

Mini OSCE Pediatrics

AWN - Group A

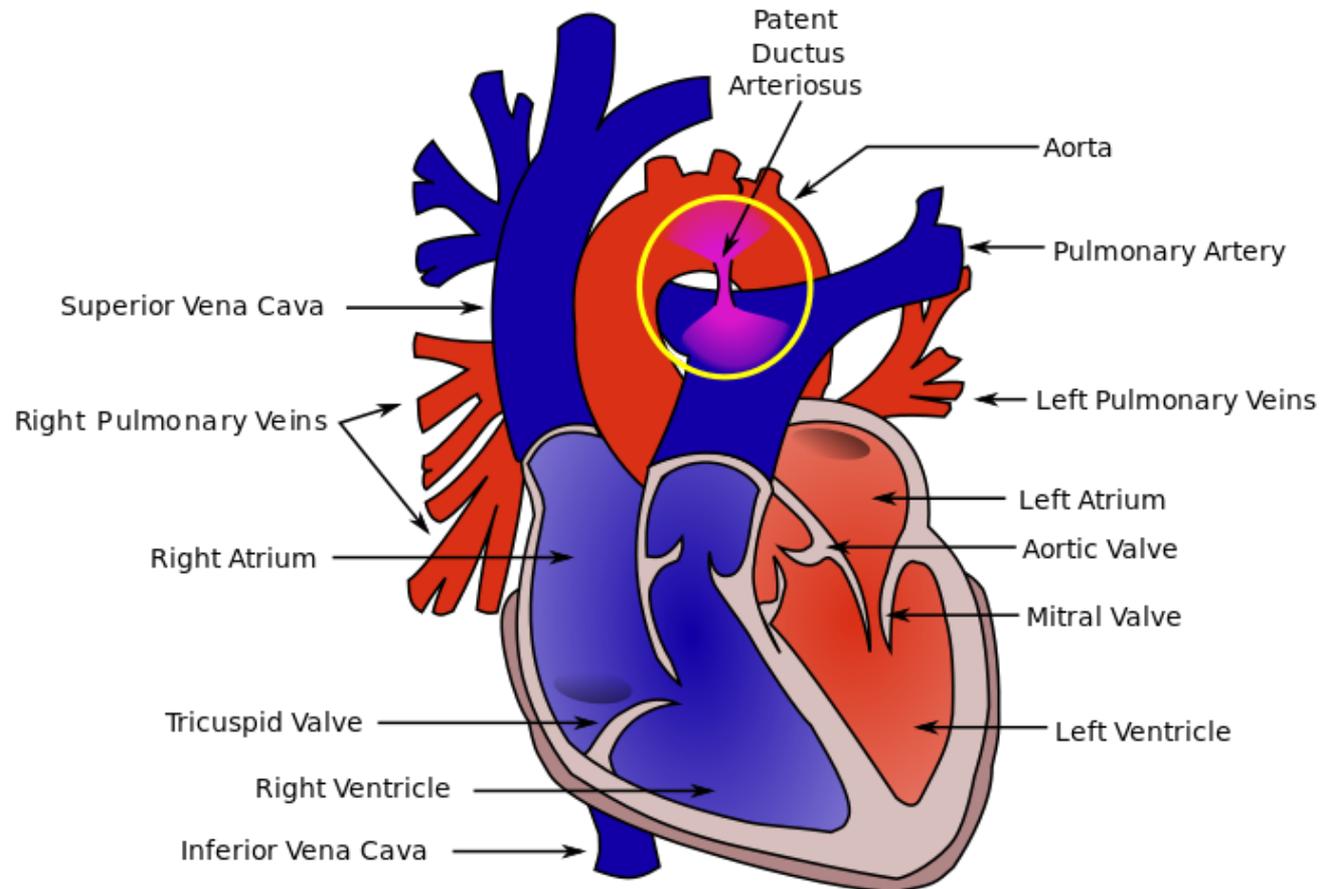
11-5-2017

Notes

- 10 pics in the exam
- Each 1 minute (total time 10 min)
- For each pic two Qs
- 1 bonus Q (TOTAL 21 MARKS OUT OF 20)
- ALL the Qs answered by Dr. Meral

Q1) What is the cardiac anomaly?

Q2) give one therapeutic intervention ?



- 1) PDA
- 2) SURGICAL LIGATION OF PDA

Q1) What's the sign called ?

Q2) Give one disease you can see this sign?



- 1) scissoring sign
- 2) spastic CP

Q1) what's called ?

Q2) name one complication



- 1) myelomeningiocele
- 2) Arnold-Chiari malformation „
hydrocephalus

Q1) identify the MO

Q2) Give one example for the MO



- 1) gram positive bacilli
- 2) listeria spp. ,, clostridium spp.

Q1) whats the eyes sign called ?

Q2) Give one disease that cause this
sign



- 1) exophthalmos
- 2) hyperthyroidism ,, crouzon syndrome

Q1) This device is called ?

Q2) used for what ?



- 1) self inflating bag (ambu bag)
- 2) apnea ,, resuscitation ,, croup + epiglottitis

Q1) Identify this reflex
Q2) disappeared at?



1) Gallant's reflex

2) 4-6 months ! (according to dr.meral)

Note: many students answered 9-18 months

ABG

Q1) whats is the result?

Q2) give TWO examples for this condition

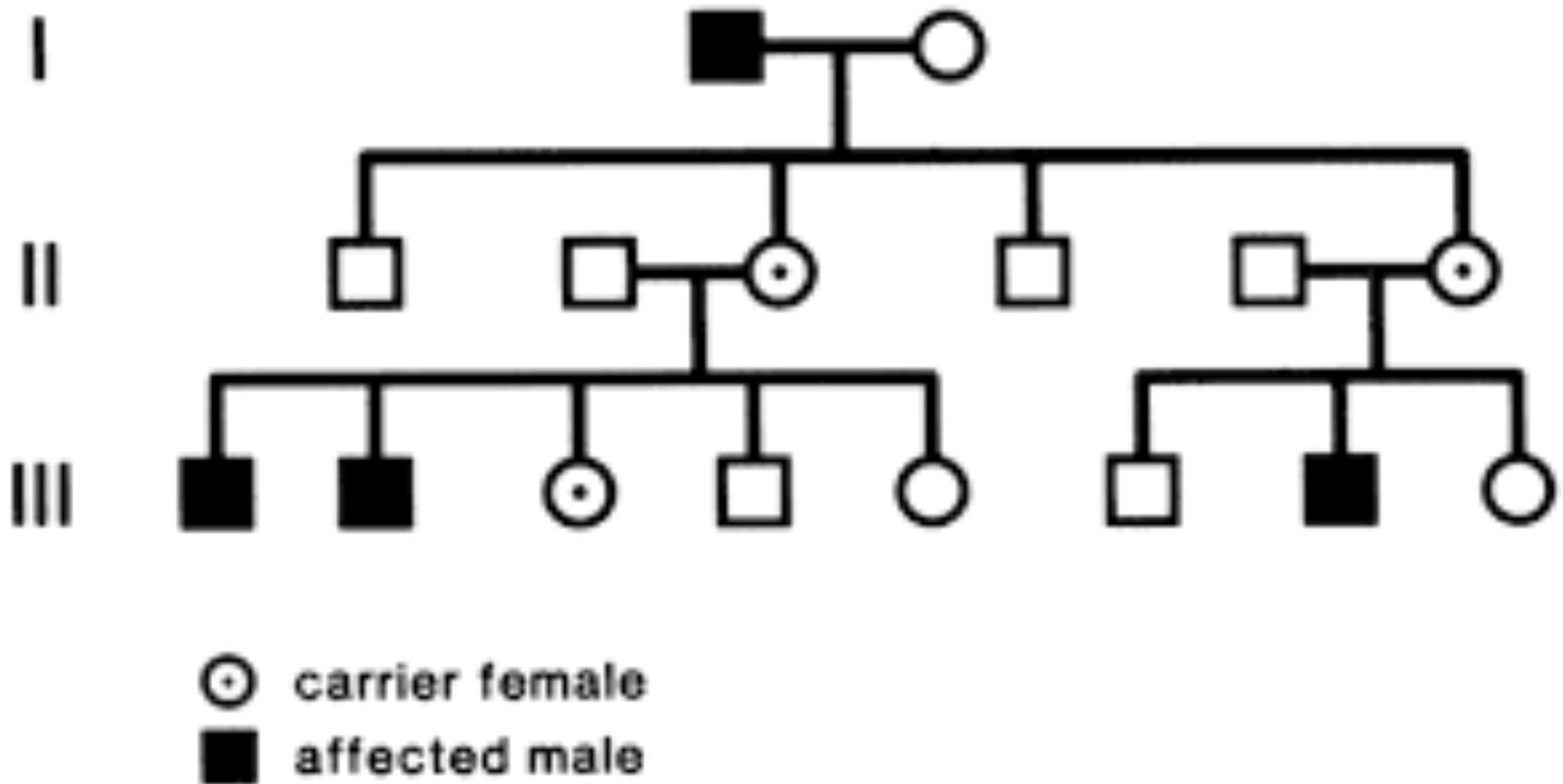
- PH: 7.05
- PCO₂: 34
- Hco₃: 9

- The rest normal

- Q1) metabolic acidosis
- Q2) DKA ,, Lactic acidosis ,, sever diarrhea ,, uremia

Q1) mode of inheritance?

Q2) give TWO examples

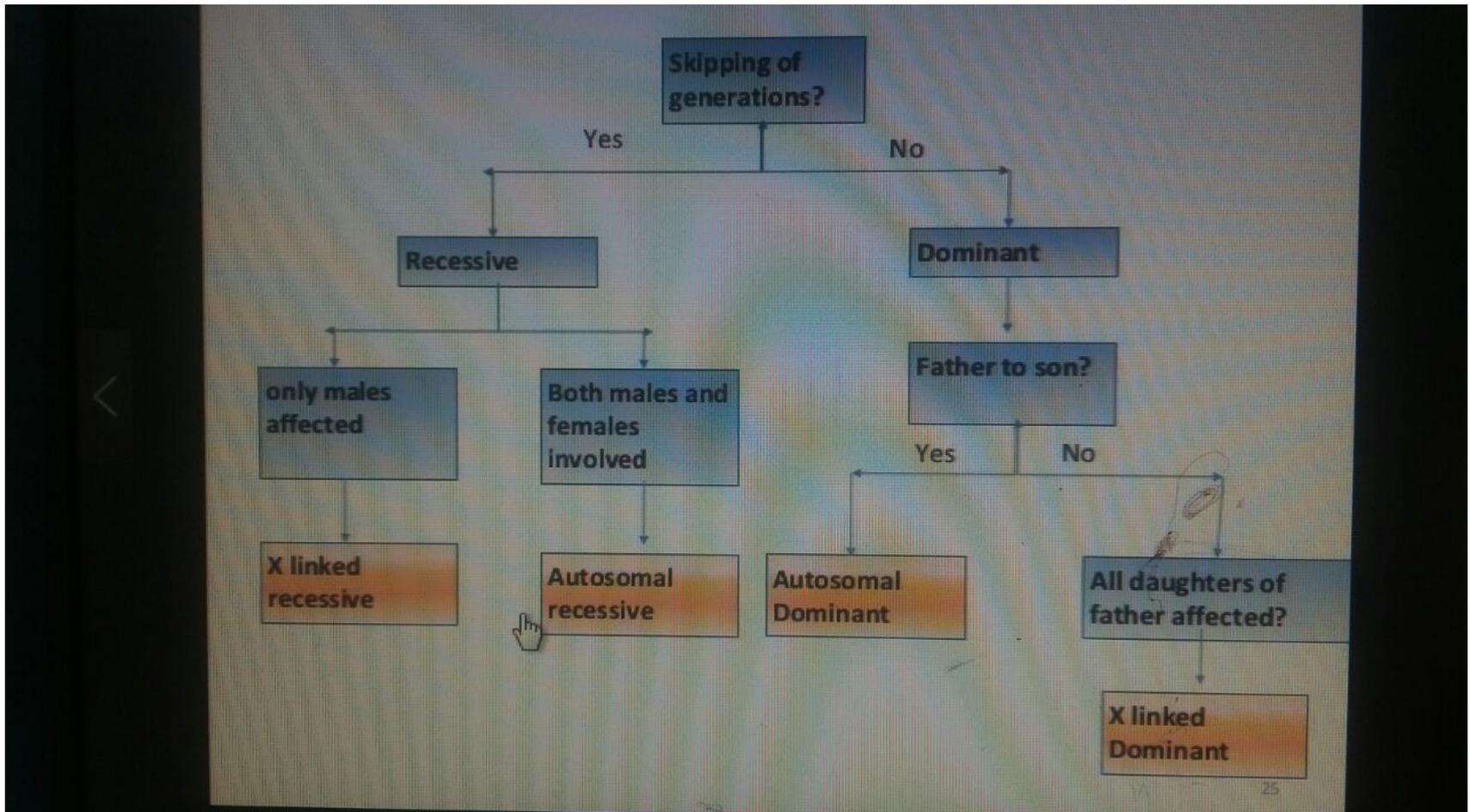


- 1) X-linked recessive
- 2) G6PD Deficiency ,, hemophilia a | b

Note : (G6PD deficiency) MUST be written like this ,, G6PD alone wrong

next pic while help you solve pedigree easily

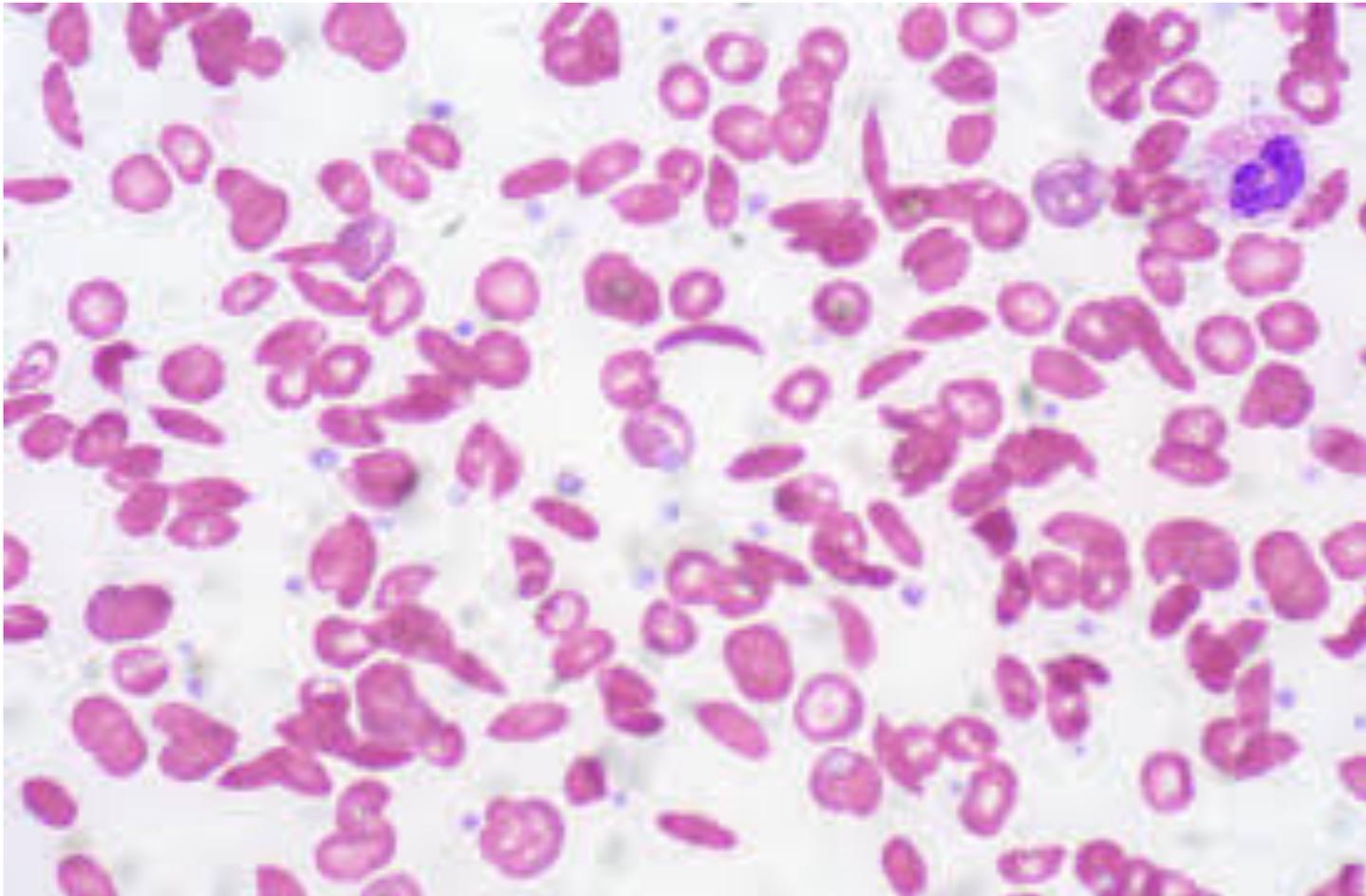
Pedigree summary



Q1) this blood film shows ?

Q2) type of inheritance ?

Q3) give one complication



- 1) sickle cell RBCs (SCA)
- 2) AR
- 3) Vaso-occlusive crises ,, hemolytic crises

Done by : Adnan Al-Sarraf

Good luck all 😊



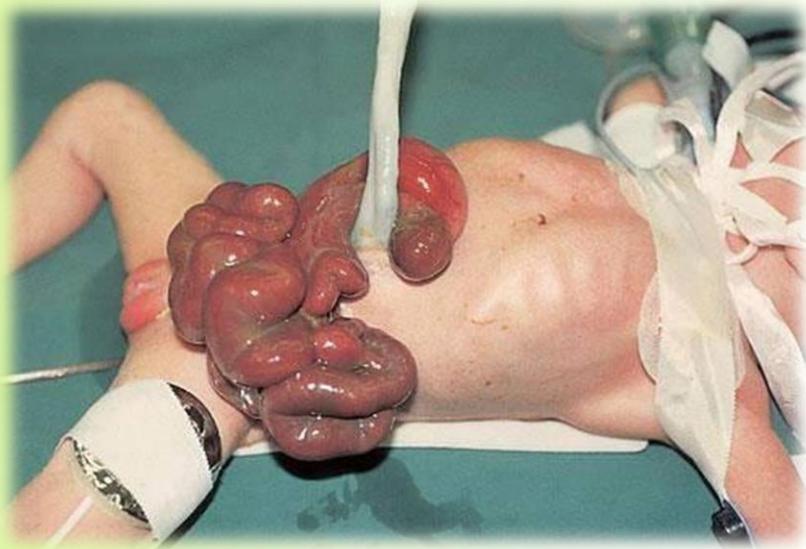
*** Ehsan Pediatrics**
miniOSCE & OSCE Qs



MiniOSCE

*Q1: What is your Dx?

A



B



Answer:

A:Gastroschisis.

B:Omphalocele

* **Q2:** A 4 year old Child came with drooling and dysphagia.

- 1) What is your Dx?
- 2) What is the management?

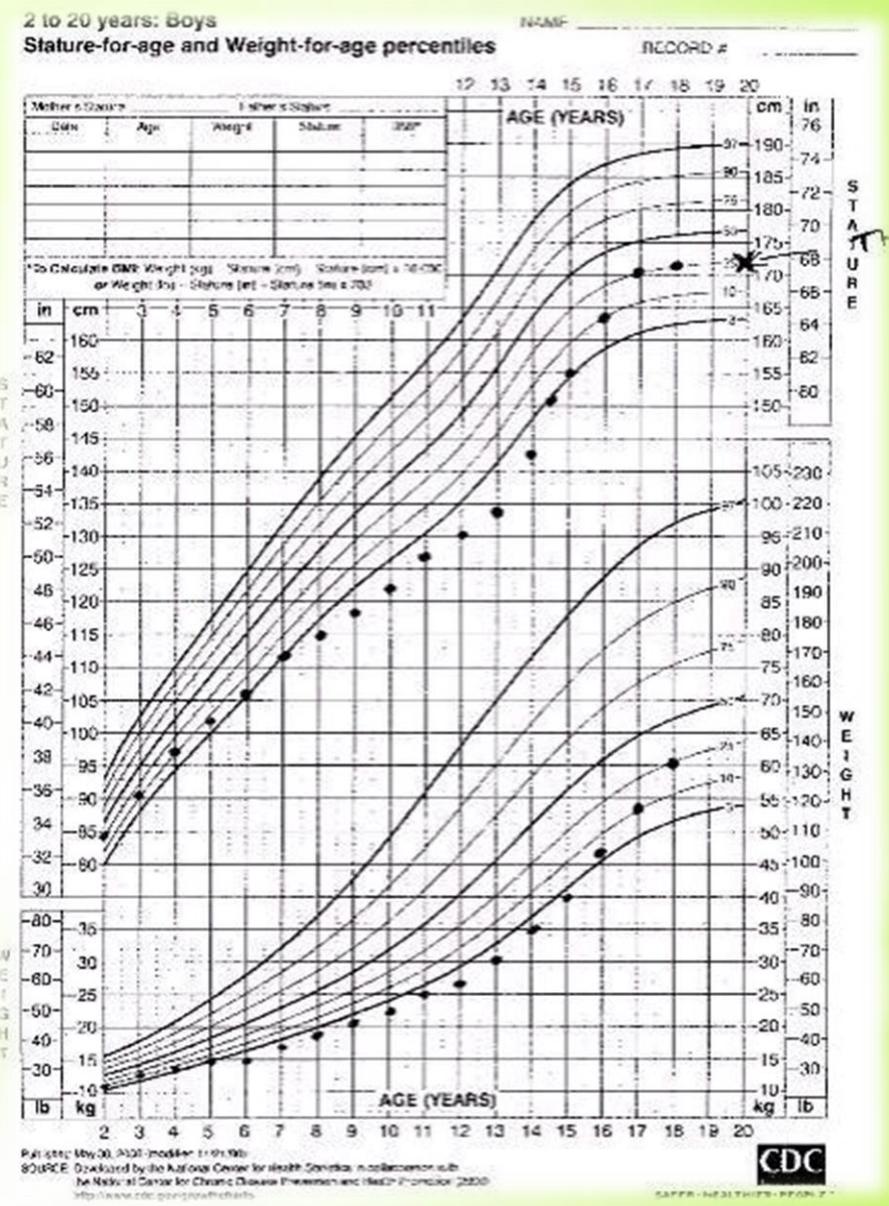


Answer :

- 1) Foreign body ingestion
"coin"
- 2) Endoscopy

* **Q3:** This chart for a patient who didn't receive any treatment. What is the cause behind his growth delay?

Answer :
Constitutional delay growth



* **Q4:** A Nurse is giving injection to a 2 month old baby in his Rt thigh. What is she giving him?

Answer :
Vaccine :
DTP, HIB, HBV and
IPV



*Q5: What is the name of this sign ?

Answer :
Scissoring



*Q6:

1) What is the name of this sign ?

2) What is the association defect ?

Answer :

1) Club foot

2) Meningomyelocele
or spinal cord defect



*Q7: What are these devices ?

A



B



Answer:

A: Inhaler

B: Spacer

***Q8:** A 6 month old child, his mother brought him when he had swollen fingers.

1)What is the sign ?

2)What's the diagnosis?

Answer:

1)Dactylitis

2)Sickle cell anemia



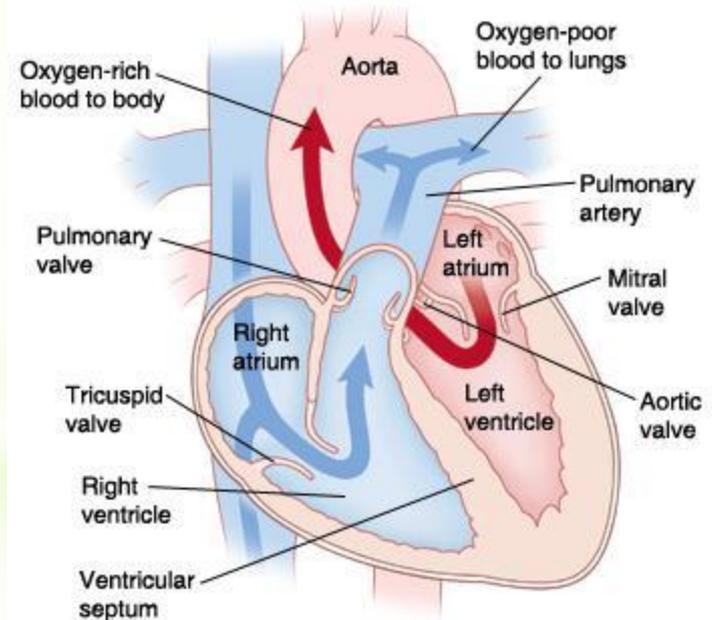
***Q9** : A question about down syndrome pt , what is the chromosomal abnormality during meiosis ?

Answer :

non disjunction of chromosome 21

* **Q10:** A question about congenital heart disease the pt was cyanosed, the diagnosis depends on the O₂ sat ..(high in Aorta and low in Pulmonary artery) **Can't remember the numbers**

Answer:
 TOF , other choices are acyanotic heart diseases





OSCE

* Group 1



History : A 11 yr old child presented with syncope ,
Dx : cardiomyopathy

P/E: Abdominal examination

Counselling:

a 6 yr old child came with headache, vomiting and fever (38C) and the result of his CSF analysis suggests bacterial Meningitis!

- 1- What are the normal ranges for protein, WBCs , RBCs and glucose in CSF ?
- 2-What are the most common bacteria that cause meningitis ?
- 3- what are the signs to confirm your Dx?
- 4- What are the complication?
- 5- What is the treatment ?



*Group 2

History : SOB , Dx: congenital heart disease “Down syndrome”

P/E: Cerebellar examination

Counselling: Neonatal Jaundice



**COURSE COORDINATOR: ANAS ABU
HAZEEM**

**EHUSAN PEDIATRICS OSCE &
MINIOSCE**



MINI - OSCE

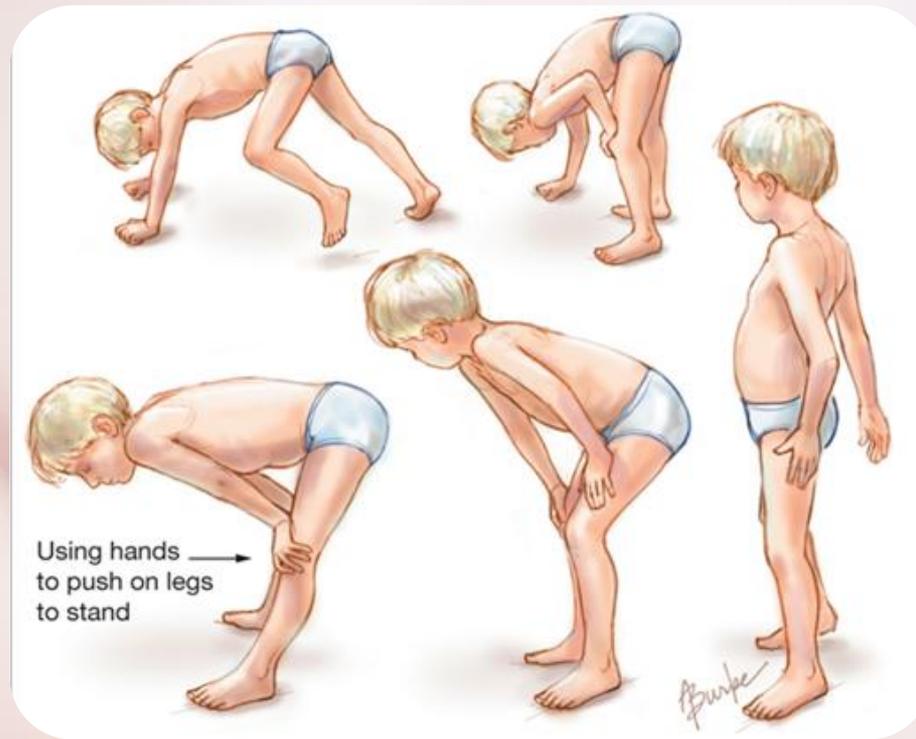


Q1: A 16 year old girl came to your clinic with primary amenorrhea & delayed puberty.

- A) What is this syndrome, what is the chromosomal pattern?**
- B) Which cardiac lesion do you want to rule out?**

Answers:

- A) Turner Syndrome, 45 XO**
- B) Coarctation of the Aorta**



Q2:

- A) What is this sign?
- B) What Is the pattern of inheritance?

Answers:

- A) Gower sign
- B) X-linked recessive



Q3:

A) What is the criteria for the diagnosis of this disease?

B) What are the 2 most important drugs for the treatment of this patient?

Answers:

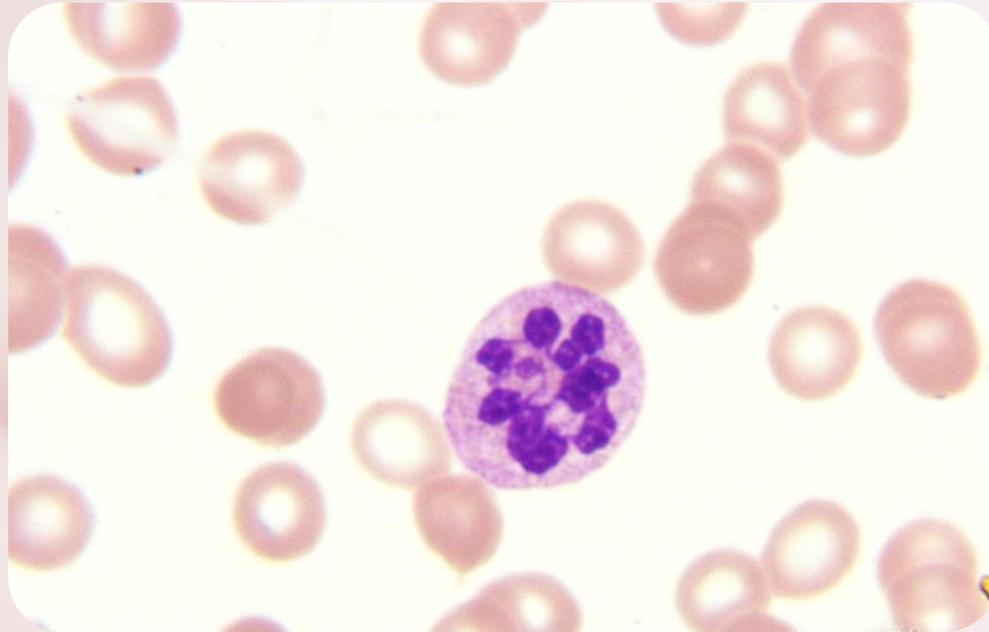
A) Fever > 5 days & 4 out of 5: 1. Polymorphous rash, 2. Cervical lymphadenitis, 3. Changes in the lips and mucus membranes, 4. Extremity skin changes (redness, swelling, peeling of the skin), 5. Non-purulent bulbar conjunctivitis.

B) Aspirin & IVIG



Q4: What is the name of this device?

Answer: Otoscope



Q5: This is a peripheral blood smear, What is the deficient nutrient?

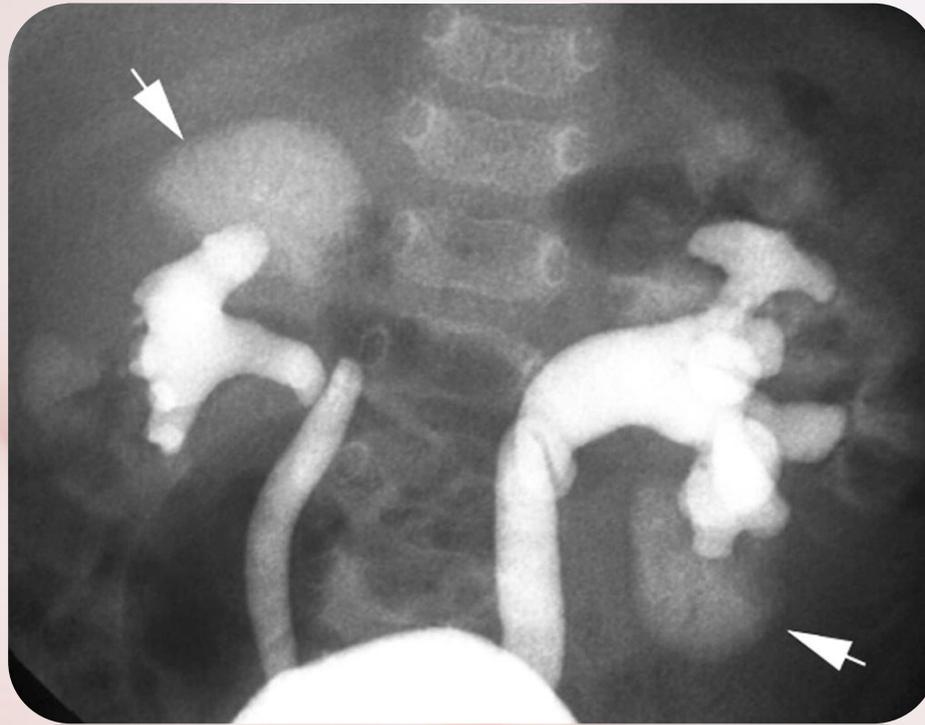
Answer: Vitamin B12



Q6: What is your diagnosis?

Answer: Esophageal Atresia

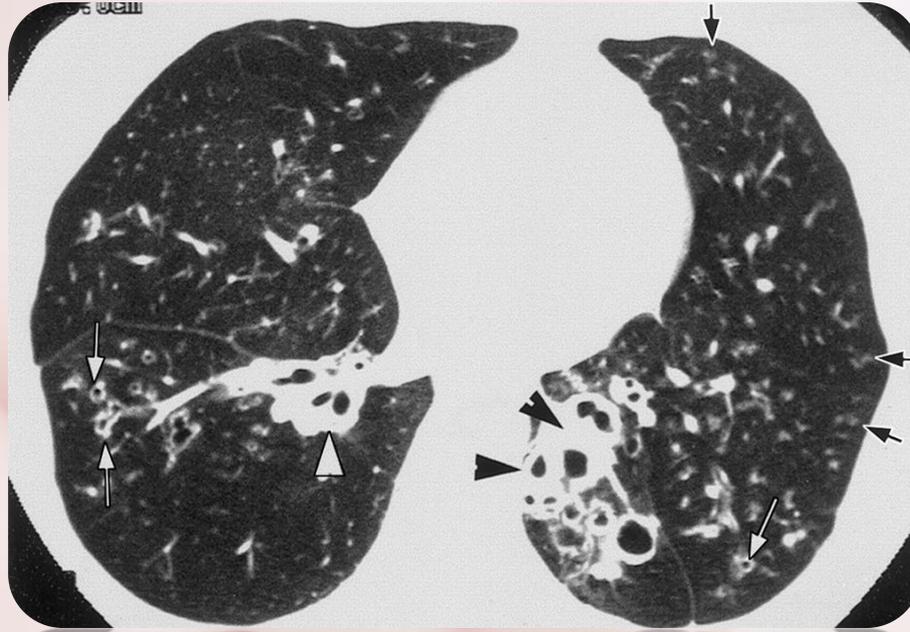
**This is exactly the same picture we had in the exam*



- Q7:**
- A) What is this technique called?**
 - B) What is your diagnosis? What is the usual presentation of this disease?**

Answer:

- A) MCUG or VCUG (Voiding cystourethrogram)**
- B) Vesicoureteral reflux, UTI**



- Q8:**
- A) Name one diagnostic test you would perform for this patient?**
 - B) What is the mode of inheritance?**

Answer:

A) Sweat chloride test or Genetic testing or Nasal Potential

Difference

B) Autosomal recessive



Q9:

A) What is this milestone?

B) At which age its expected to be found?

Answer:

A) Mature pincer grasp

B) 12 months



Q10:

- A) What is your diagnosis?**
- B) What are the lines of treatment?**

Answer:

- A) Meningococemia**
- B) Antibiotics, Fluids, Inotropes (Any 2 of the 3 is enough)**



Group 1 - History

Hx – A 12 year boy is referred to your clinic with a Failure to thrive, suggested questions:

- What is the patient's weight, Height, & Hc? The patient's weight was below the 3rd percentile, Ht & Hc are both appropriate for age.
- What was his weight at birth? 3.5 kg. Is he pre- term or full term? Full term
- When was his problem noticed & how was the progression (rapid/ gradual drop in weight)?
- What are the parents heights? Appropriate
- Are there any Dysmorphic features? No, Are upper limbs & lower limbs proportional? Yes
- What does he eat? Only milk formula, no solid food has been introduced.
- How does the mother prepare the formula? 2 spoons in 200 cc (very dilute).
- Could he have any psychological problem (neglect, abuse, ..)?
- Does he have:
 - Pallor? No
 - Diarrhea? No Bloody stools? No Vomiting or regurgitation? No
 - Chronic/ recurrent respiratory problems/ nasal polyps? No
 - Excessive sweating with feeding, cyanosis, or heart diseases? No
 - Any congenital disease (e.g. TORCH)? No NICU admission? No
 - Any chronic infection (especially UTI, sinusitis, ..), fever, or chronic disease (Anemia, cancer)? No
- Is there a family history of FTT, Anemia, Cystic Fibrosis, Celiac sprue, Inflammatory bowel disease, Malabsorption, VUR, Hormonal diseases, Chromosomal or genetic diseases, sibling with FTT, Metabolic Diseases, Immunodeficiency, early death? No
- Hx of Vaccination, Allergy, Admissions, Trauma.

Group 1– Physical Exam

Perform a Respiratory Examination



Group 1 - Counseling

1. **What are the benefits of Breast feeding for the mother & her baby?**

1. **For the baby:** compared to formula, milk has:

1. Promotion of immunity (immunoglobulins)
2. Compared to formula, Breast milk has:
 1. **More Vit. C, A, PUFA, lactose** compared to formula
 2. Less electrolytes e.g. sodium > lower renal solute load
 3. Same amounts of fat, calories but much better absorption (100% compared to 60% for the formula)
 4. **Less quantities of protein, Fe, Ca, Zinc** but Better utilization of protein, Fe, Ca.
 5. Higher whey: casein ratio; more digestible.
 6. Less allergenic

2. **For the mother:**

1. Decreases postpartum hemorrhage (because of oxytocin).
2. Aids in gaining the pre-pregnancy weight.
3. Establishment of Bonding & Attachment.
4. Lower risk of breast cancer, ovarian cancer, and endometrial cancer.
5. Lower risk of osteoporosis.



2. **How does the mother know her breast feeding is enough?**

1. 8-12 feeds per day to 6-8 weeks of age
2. Frequent swallowing
3. Adequate urine output. The baby should void each time after feeding (2-6 times/day).
4. Adequate stooling. Note : breast fed babies tend to pass stool more frequent than formula babies .
5. Weight loss in the 1st week should not exceed 8% of BWt, Weight gain after 1 week 15-30 grams/day.
6. Contentment “sleep after feeding” 1.5-2 hours after feeds.

3. **What is the meaning of exclusive breastfeeding?**

Breastfeeding exclusively, no solid foods or even water.

Group 1 - Counseling



5. **Explain, what is the correct method of breast feeding?**

- A. Position: Cradle, footy hold, or lying down
- B. Frequency: every 2-3 hours (8-12 times per day)
- C. Duration: 15-20 minutes of breast feeding.
- D. One-sided or Two-sided? One-sided.

2. **What is the most common cause of Jaundice in the 2nd day of life?**

Physiologic Jaundice.

2. **Why does physiologic jaundice happen**

Increased RBC mass (Hct)

Shortened RBC life span

Hepatic immaturity

Group 2 - History

Hx – pallor of three weeks duration in a 2 years old boy , delayed weaning and poor consumption of table food.

Refer to focused History handout from the committee of human medicine =)

Group 2– Physical Exam

Perform a Cardiovascular Examination



1. What are the criteria for the diagnosis of severe dehydration?

Symptom/Sign	Mild Dehydration	Moderate Dehydration	Severe Dehydration
level of consciousness	Alert	Lethargic	Obtunded
Capillary refill*	2 s	2-4 s	>4 s, cool limbs
Mucous membranes	Normal	Dry	Parched, cracked
Tears	Normal	Decreased	Absent
Heart rate	Slightly increased	Increased	Very increased
Respiratory rate/pattern*	Normal	Increased	Increased and hyperpnea
Blood pressure	Normal	Normal, but orthostasis	Decreased
Pulse	Normal	Thready	Faint or impalpable
Skin turgor*	Normal	Slow	Tenting
Fontanel	Normal	Depressed	Sunken
Eyes	Normal	Sunken	Very sunken
Urine output	Decreased	Oliguria	Oliguria/anuria

2. **What is the approach to mild dehydration?**

Children with mild dehydration can be initially treated with oral rehydration.

Calculate the maintenance & fluid deficit (5% of body weight).

5 mL of oral rehydration solution every minute is well tolerated.

Replace ongoing losses from stools and emesis (10 cc for each stool) in addition to replacing the calculated fluid deficit.

3. **When to admit a patient with dehydration**

Severe dehydration, Altered mental status (Lethargy), Hypernatremic or Hyponatremic dehydration

Intractable vomiting

Severe gastric distention.

1. **What are the components of ORS & why was it changed**

Solution	Carbohydrate (g/dL)	Sodium (mEq/L)	Potassium (mEq/L)	Base (mEq/L)	Osmolality
Rehydralyte	2.5	75	20	30	310
WHO/UNICEF*	2	90	20	30	310

*It was changed because of increased risk of hypernatremic dehydration .
According to Dr. Anas, pedialyte is the best ORS, unfortunately it's not used in Jordan.*

Solution	Carbohydrate (g/dL)	Sodium (mEq/L)	Potassium (mEq/L)	Base (mEq/L)	Osmolality
Pedialyte	2.5	45	20	30	250



”العبد لا يترك ما يحبه ويهواه إلا ما
يحبه ويهواه“
ابن القيم



B -Group

Pulse pediatrics miniOSCE & OSCE Qs



MiniOSCE 😊

Q1:

1- Give 1 abnormality in this X_ray?

2- What is the treatment?

A1: Right tension pneumothorax.

A2: Chest tube or thoracostomy.



Q2:

Gram stain for CSF for 5 y/o Pt with meningitis.

1- Identify the microorganism?

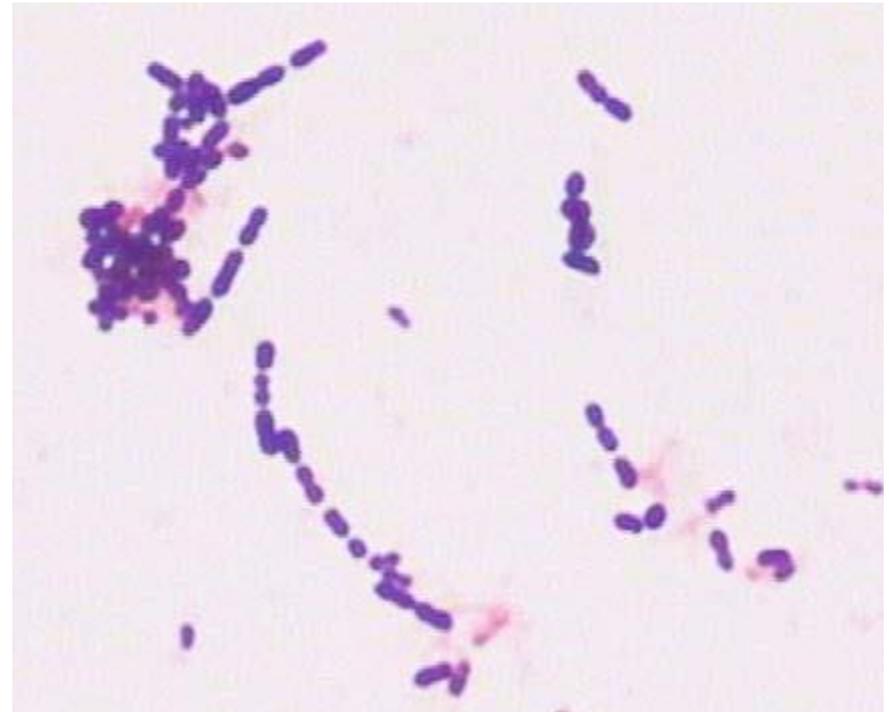
2- What is the treatment for it ?

A1: Strep. Pneumonia

A2: 1. vancomycin

**2. 3rd generation
cephalosporin**

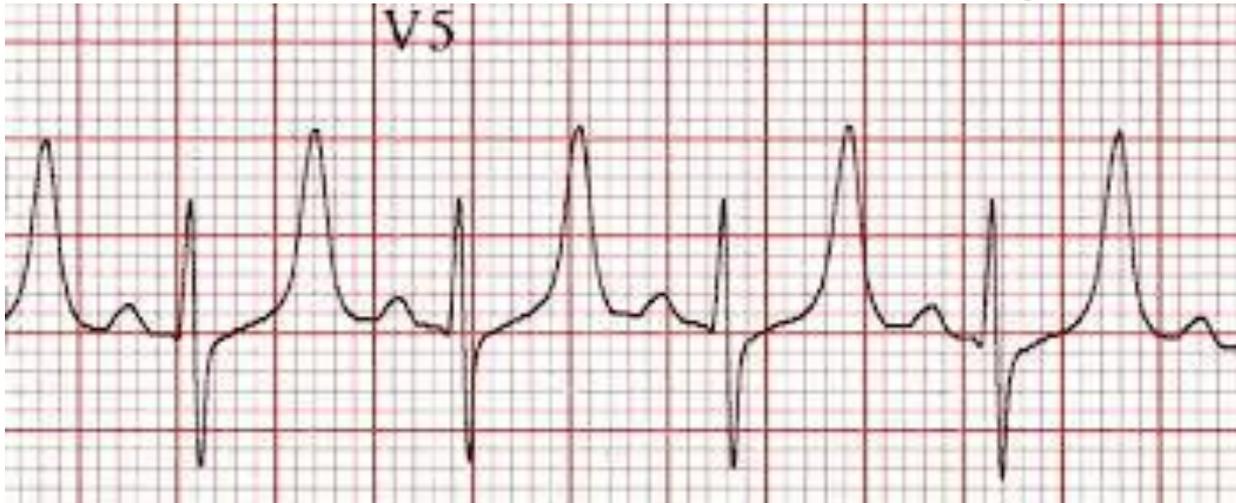
(Both drugs should be wrote)



Q3:

1- What is the electrolyte abnormality in this ECG?

2- What is the first line management?



A1: Hyperkalemia.

A2: Ca gluconate.

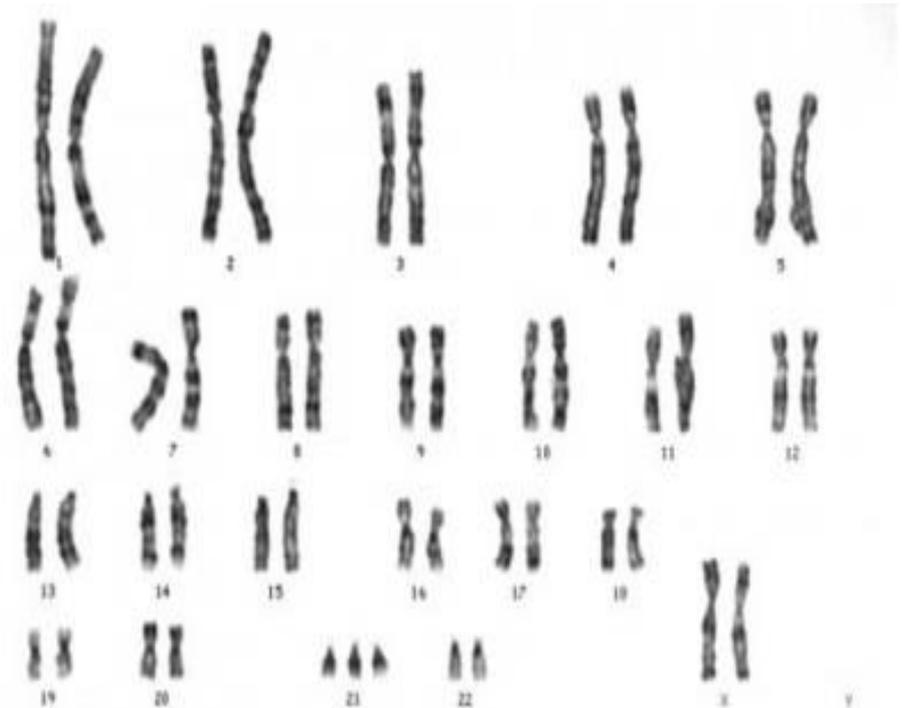
Q5:

1- What is the most specific cardiac anomaly?

2- what is the lab test you want to check?

A1: AV canal.

A2: TSH level.



Q6:

1- Mention two abnormalities in the X-ray?

2- Your Dx?

3- Rx?

A1:

1- cupping of ulna.

2- fraying of the metaphyseal region.

A2: Rickets

A3: Vit. D



Q7:

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

2- What is the route of administration ?

A1: (DTaP – Hib – IPV) – HBV –RVS

A2: IM

Q8:

1- Describe the skin findings.

2- What's the mode of inheritance?

A1: Café au lait spots.

A2: AR.

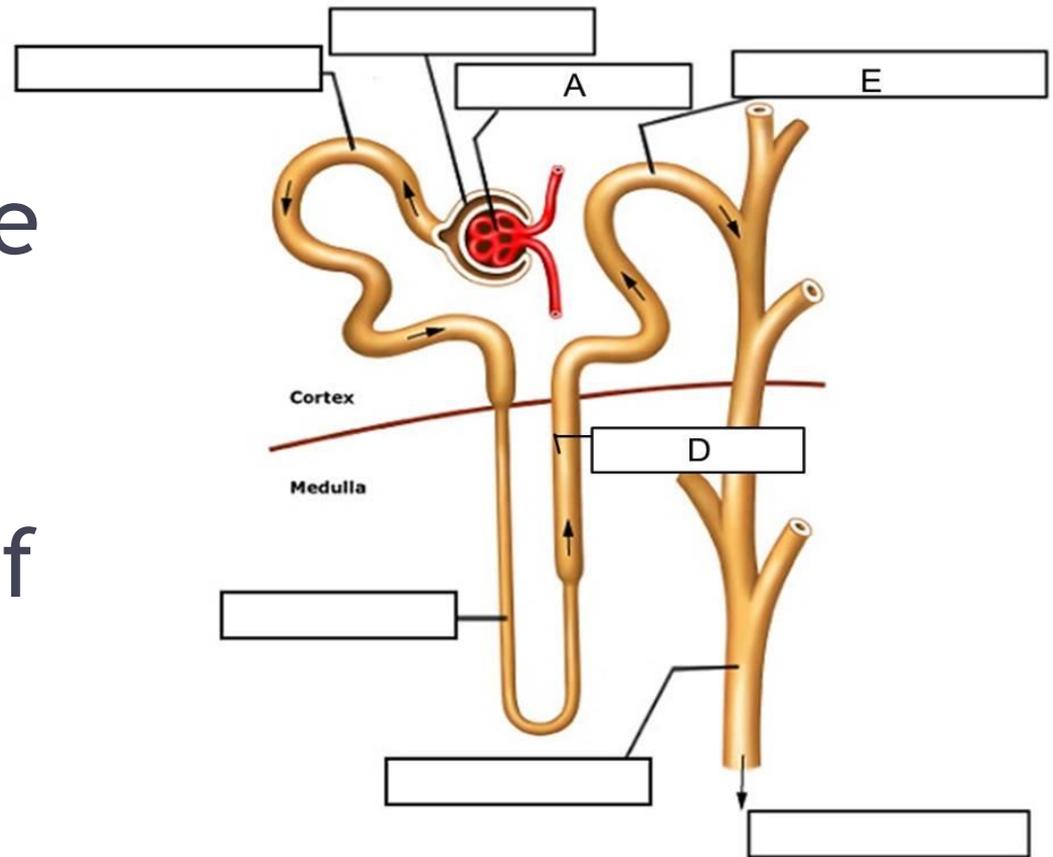


Q9:

1- What is the name of the structure labeled as A?

2- What's the site of action of Furosemide?

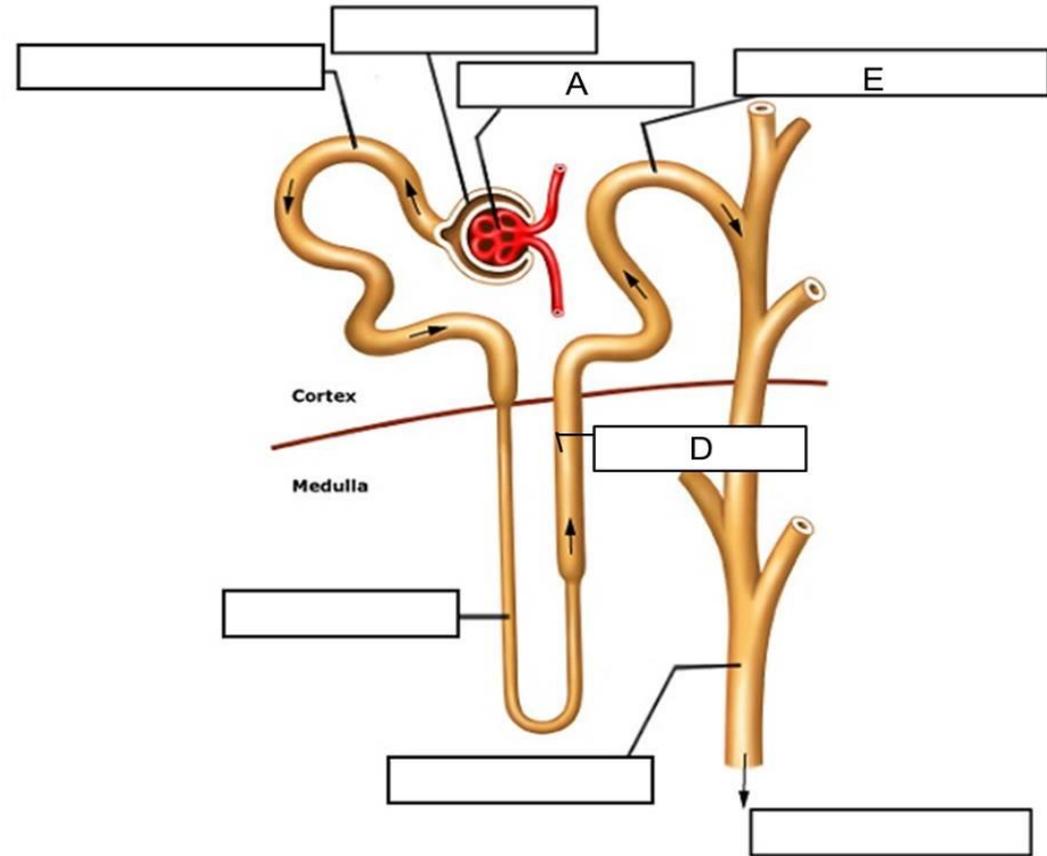
3- What diuretic acts on part E?



A1: Glomerulus.

A2: D (Loop of henle)

A3: Thiazides



Q10:

5 y/o male, presented with vomiting and fatigue, lab results:

Na \rightarrow 125

k \rightarrow 6.9

Glucose \rightarrow 42 mg/dl

1. Dx

2. Skin findings

3. Long term Rx

A1: Addison's disease

A2: Hyperpigmentation, vitiligo

A3: Corticosteroid (hydrocortisone).

OSCE 😊

GROUP 1

History: 1. 8 years old male presented with cough take full history.

2. Give 2 differentials.

...

Physical examination: perform a full abdominal examination.

...

Counseling: (neonatal sepsis)

5 days old neonate came to ER with fever for 3 days.

1. What is the diagnosis
2. Do you prefer to admit him and why?
3. Mention 4 tests to confirm sepsis?
4. What are the CBC abnormalities?
5. What's the most common cause of sepsis in this child ?
6. Mention 3 bacteria that maybe the cause?
7. How you will manage this child?
8. If it's viral what's the most common virus?
9. Do you give antiviral for this child? what is it?

GROUP 2

- ❖ History: 1. 2 month old Down syndrome baby presented with SOB, take full history.
- 2. Give 2 differentials.

...

- ❖ Physical examination: perform a full abdominal examination.

...

- ❖ Counseling: (neonatal jaundice)

3 days old baby with serum bilirubin level 20 mmol/L.

- 1- What is the cause of jaundice in this pt?
- 2- What is the most common cause of jaundice?
- 3-What do you want to ask the mother in Hx?
- 4-What is the tt?
- 5- What is the Mechanism of phototherapy? what is the range of wave length?
- 6- What ar the side effects of phototherapy?
- 7-What is the difference between: breast feeding vs breast milk jaundice?
- 8-why jaundice is alarming?
- 9-What is the screening test?
- 10- What do you know about comb test?

GOOD LUCK



Mini-OSCI exam 4th year group B 2014

Note;

all the answers are according to Dr. Rola Al.sagan

By; Mohammad AL-Hawamdeh





- 1) What's the name of rash? Purpuric rash
- 2) Give two other symptom? Abdominal pain, arthralgia

National Jordanian Vaccination Program

Age	1 m	61 day	91 day	121 day	10 m	12 m	18-24 m	6 Year
Vaccine								
BCG	☺							
DTP		☺	☺	☺			☺	☺
Polio V.		IPV		OPV	OPV		OPV	OPV
HIB		☺	☺	☺				
HBV		☺	☺	☺				
Measles					☺			
MMR							☺	

What are the absent vaccine by time?

1-at 91 day ... IPV and OPV

2-at 12 month... MMR

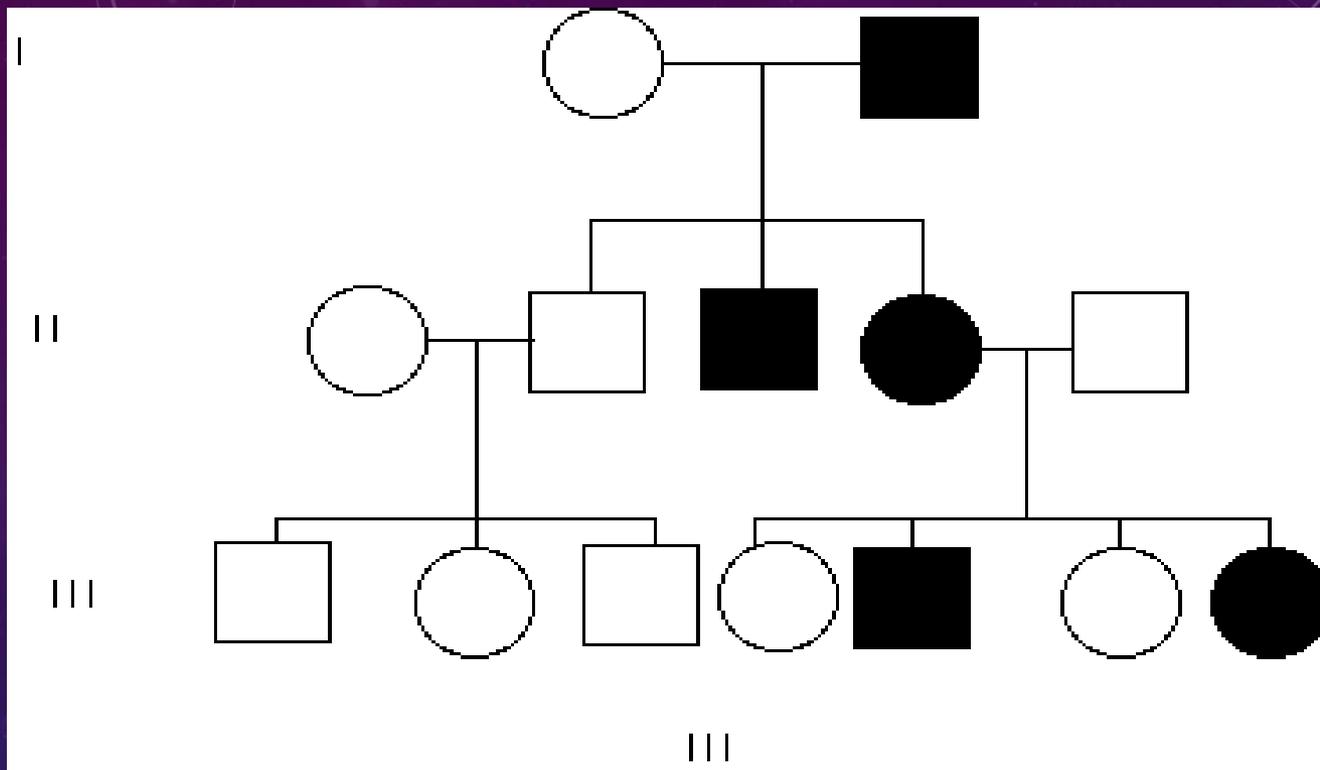
3-at 6 year... dT

**6-month old
baby presented
with O2.sat 60%**



1) Give one finding in the X-Ray?
Boot shape, oligemic lung, hyperlucent lung

2) Your Dx.? TOF



1) What's the type of inheritance? X-linked recessive

2) Give two example?

a-G6PD.deficiency

b-heamophilia "A,B"

c-chronic granulomatus defect



1) What's the name of this test? Scissoring

2) Name two findings in the examination?

a- hyper reflexia

b-clonus



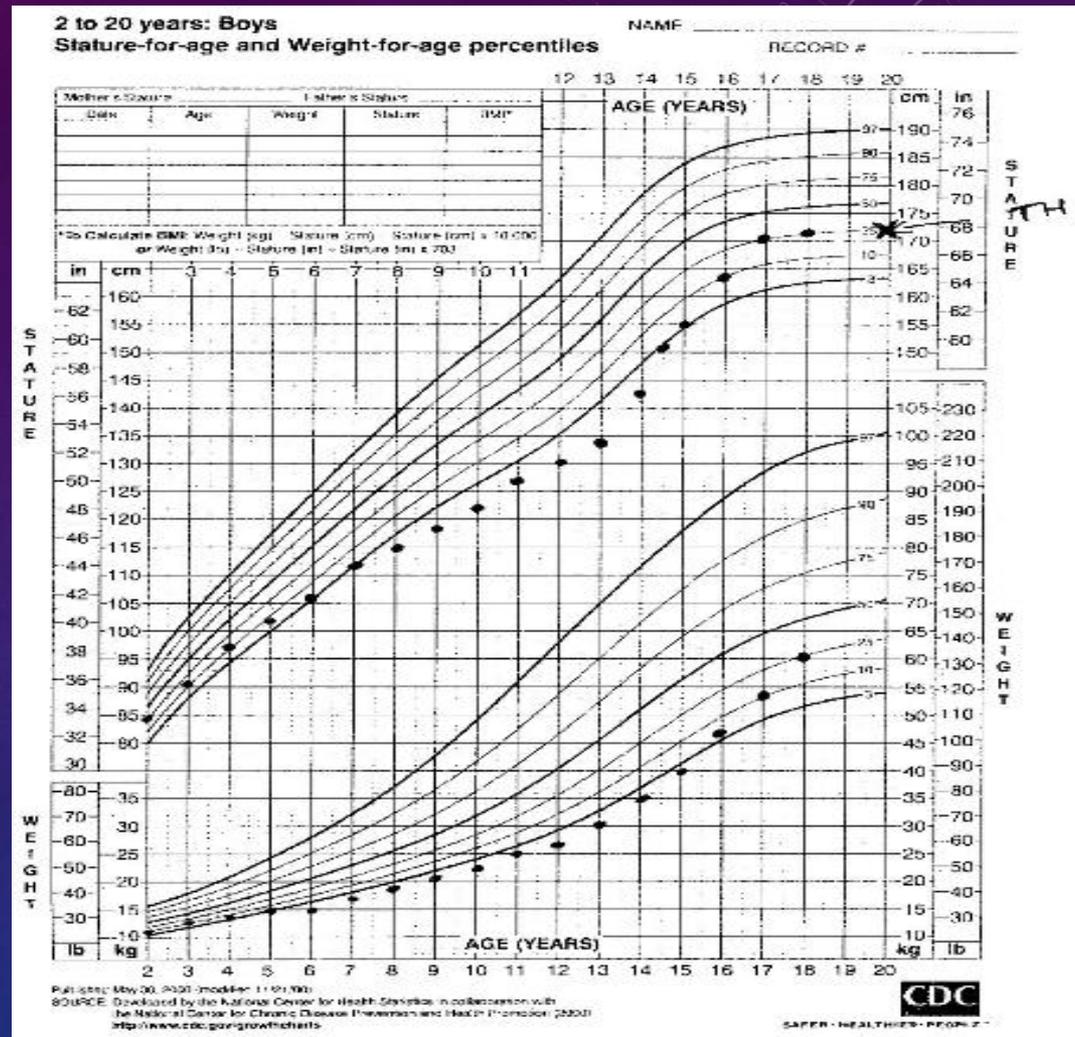
- 1) The age of this baby not more than...6...-7... Month
- 2) why? Because he sit with rounded back



1) What's the Dx.? Impetigo

2) what's the treatment? Antibiotic “ penicillin, cefotaxim,.....”

This chart for pt. not receiving any treatment...



What's the cause for this change in the chart?
constitutional growth delay



- 1) Name this type of nabkin dermatitis? Irritative**
- 2) what's the treatment? Some thing related to zink**
- 3) How to prevent? Keep dry , frequent changing of diaper , using cream**

This is CBC

RBC: 4.5×10^6

Hb: 2.8 g/dl

HCT: 5....%

MCV:.....

Rickits : 15%

- 1) What's the most important two abnormality? Low Hb , low HCT , high rickits
- 2) What's the Dx.? Hemolytic anemia

OSCE EXAM

- station 1 (history) : a 7 year old boy presented with jaundice ... Dx : Hepatitis A
- station 2 (exam) : CVS examination
- Station 3 (discussion) : a 3 year old boy presented to you with hypotonia
- Q1: what are the elements that you should ask in taking History
- Q2: what is the examination you want to do for this child ?
- Q3: if you knew that the head circumference of this child is 44 cm , do you think the cause is Central or peripheral ?
- Q4: how to differentiate between Upper motor neuron lesions and Lower motor neuron lesions ?
- Q5: What investigations you want to do ?



" على قدر نيّة العبد و همته و مُرادَه و رغبته ..
يكون توفيق الله له و إعانتَه .. فالمعونة من الله
تنزل على العباد على قدرِ همَمهم "
- ابن القيم -

