM MONTHS : HIGH UREA AND  
CREATININE , EGFR=40?

• A. WHAT IS THE NAME OF THIS  
CONDITION?

**RENAL OSTEODYSTROPHY (SECONDARY  
HYPERPARATHYROIDISM DUE TO CHRONIC  
KIDNEY DISEASE).**

2 LINES OF TREATMENT:

1. PHOSPHATE BINDERS

2. VITAMIN D SUPPLEMENTS

2 COMPLICATIONS OF THIS SITUATION:

**BONE FRACTURE**

**GROWTH RETARDATION**

**ANEMIA**



PRESENTED WITH 2 WEEKS OF RHINORRHEA  
AND SNORING AT NIGHT:

• A. WRITE 2 PHYSICAL FINDINGS:

1. **ADENOID FACIES (OPEN MOUTH,  
ELONGATED FACE).**

2. **MOUTH BREATHING.**

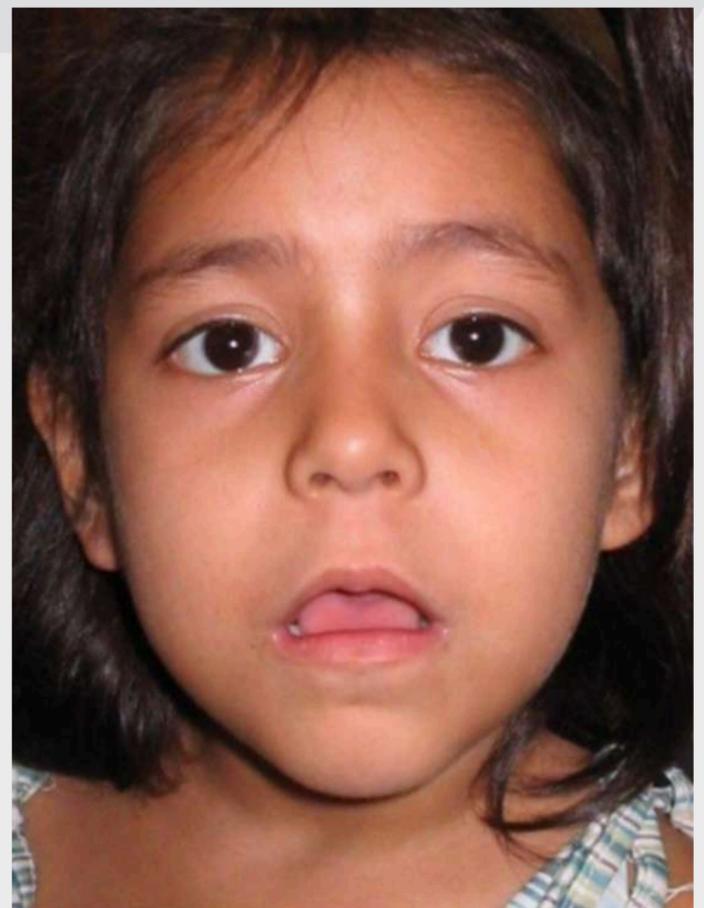
• B. WHAT IS YOUR DIAGNOSIS?

• **ADENOID HYPERTROPHY.**

• C. WRITE 2 COMPLICATIONS OF THIS  
SITUATION:

1. **OBSTRUCTIVE SLEEP APNEA (OSA).**

2. **CHRONIC OTITIS MEDIA WITH EFFUSION.**



# OTHERS

WHAT YOU FIND IN THIS PICTURE?

- **INTRAVENTRICULAR HEMORRHAGE**

2 COMPLICATIONS OF THIS CONDITIONS?

1. **PERIVENTRICULAR LEUKOMALACIA**
2. **DEVELOPMENTAL IMPAIRMENT**



NEWBORN WITH BILIOUS VOMITING

1. CAUSE OF THIS X-RAY FINDING:

- **DUODENAL ATRESIA**

2. TWO OTHER CAUSES OF FAILURE TO PASS MECONIUM?

- **HIRSCHPRUNG'S AND IMPERFORATE ANUS**



DDX :

- **INTRAVENTRICULAR HEMORRHAGE**

MENTION 2 COMPLICATION:

- **SEIZURE**
- **DOUBLE DIPLEGIA**
- **CEREBRAL PALSY**



# OTHERS

**DIAGNOSIS:**

**MYELOMENINGOCELE**

**WHAT EXPECT ABOUT HEAD**

**CIRCUMFERENCE:**

**MACROCEPHALY**



**WHAT'S THE MOST PROBABLE  
DIAGNOSIS?**

• **PERI-VENTRICULAR CALCIFICATIONS**

**2- DESCRIBE WHAT YOU SEE?**

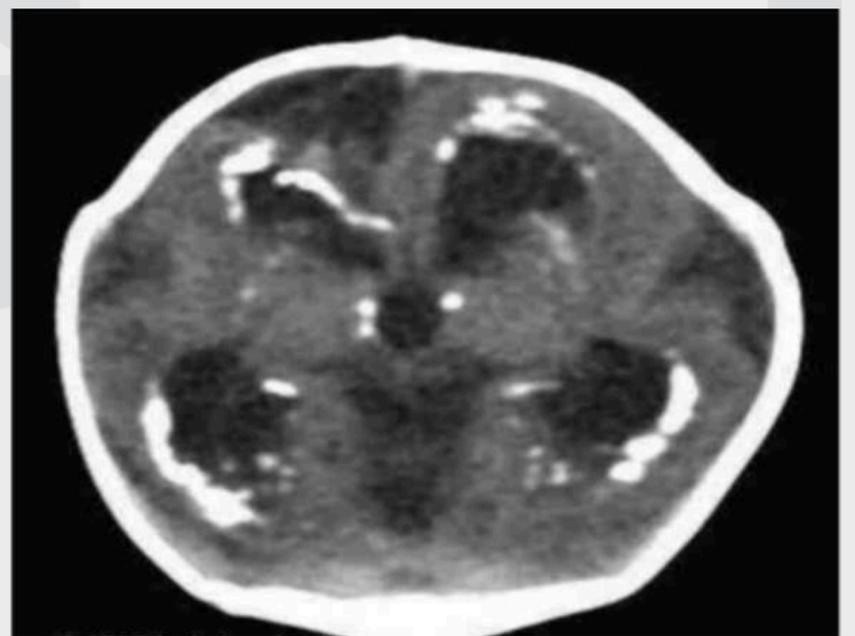
• **CONGENITAL CMV**

• **SOME ANSWERED TUBEROUS  
SCLEROSIS, SINCE IT CAUSES BRAIN  
CALCIFICATIONS.**

• **BUT REMEMBER:**

• **CONGENITAL CMV >> C- SHAPED  
"PERIVENTRICULAR CALCIFICATIONS"**

• **CONGENITAL TOXOPLASMOSIS >>  
DIFFUSE "SCATTERED" INTRACRANIAL  
CALCIFICATIONS**



## OTHERS



DIAGNOSIS :

**KWASHIORKOR**

MAIN PROBLEM :

**LOW PROTEIN INTAKE**



DIAGNOSIS :

**MARASMUS**

MAIN PROBLEM :

**LOW CALORI INTAKE**

فَا دَامَ الْعَبْدُ يُلْحَقُ فِي الدُّعَاءِ، وَيَطْمَعُ فِي الْإِجَابَةِ مِنْ غَيْرِ قَطْعِ الرَّجَاءِ، فَهُوَ قَرِيبٌ مِنَ الْإِجَابَةِ، وَمَنْ أَدْمَنَ قَرَعَ الْبَابَ يُوشِكُ أَنْ يُفْتَحَ لَهُ.

- الحافظ ابن رجب.

سبحانك اللهم وبحمدك نشهد أن لا إله إلا أنت نستغفرك ونتوب إليك

لا تغفلوا عن أهل الأكاديمي من دعاءكم الصادق

١٦-رمضان -١٤٤٧هـ