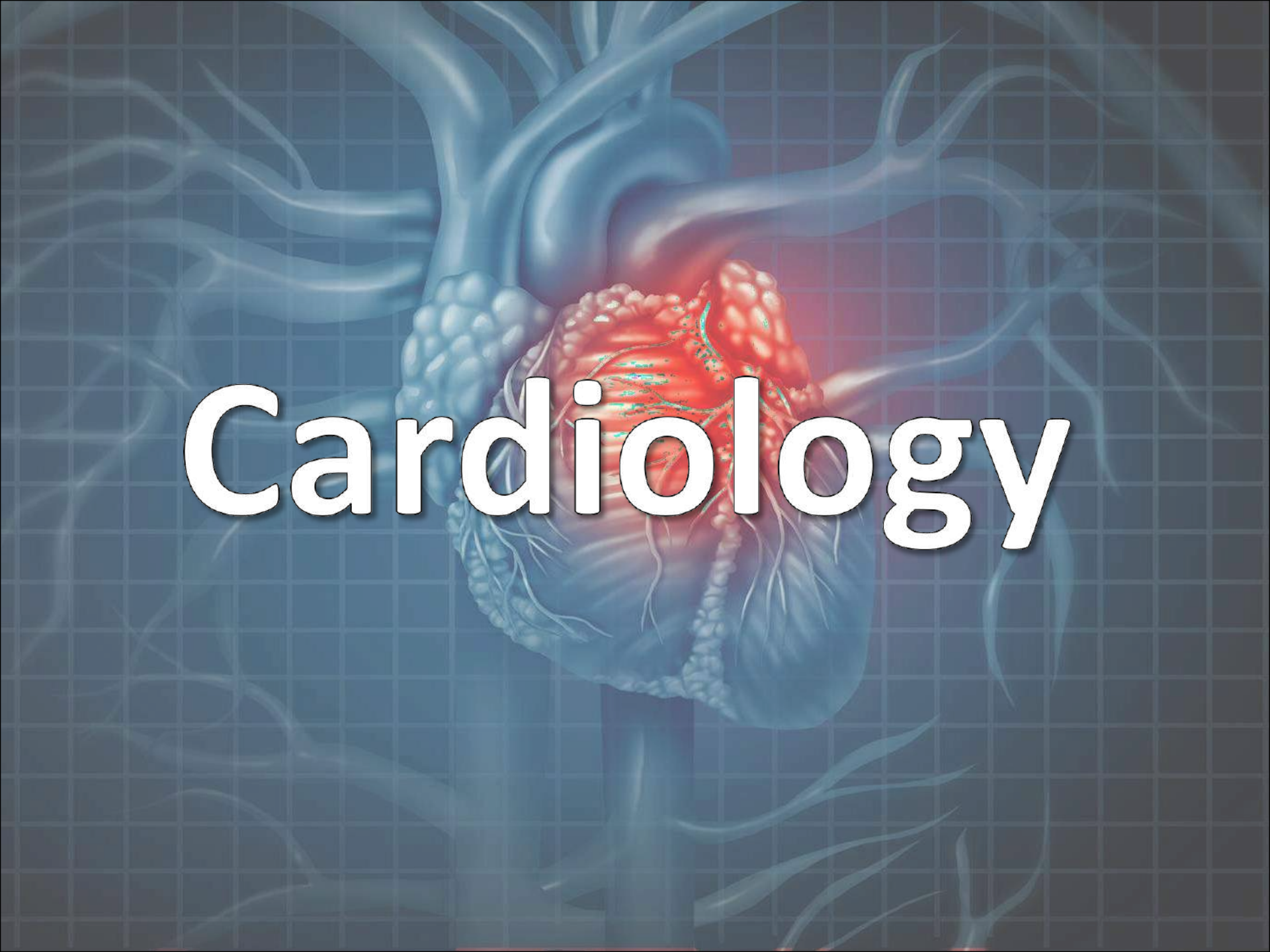
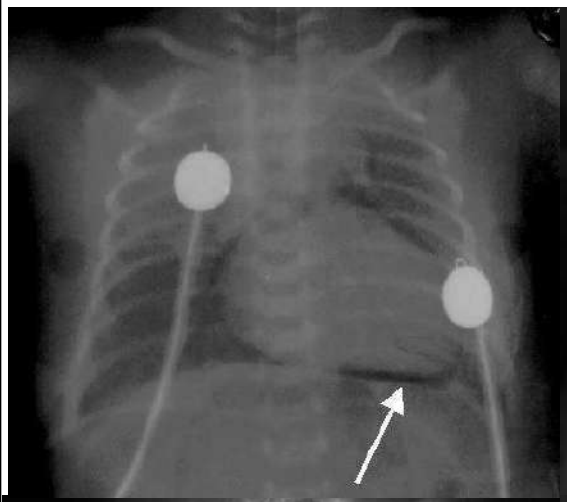

Cardiology

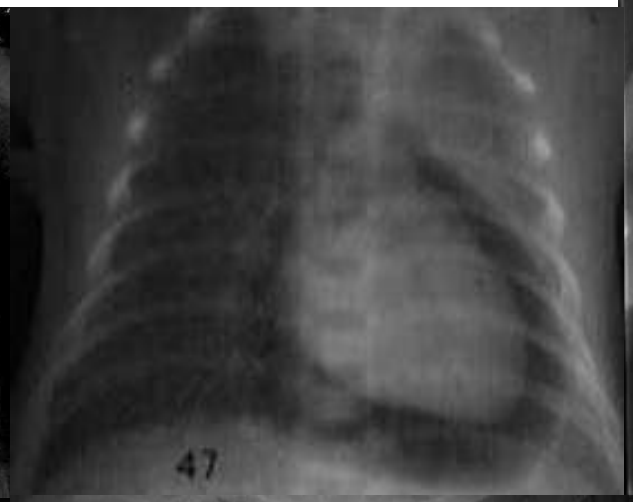
Q1- what is the diagnosis ?

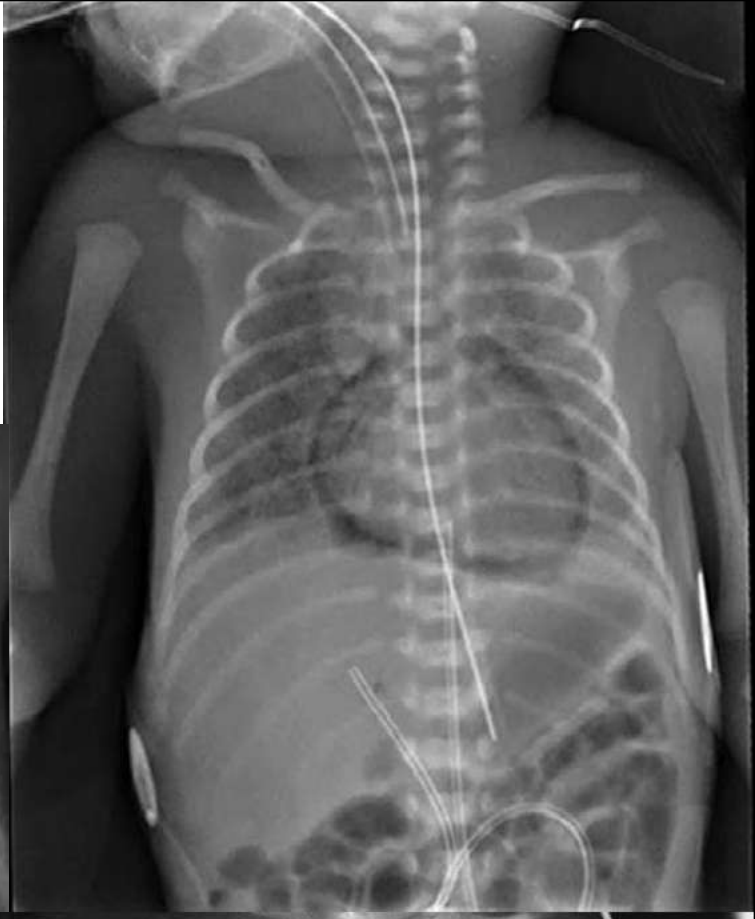
pnuemopericarduim

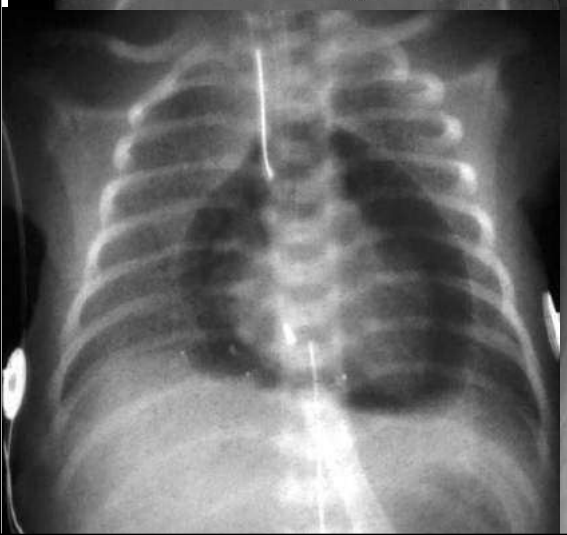
Q2- what is the Mx?

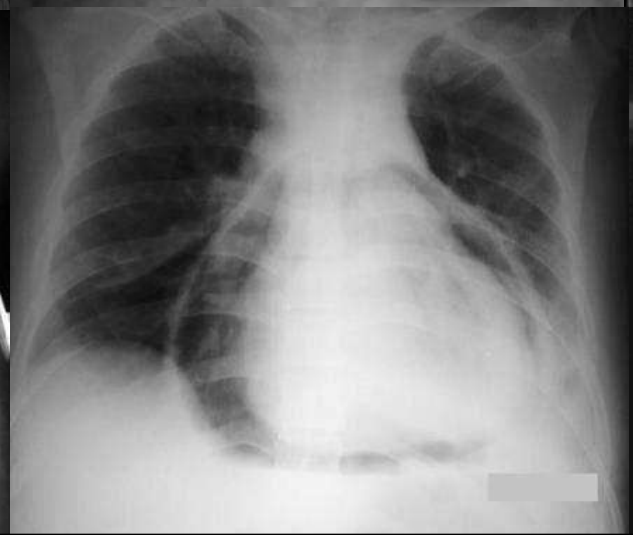
pericardiocentesis.

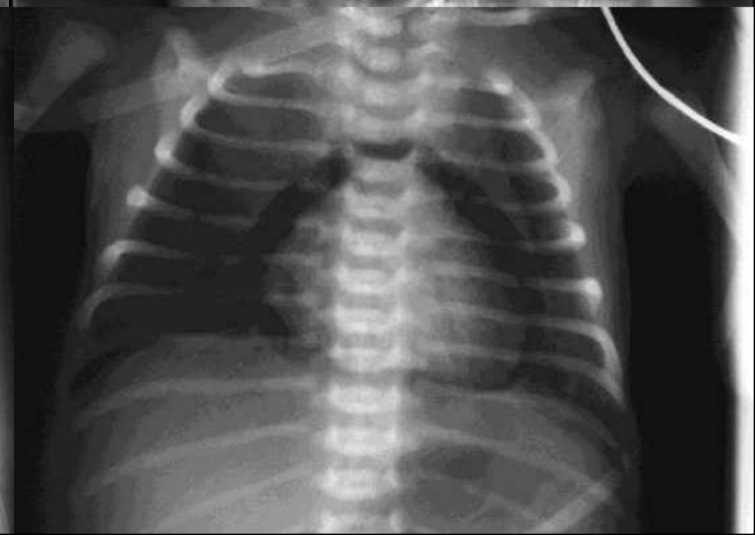












A 6 year old child previously healthy started to complain from fever , SOB, Hypotension and shoulder pain 6 days ago

Q1: What's the diagnosis?

Pericardial Tamponade (flask shaped)

Q2: Name 2 things you'll hear by auscultation.

1) Friction rub,

2) muffled heart sounds

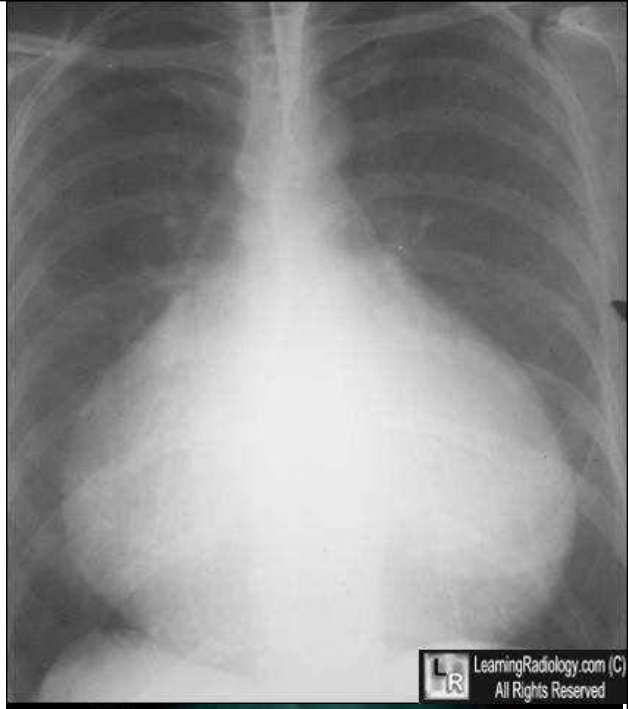
Q3: Name 2 other physical findings?

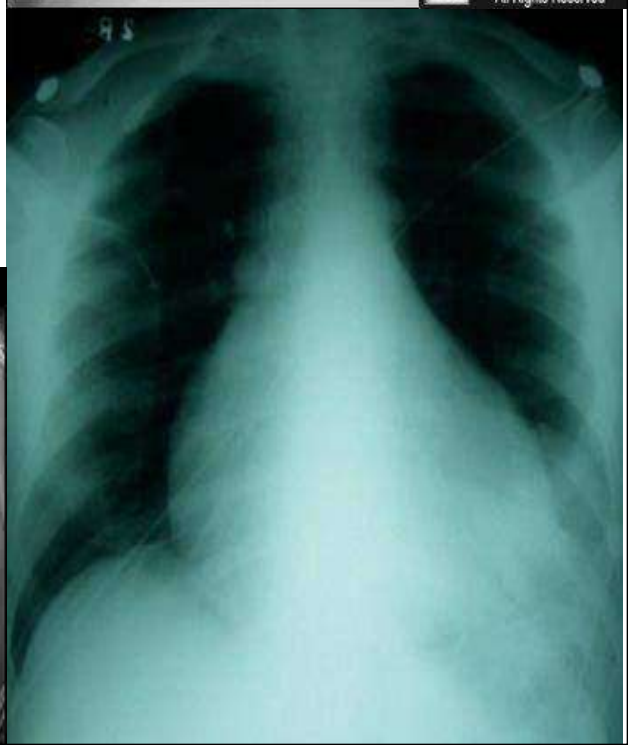
-**Classic Beck triad** of pericardial tamponade - Hypotension, muffled heart sounds, jugular venous distention

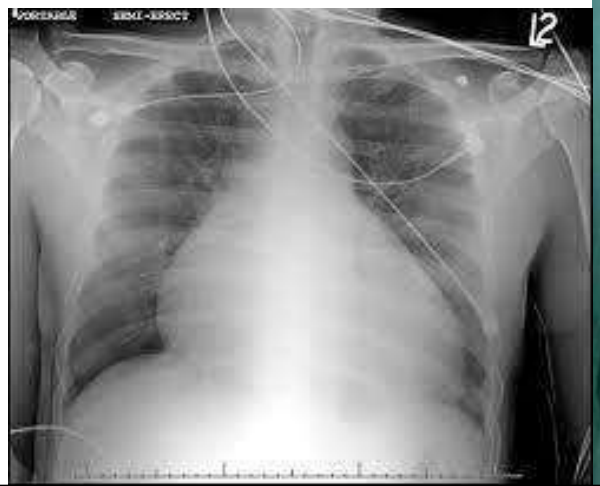
-Pulses paradoxus, tachycardia, friction rub

Q4: CXR finding?

- Cardiomegally







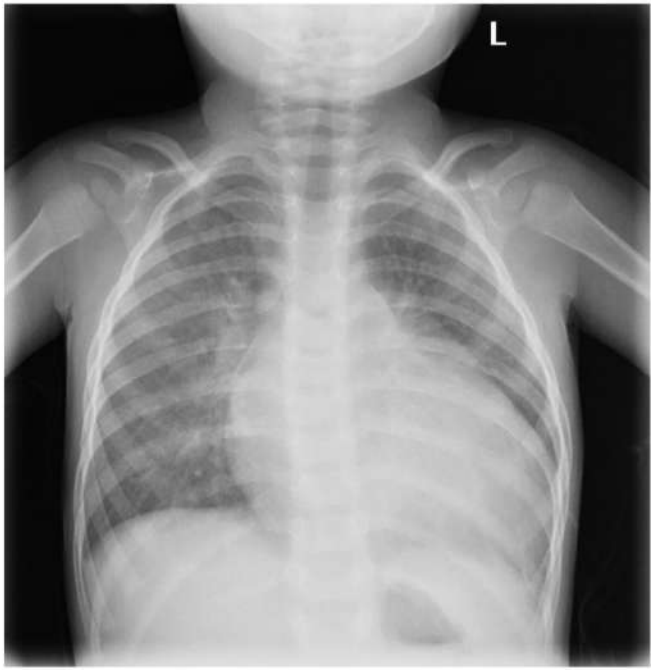
Q5) 3 years old boy complain from heart failure after 2 weeks of URTI.

A)What is the underlying cause?

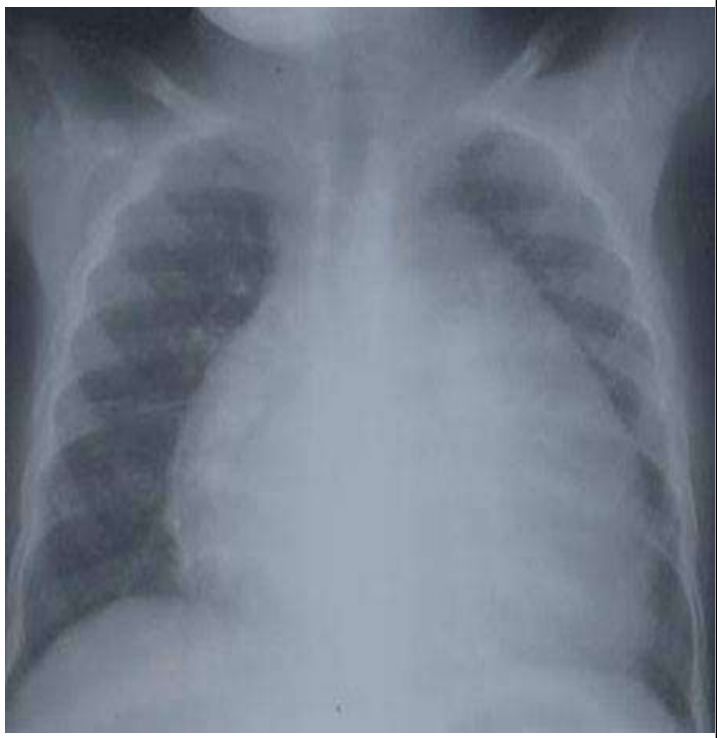
Myocarditis

B) What is the mechanism of heart failure?

dilated cardiomyopathy, diminished cardiac function due to contraction failure.



Q: A 5 year old with acute onset of SOB, on examination he appeared to have tachycardia, tachypnea, hepatomegaly:



Q1. X-Ray finding?

- Cardiomegaly

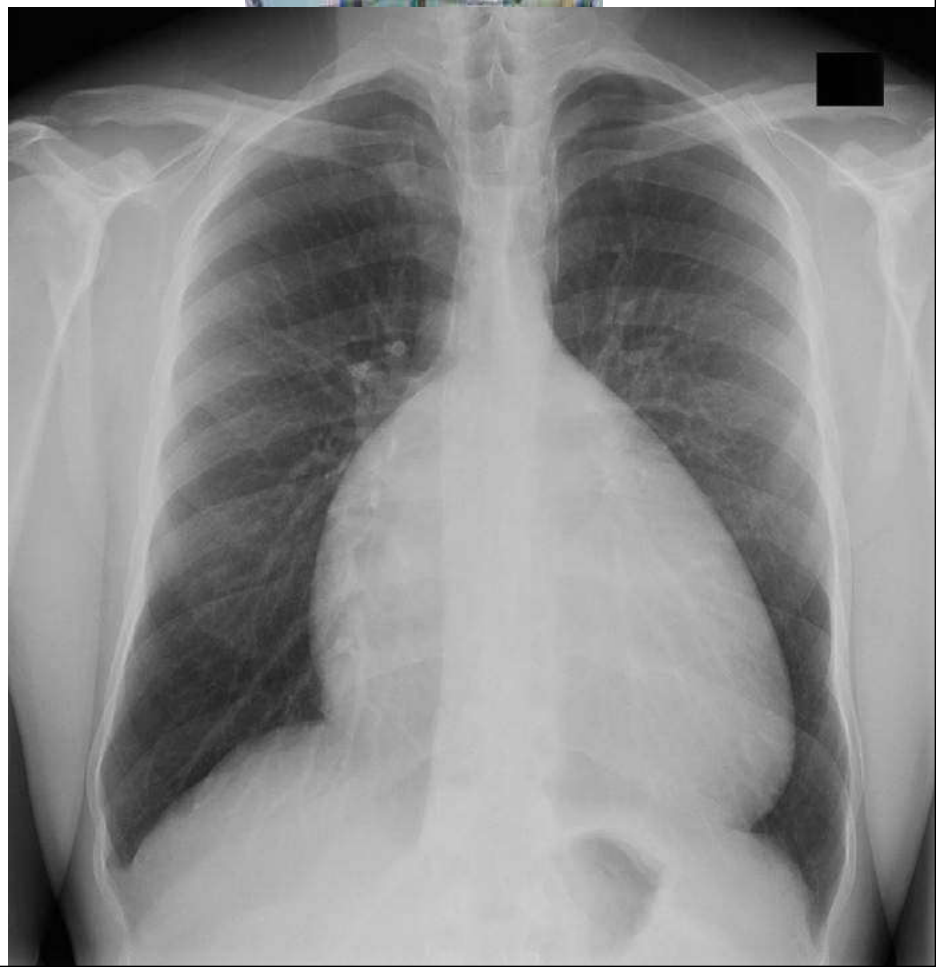
Q2. What is the Dx?

- Congestive heart failure

Q3: Name two physical findings?

1) Tender enlarged liver
2) Leg edema

Q: Down child with this CXR, exam showed systolic murmur with no S3:



Q1. X-Ray finding?

- Cardiomegaly

Q2. What is the cause?

- Endocardial cushion defect

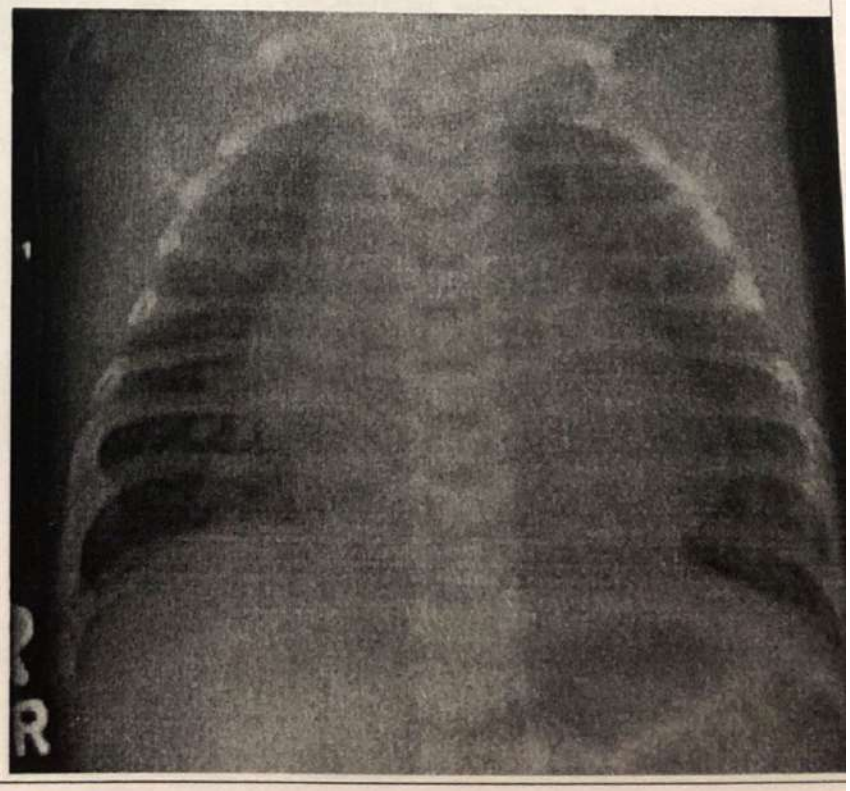
(AV canal, VSD, ASD)

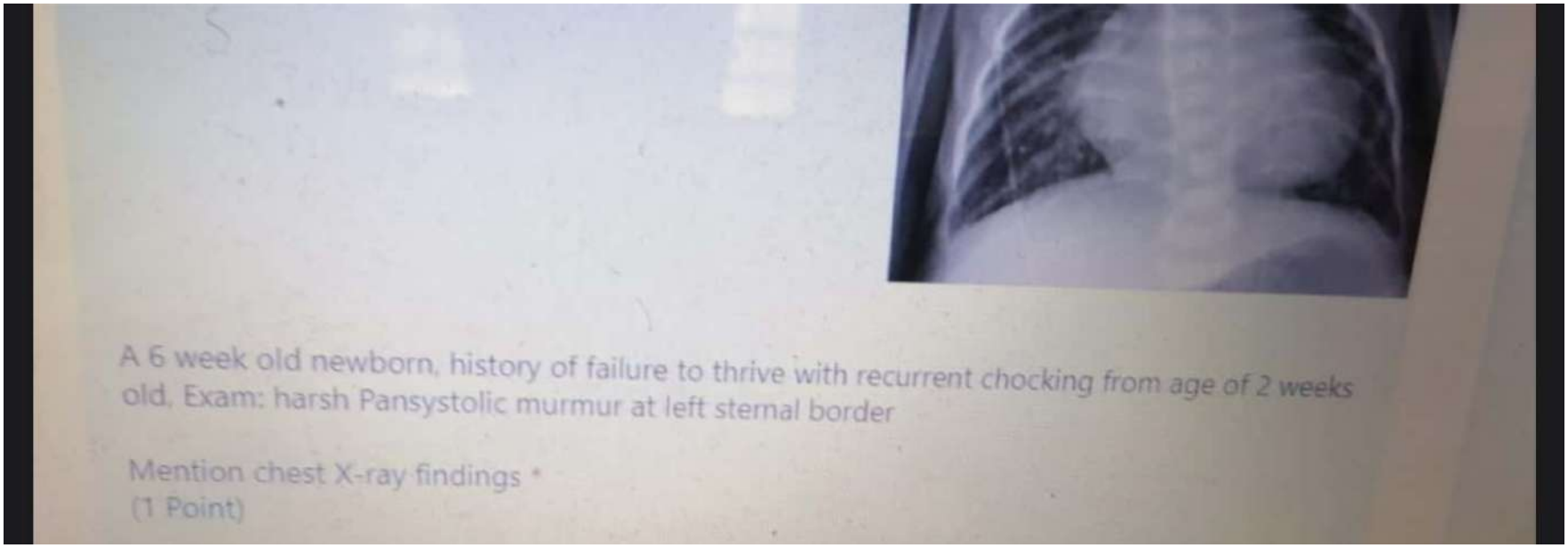
Question 21

This is a 2-month-old infant with Down Syndrome. He presented with shortness of breath. Upon exam, he had a systolic murmur, but no cyanosis.

Mention the most common anomaly leading to the finding that you can seen in his chest x-ray ?

* Endocardial Cush dubb
AV canal



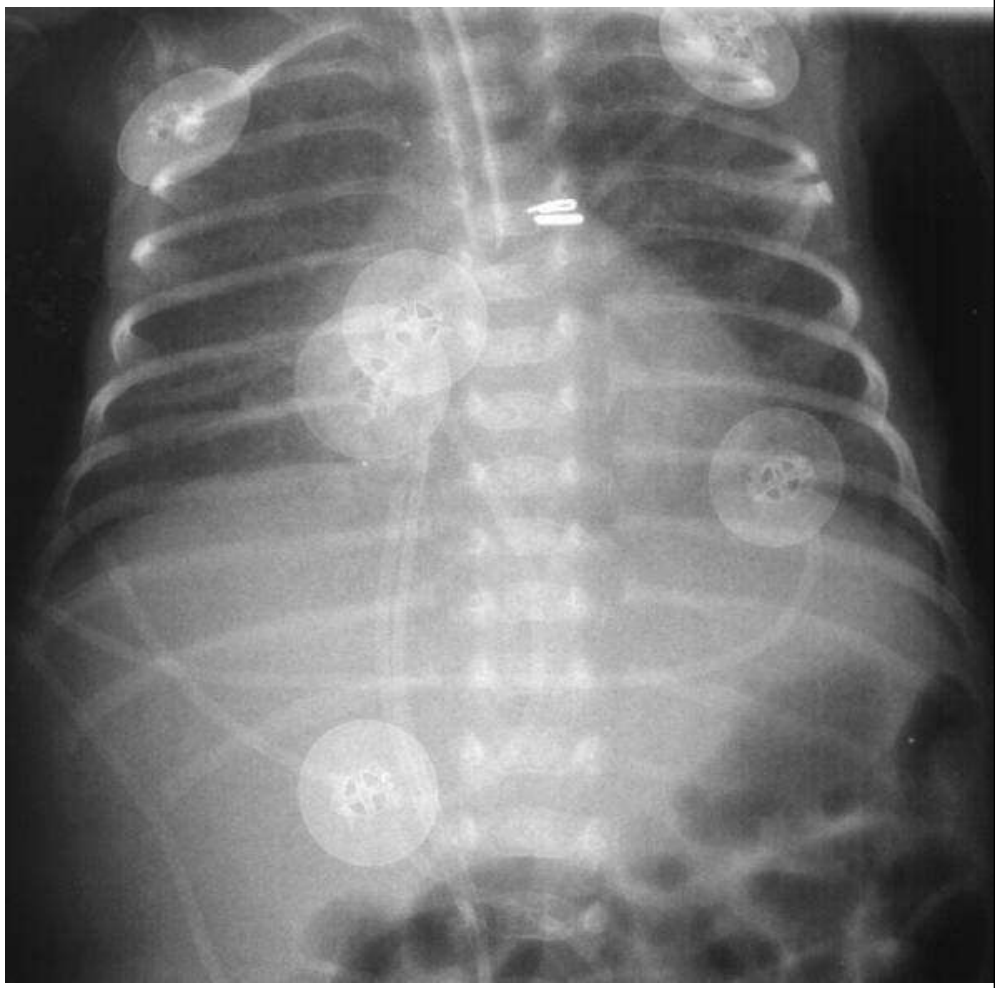


A 6 week old newborn, history of failure to thrive with recurrent chocking from age of 2 weeks old, Exam: harsh Pansystolic murmur at left sternal border

Mention chest X-ray findings *
(1 Point)

- This is a pt. with **chronic lung disease** caused by **PDA** .

- The PDA is corrected by **ligation** (as you see the clips are clear)



Congenital heart disease		
Cause	**Clinical features**	**Examples**
Left-to-right shunting	• Tachypnea • Poor weight gain • Sweating with feeds	• Ventricular septal defect • Atrial septal defect • Isolated patent ductus arteriosus
Right-to-left shunting	• Cyanosis	• Transposition of the great vessels • Tetralogy of Fallot • Tricuspid atresia • Anomalous pulmonary venous return • Truncus arteriosus
Interrupted left ventricular output	• Pallor or shock • Severe acidosis	• Coarctation of the aorta • Hypoplastic left heart syndrome

Hyperoxia test

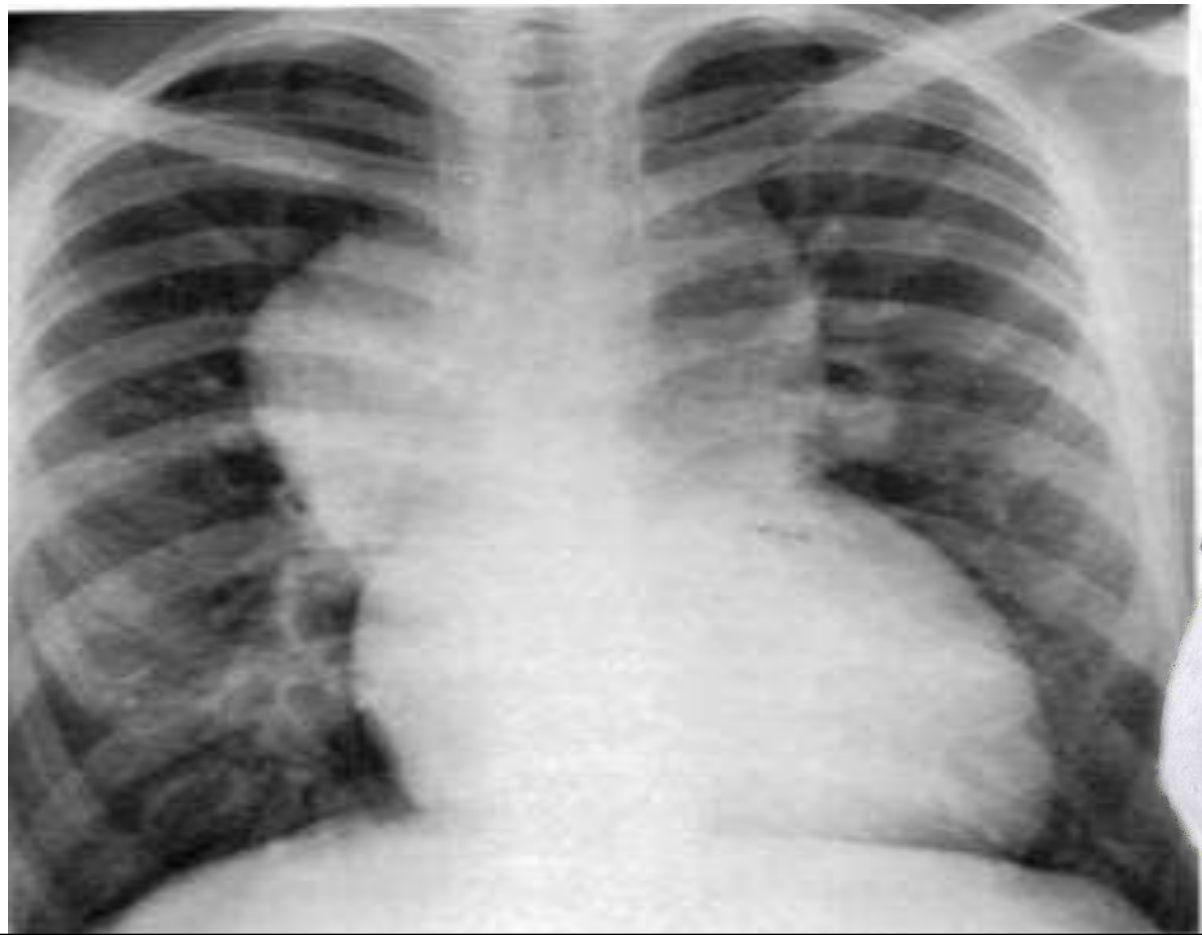
Cyanotic heart disease in newborns		
Diagnosis	**Examination**	**X-ray findings**
Transposition of the great vessels	• Single S2 • +/- VSD murmur	"Egg-on-a-string" heart (narrow mediastinum)
Tetralogy of Fallot	• Harsh pulmonic stenosis murmur • VSD murmur	"Boot-shaped" heart (right ventricular hypertrophy)
Tricuspid atresia	• Single S2 Single A2 • VSD murmur	Minimal pulmonary blood flow
Truncus arteriosus	• Single S2 • Systolic ejection murmur (increased flow through truncal valve)	Increased pulmonary blood flow, edema
Total anomalous pulmonary venous return with obstruction	• Severe cyanosis • Respiratory distress	Pulmonary edema, "snowman" sign (enlarged supracardiac veins & SVC)

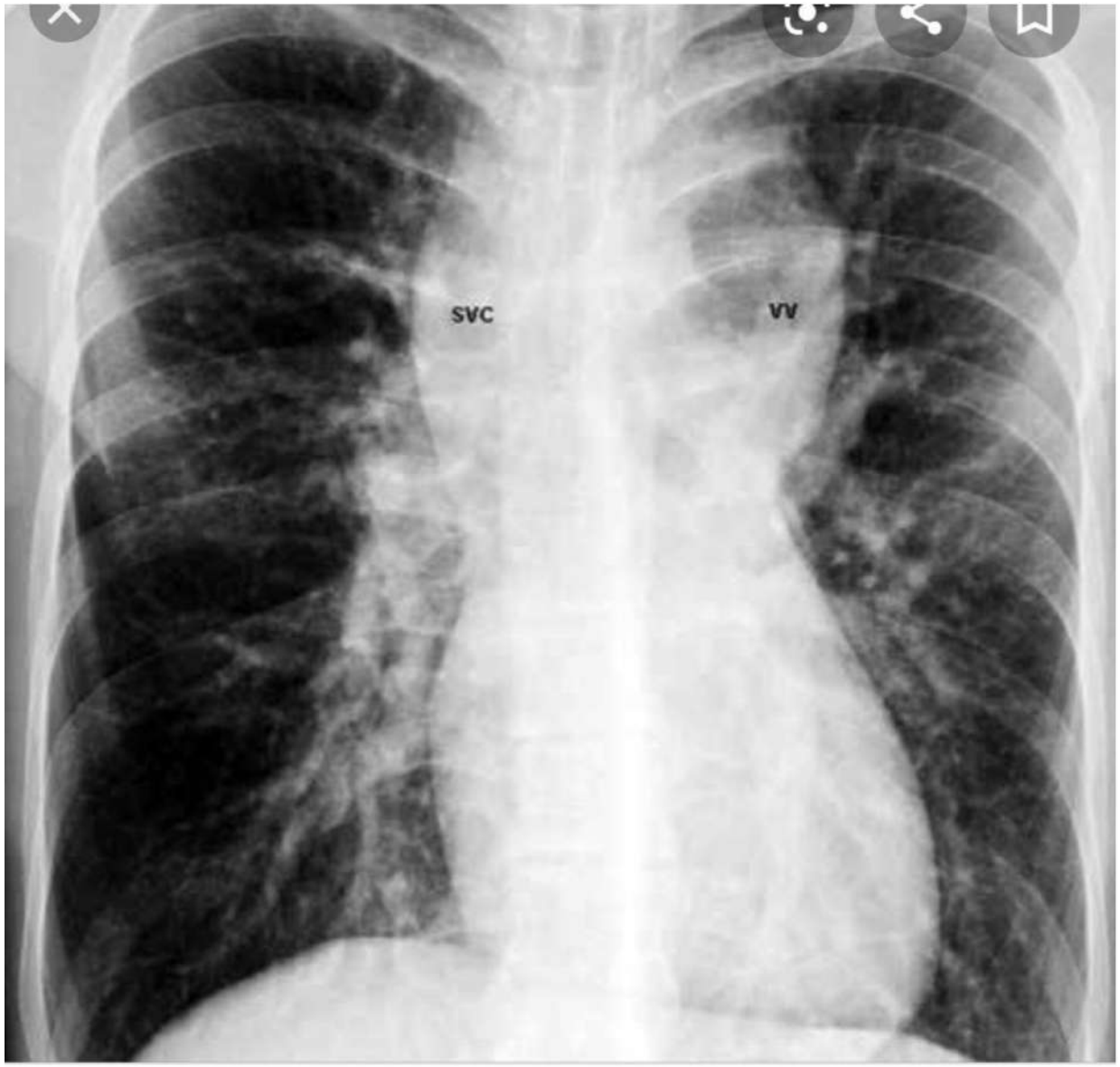
Q1: What is the appearance?

- Snowman sign

Q2: What is the Dx?

- total anomalous pulmonary venous return





What is the anomaly which is imp to found as life saving ? ASD

Q1: What is the disease?

- Tetratology of fallot

(TOF: is combination of 4 heart defects: VSD, overriding aorta, pulmonary stenosis, right ventricle hypertrophy)

Q2: Name 3 CVS physical signs, beside the murmur?

1) Ejection systolic murmur
2) Thrills
3) Single S2
4) Cyanosis

Q3: Name 2 complications?

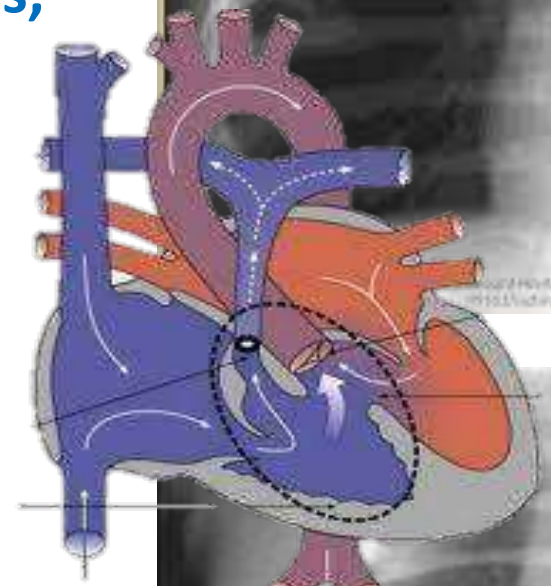
1) Clubbing
2) Heart failure
3) FTT

Q4: What is the CXR appearance?

- Boot-shaped heart

Q5: Best next step?

- Echo



✓ Rt to Lt Shunt

Hypercyanotic Spells

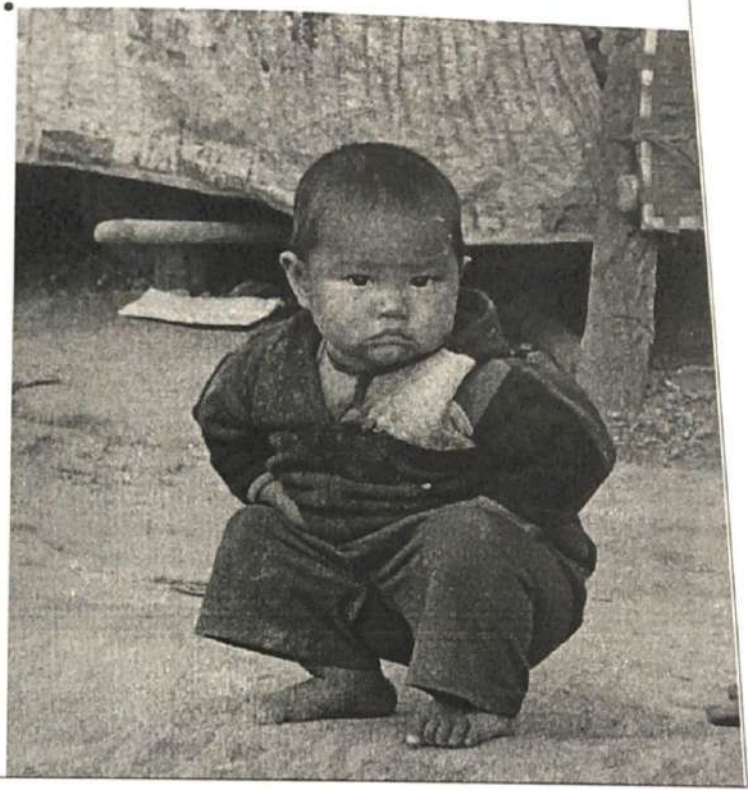
✓ Boot shape

✓ Hunch of Syst at Lt upper St Boundary

✓ aortic Click.

Question 16

This boy is known to have cyanotic congenital heart disease. He prefers to sit-down in this posture (as shown) when the cyanosis is exacerbated & when he gets shortness of breath.



What is the most likely diagnosis of his cardiac anomaly?

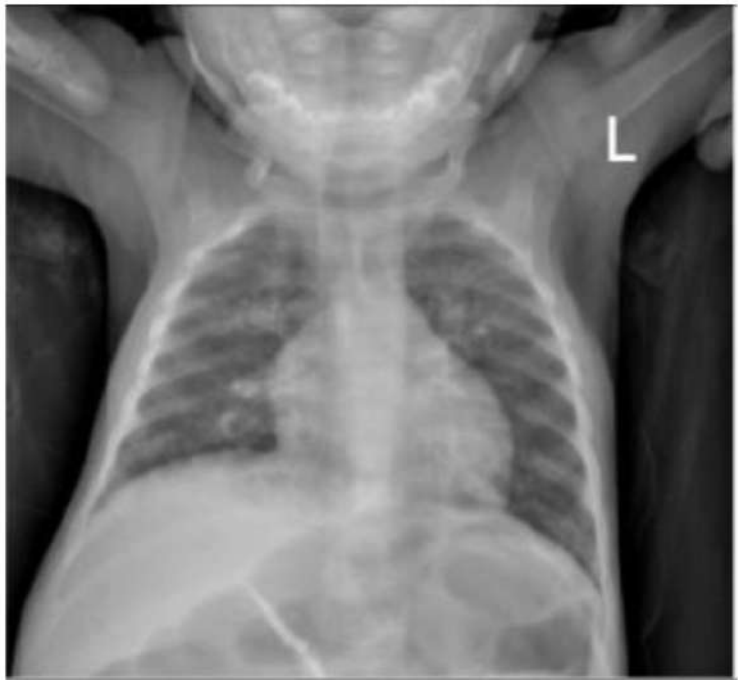
TOF.

- Rt Atrial dilation
- RVH + RAD

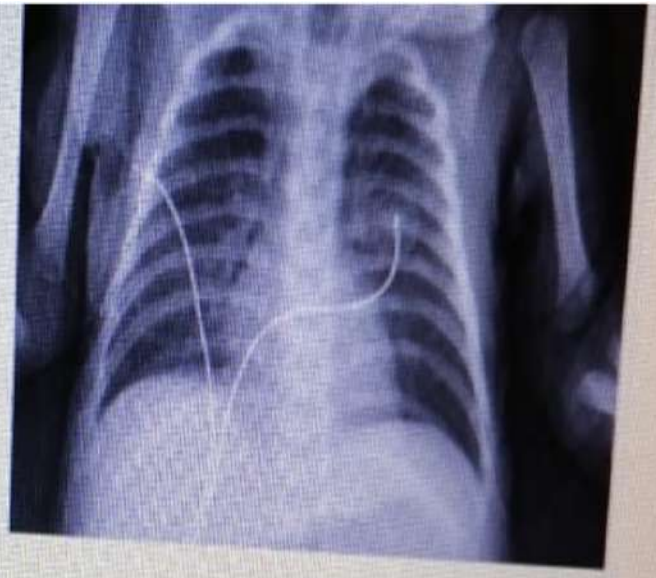
Echo in Diagnostic

2-This pt has hypocalcemic tetany.

- **Write the cause of immunodeficiency?**



DiGeorge syndrome



1 month old child presented with hypocalcemic seizures, dysmorphic features, and absent thymus on X-ray.

Which immunodeficiency you should rule out? *

(1 Point)

This is a cartoon drawing for the heart of a 1-day old neonate. He was cyanosed, with an O2sat=75% and PaO2 = 85 mmHg

Q1: What's your diagnosis?

- Transposition of great vessels (TGA)

Q2: What is the MC presentation in neonates?

- Cyanosis

Q3: What is the cause of the cyanosis?

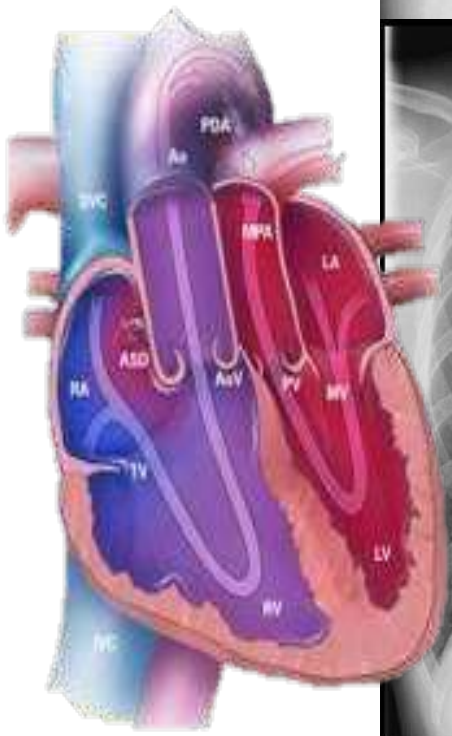
- Two parallel circuis

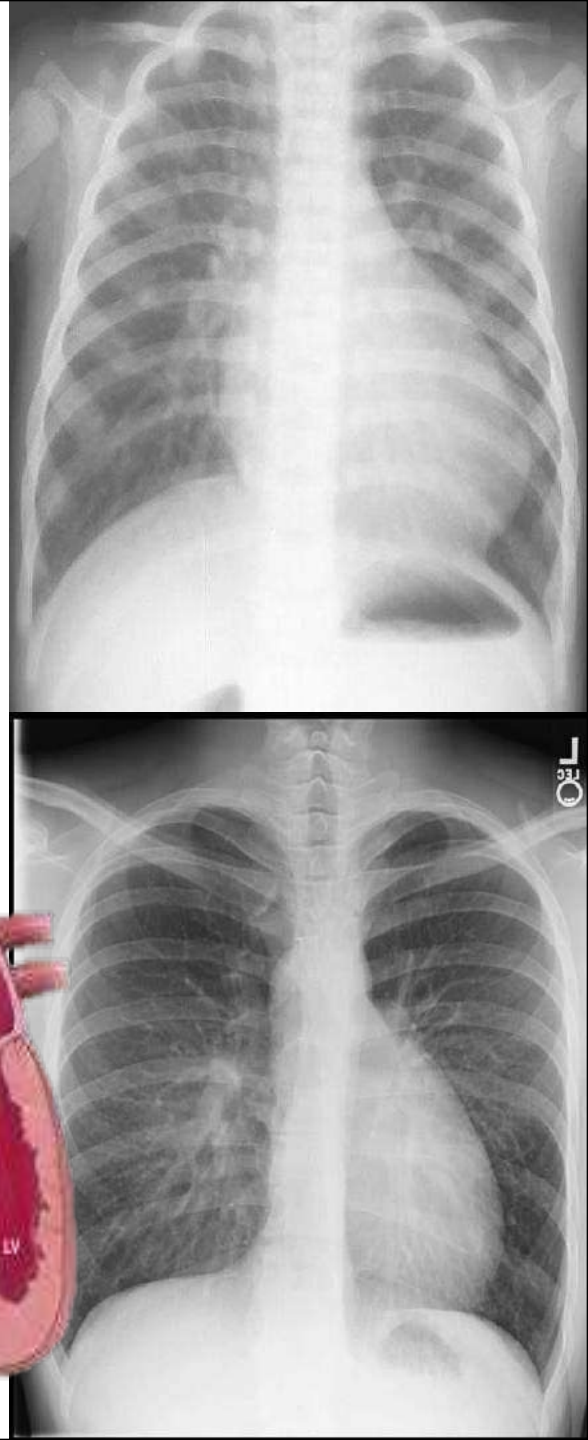
Q4: Name one medical treatment?

- PGE 1 (Postaglandin E1)

Q5: what is the CXR appearance?

- Egg on string





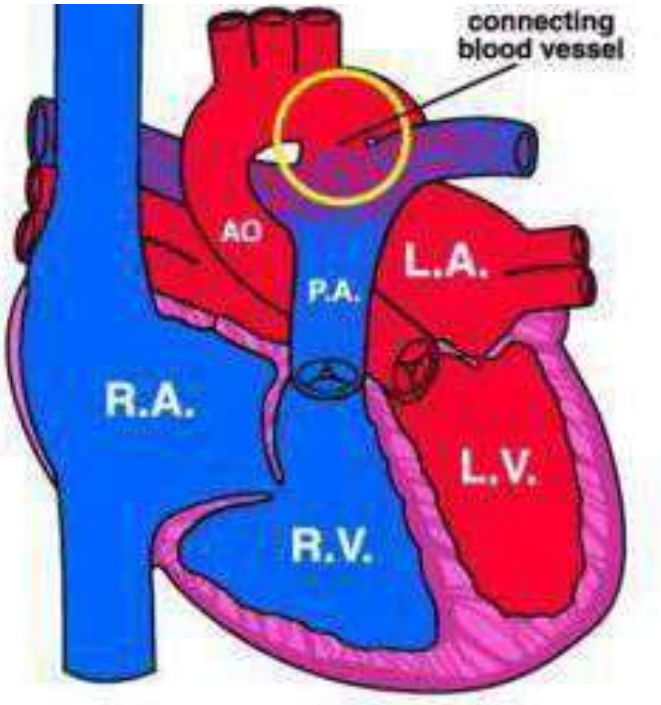
Q1: What is the diagnosis?

- Patent ductus arteriosus (PDA)

Q2: Mention 2 signs on physical exam?

1) Machinery like murmur (continuous)

2) Bounding pulse

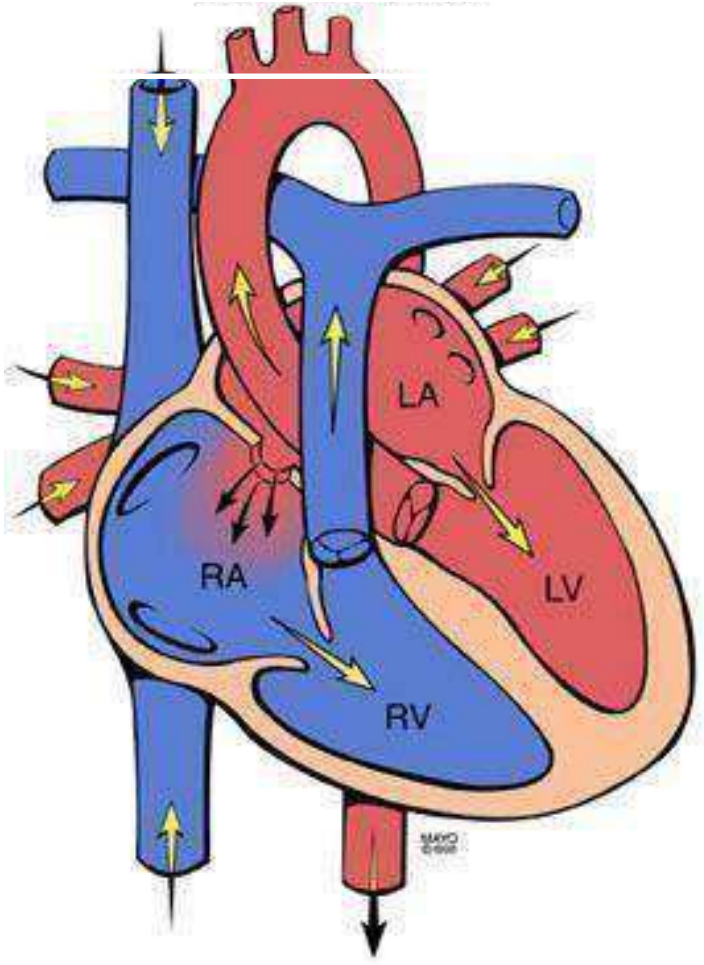


Q1: What is this?

- Atrial septal defect (ASD)

Q2: Two examination findings?

1) Systolic murmur
2) Fixed splitted S2



Q4. A newborn baby, vaginally delieverd , oresinted with cyanosis , no grunting or accessory muscle use , and otherwise normal

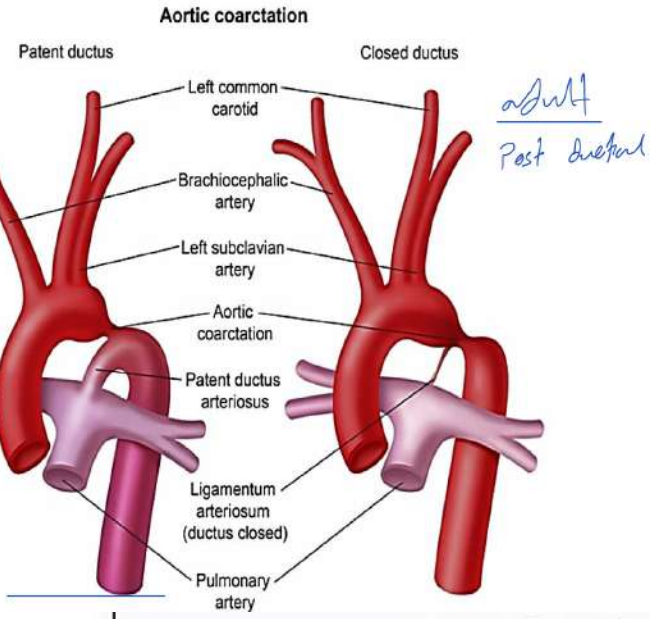
1. Give to Ddx
    1. TTN ,MAS , CDH
    2. Cyanotic heart dz e.g. TGA
2. Give two diagnostic methods to help you
    1. 100% Oxymetric test
    2. Cxr to rule out obvious causes
    3. Oxygen saturation

PT with respiratory distress on c pap ,not responded , continuous mechinary murmur found

..

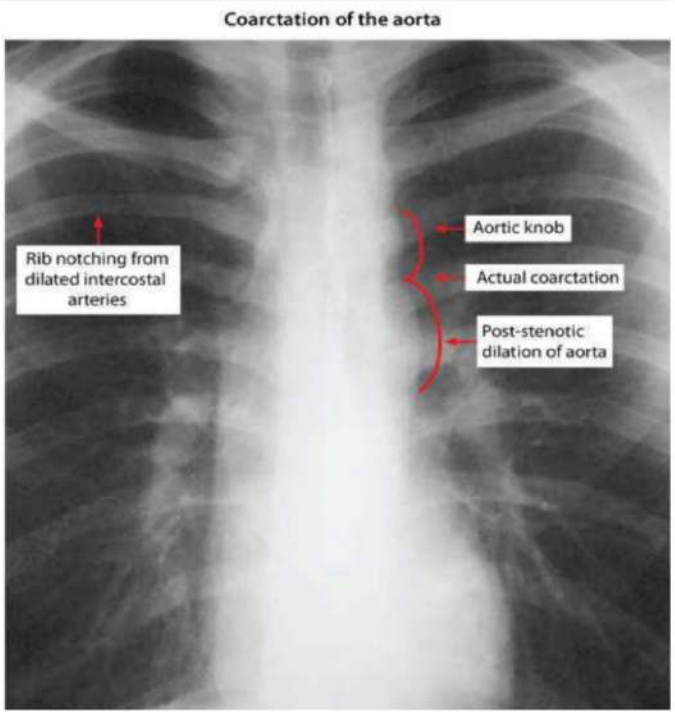
What is the cause of respiratory distress?

What is the medication given ?



infantile
PDA
Pre ductal

adult
Post ductal



Coarctation of the aorta adult type	
Etiology	• Congenital • Acquired (rare) (eg, Takayasu arteritis)

Clinical features	• Upper body
	  ◦ Well developed
	  ◦ Hypertension (headaches, epistaxis)
	• Lower extremities
	  ◦ Underdeveloped
	  ◦ Claudication
	• Brachial-femoral pulse delay
	• Upper & lower extremity blood pressure differential
	• Left interscapular systolic or continuous murmur

Diagnostic studies	• ECG: Left ventricular hypertrophy
	• Chest x-ray
	  ◦ Inferior notching of the 3rd to 8th ribs
	  ◦ "3" sign due to aortic indentation
	• Echocardiography: Diagnostic confirmation

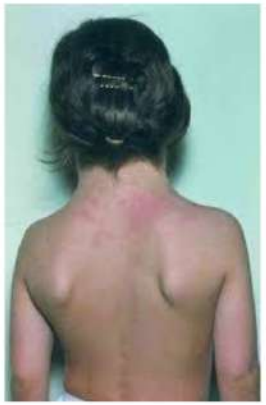
Treatment	• Balloon angioplasty ± stent placement • Surgery

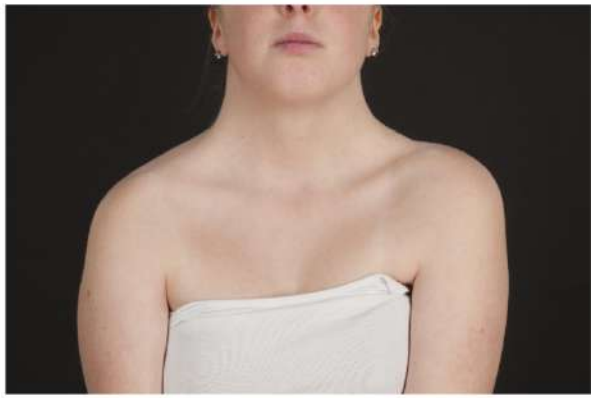
may be difficult to auscultate in the supine position.

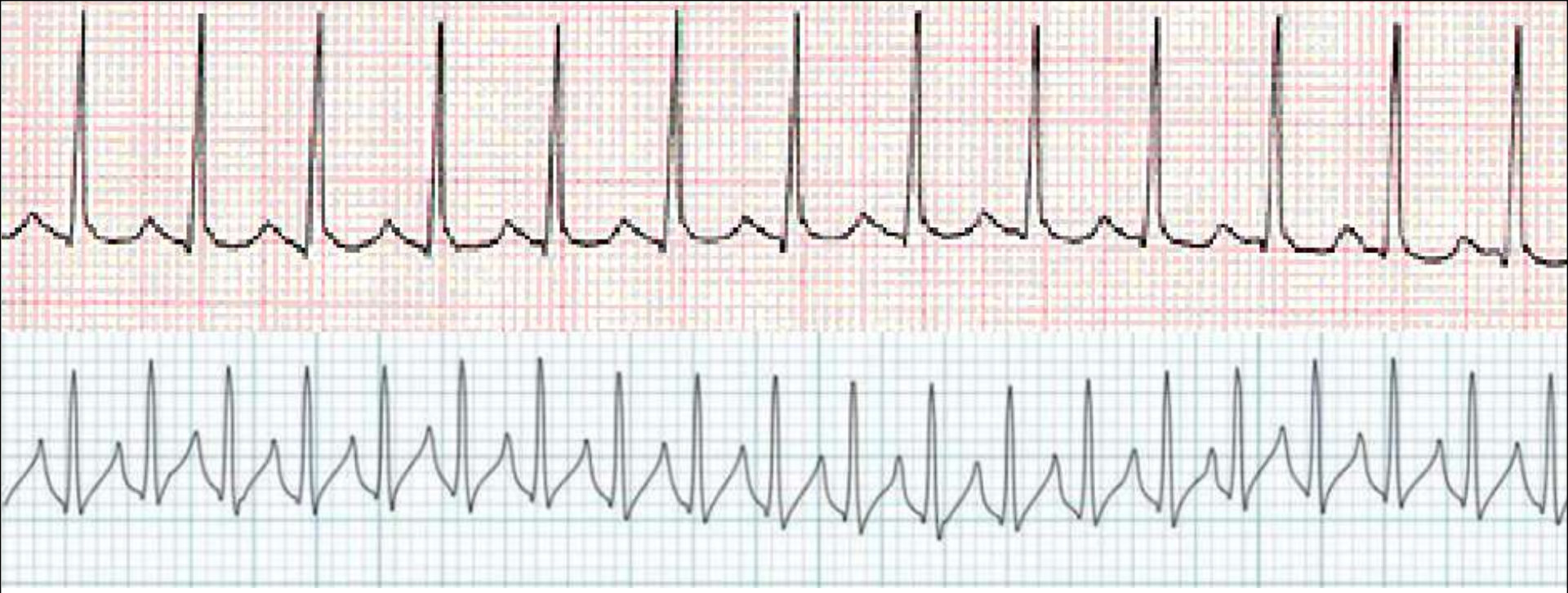
narrowing = narrowing

Q1. What is the most cardiovascular p4oblem this girl might have

- Bicuspid aortic valve
- (coarctation of aorta is the 2nd commonet)







Q: ECG of 11 y/o male (SVT):

Q1: What is the presentation?

- palpitation, loss of consciousness

Q2 What is the most dangerous complication?

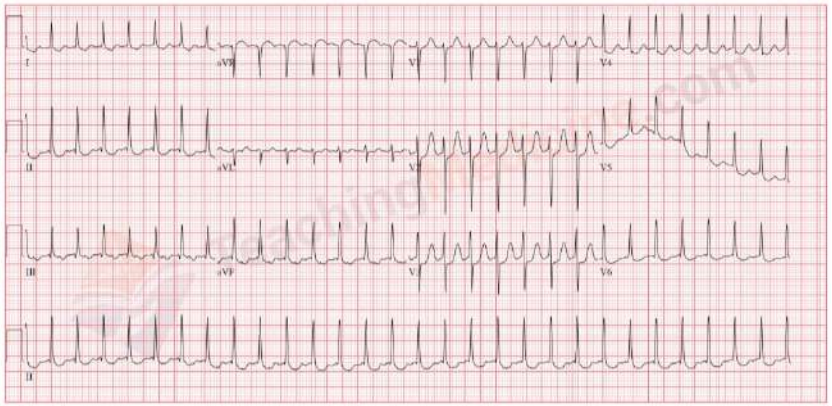
- Ventricular Tachycardia

10- Ecg, patient's bp is 90/60, altered level of consciousness
What is your diagnosis?

SVT

Management?

Cardioversion



Q: This is an ECG of a child after 5 minutes of the treatment he was back to normal

Q1: What is your diagnosis?

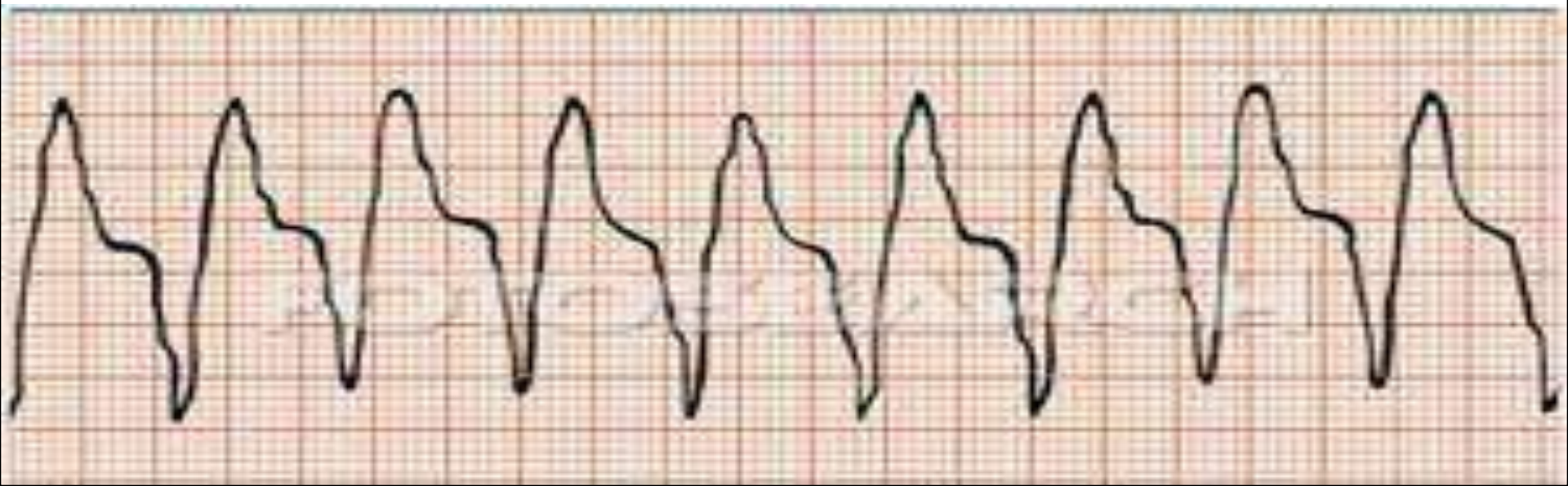
- Ventricular tachycardia

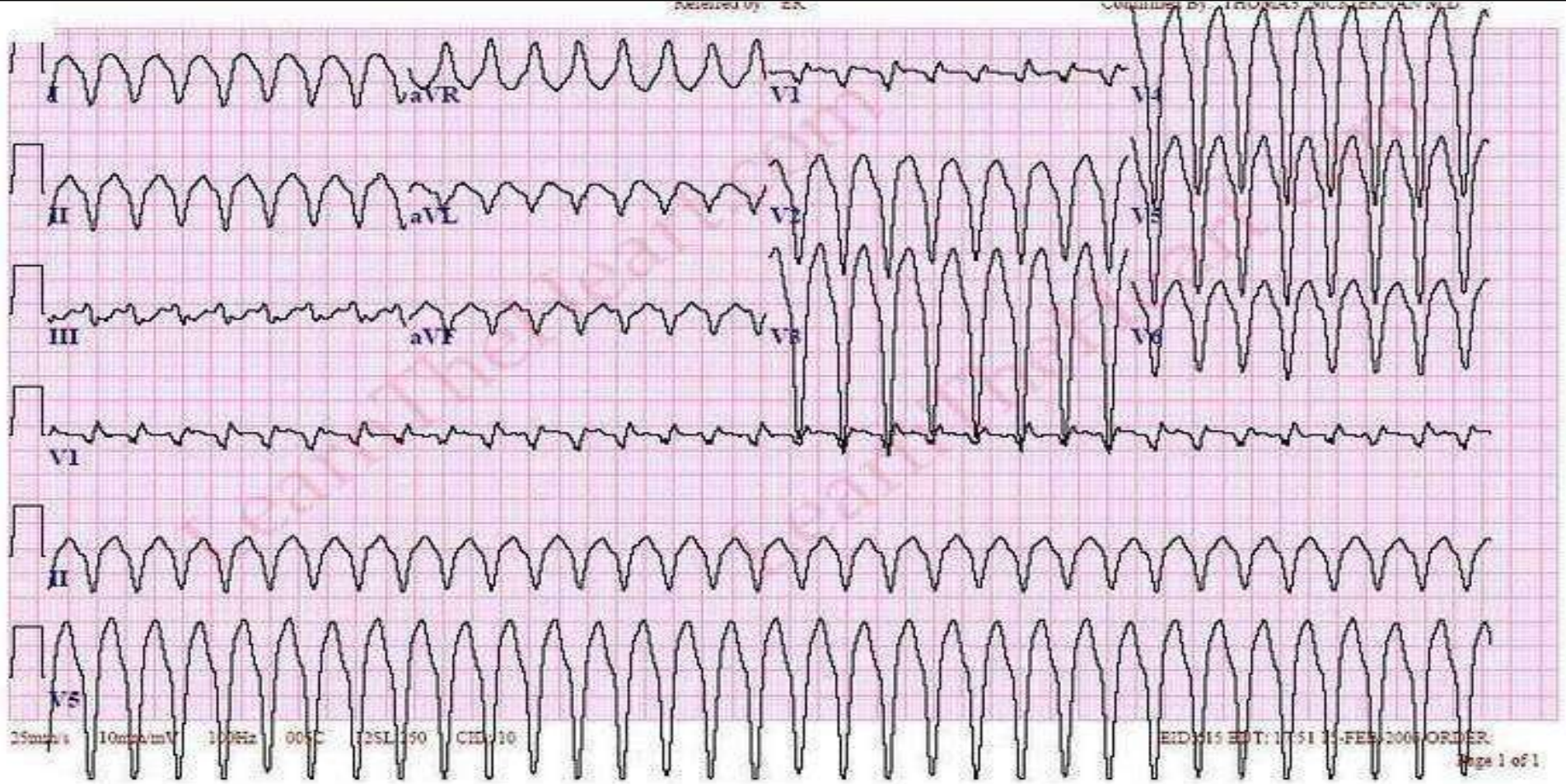
Q2: What was the treatment?

- Synchronized electrical cardioversion

Q3: Name a medical Mx?

- Lidocaine, Amiodarone





Q1: What is your diagnosis? Ventricular Tachycardia

Q2: If the pt is staple, give 2 options for the treatment?

1) Synchronized electrical cardioversion
2) Defibrillation
3) Cardiac Ablation
4) Anti-arrhythmic drugs: Amiodarone

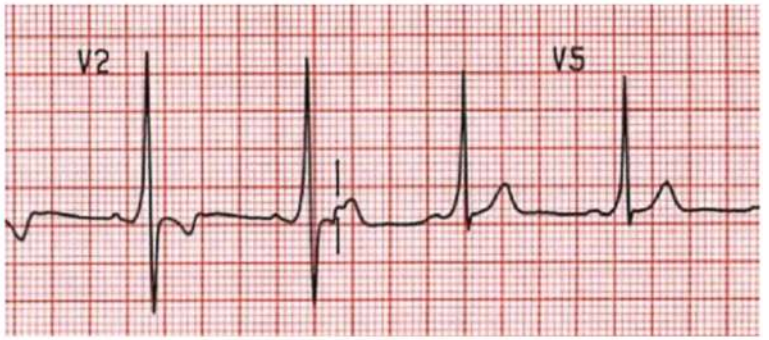
Q3. A 10 urs old boy preswnted to the hospital with palpita5ion , when he calmed down , the ecg showed the following pattern

1. What is the dx

WPW

2. What is the complication might develop

Ventricular tachycardia (not sure)



Q1: What is your diagnosis ?

- Congenital complete heart block

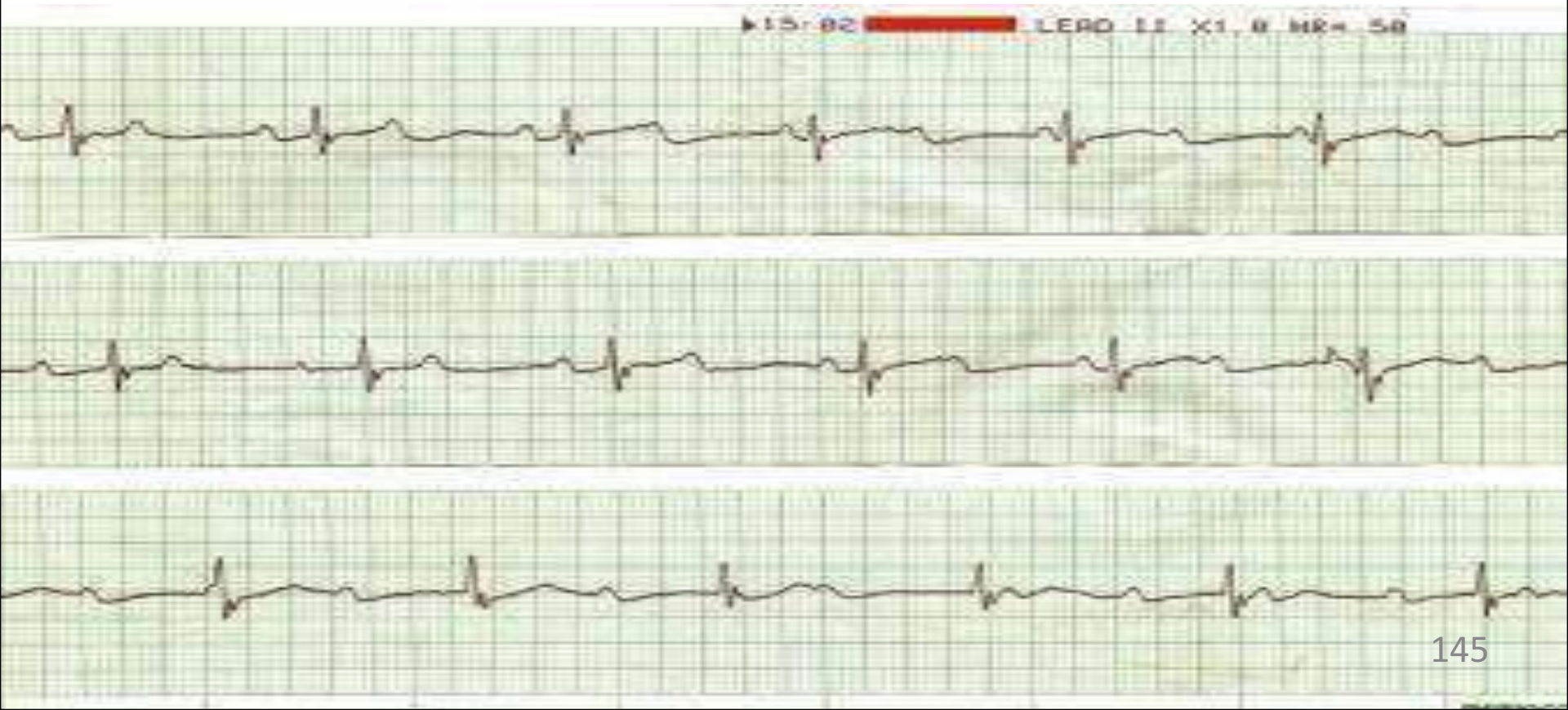
Q2: What is the major abnormality in this ECG ?

- Bradycardia

Q3: Name 2 lines of Mx?

1) Corticosteroids (Dexamethasone)

2) Pace-maker



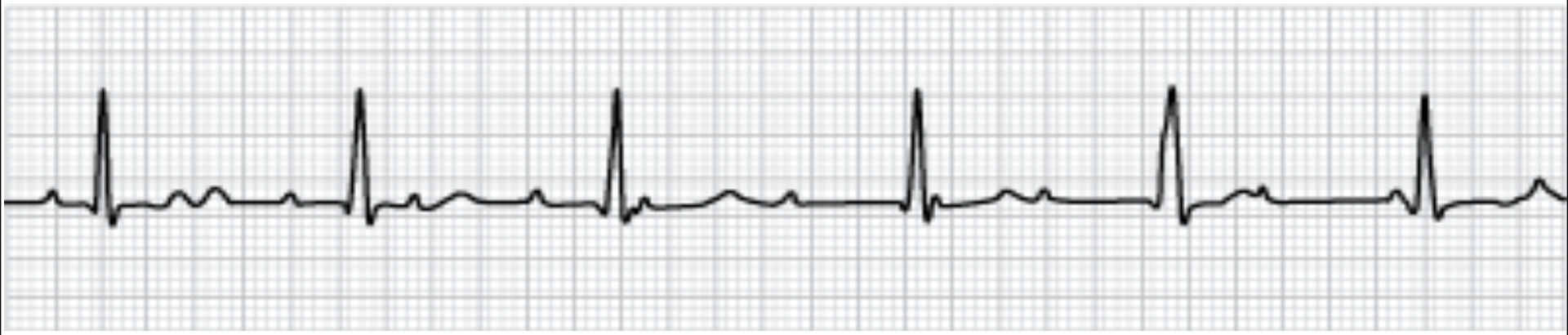
Q: there were arrows indicating P waves.

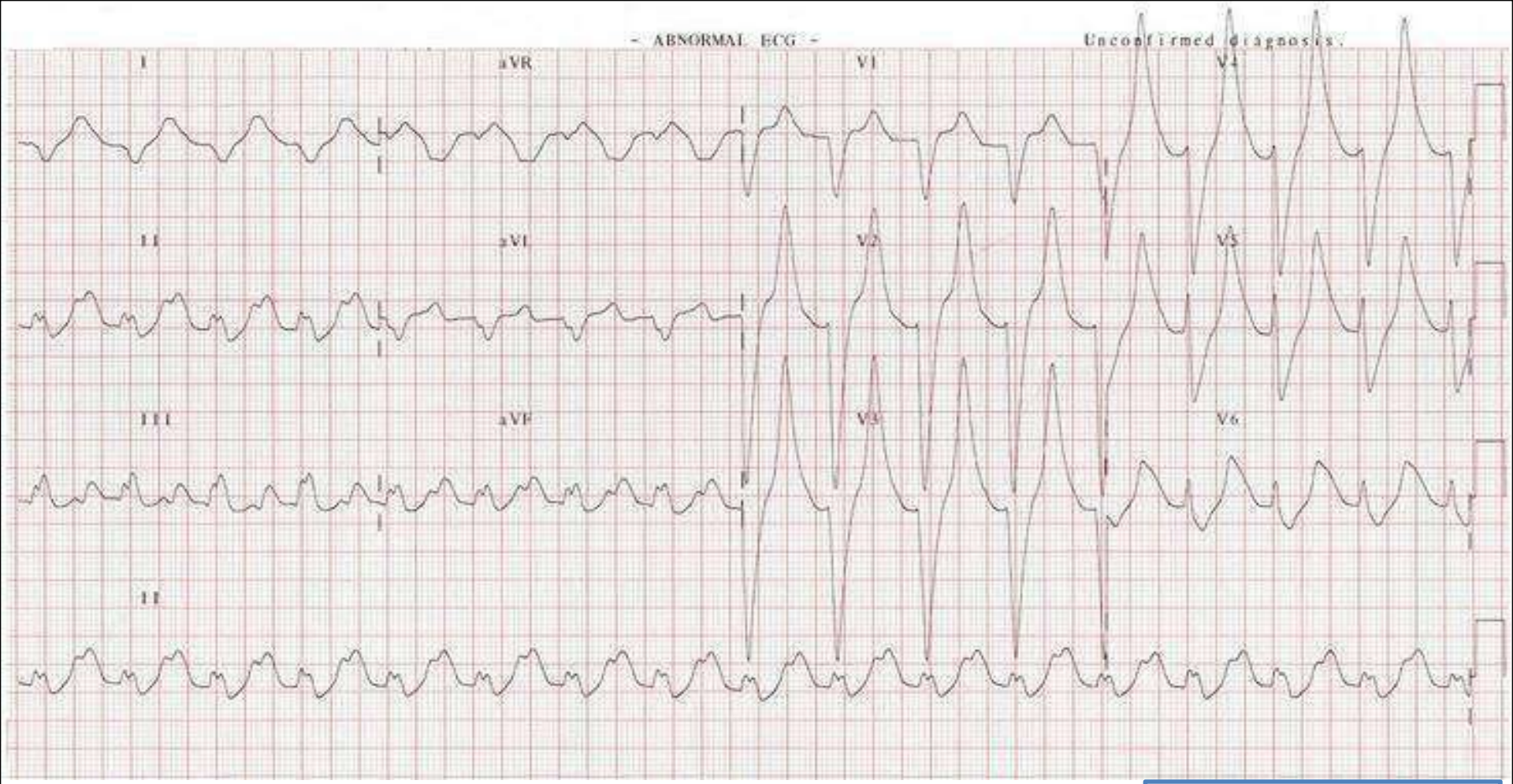
Q1: What is the diagnosis?

- Congenital complete heart block

Q2: Mention one cause?

- Maternal SLE





Q: Hx of a pt with lymphoma who was given chemotherapy then came with this ECG

Q1: What is your Dx ? Hyperkalemia

Q2: What is the cause ? Tumor lysis syndrome

Tumor lysis syndrome labs:

1) Hypocalcemia
2) Hyperkalemia
3) Hyperphosphatemia
4) Hyperuricemia
5) High BUN
6) Azotemia

Q1: Name the finding on the ECG?

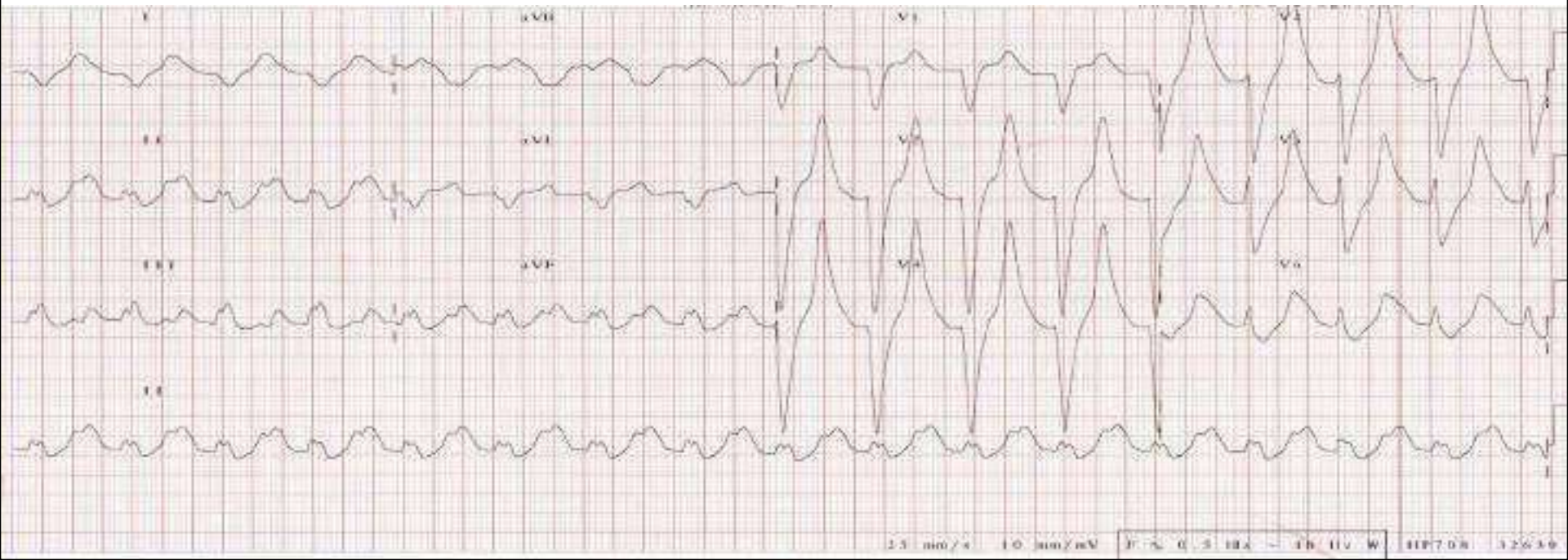
Peaked T wave

Q2: What is the Dx?

Hyperkalemia

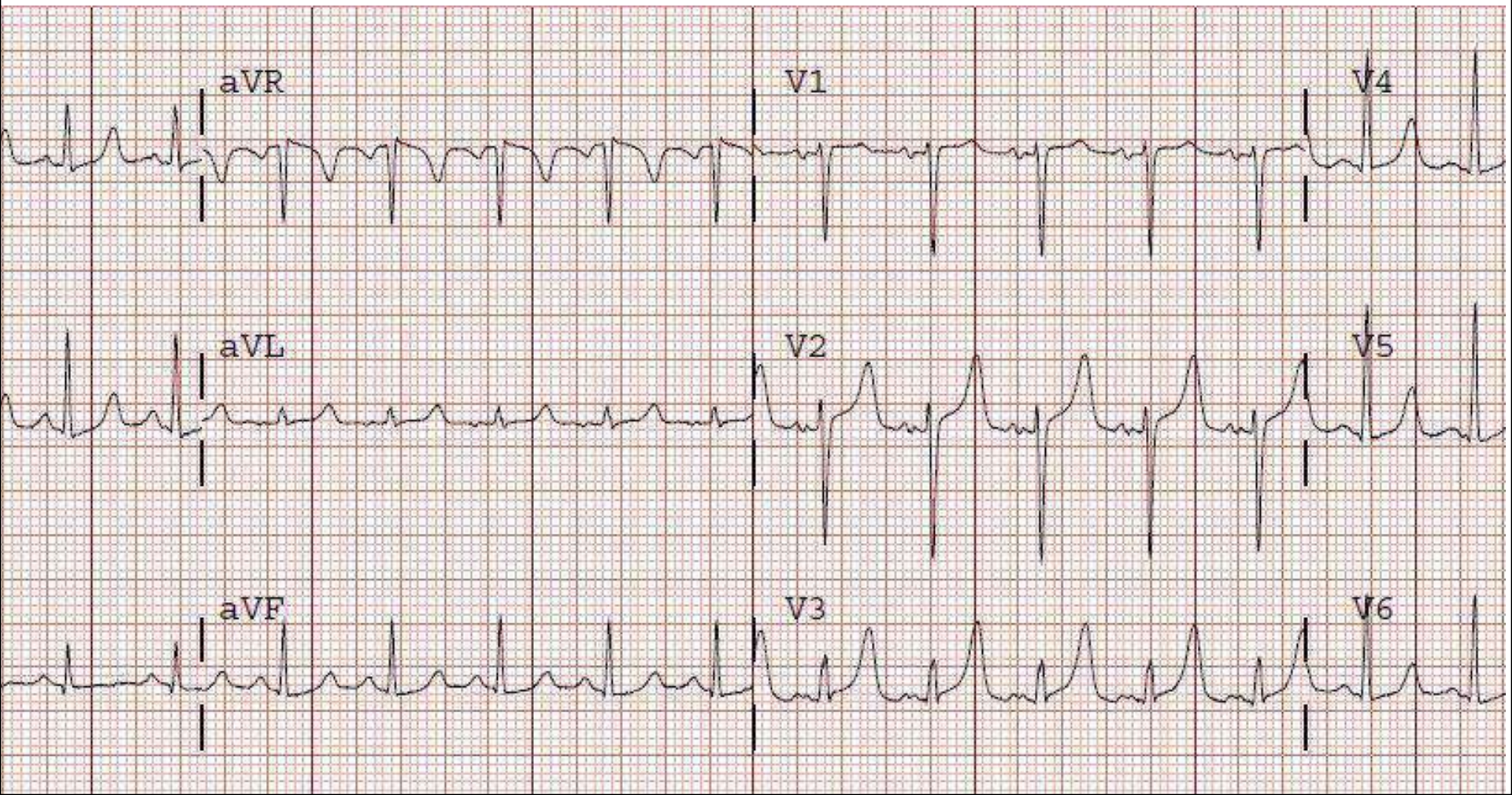
Q3: Give two modalities of Mx:

- Insulin + Glucose
- Calcium gluconate
- B-agonist



Q: What is the Dx?

Hyperkalemia (Hyper acute T wave)



Q1: name 2 findings?

1) Clubbing 2) Cyanosis

Q2: What system do you want to examine for this pt?

- CVS or RS

to differentiate do a hyperoxia test(100% O2 should increase the po2 to 100mm\hg in respiratory if not then it' s cardio.

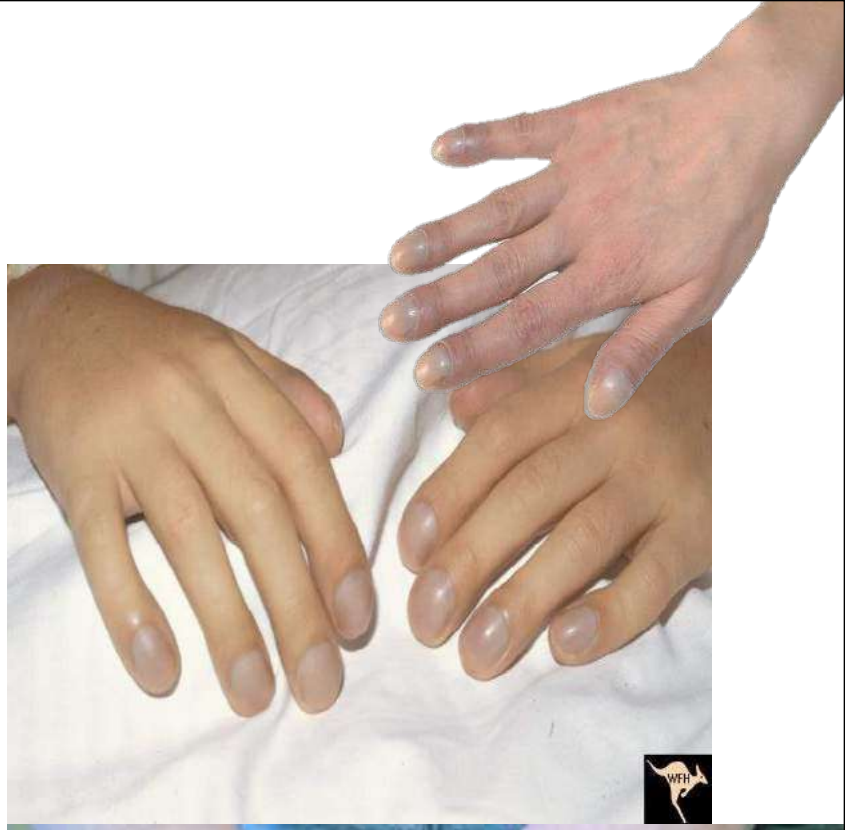
Q3: 2 RS/CVS causes of clubbing?

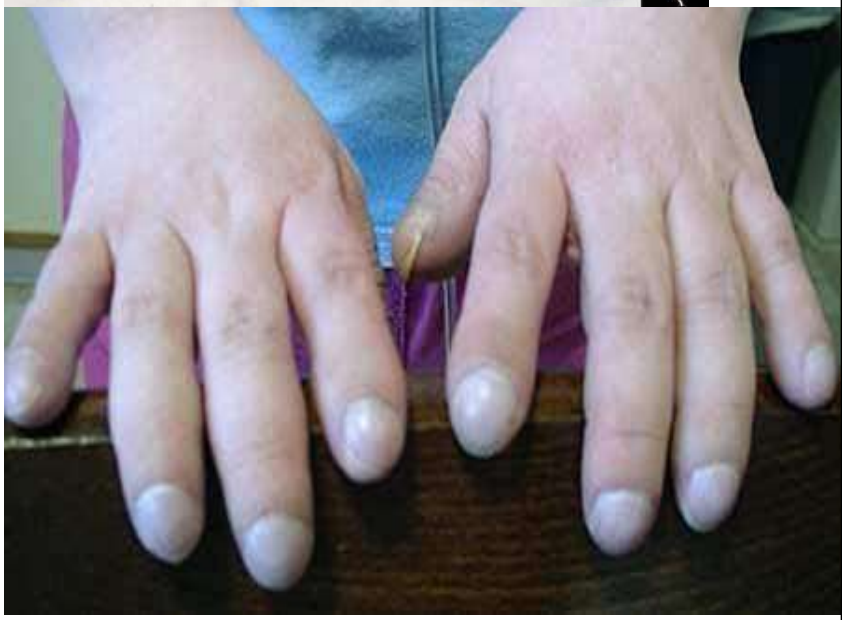
RS:

1) Cystic fibrosis
2) Bronchiactasis
3) Lung Ca

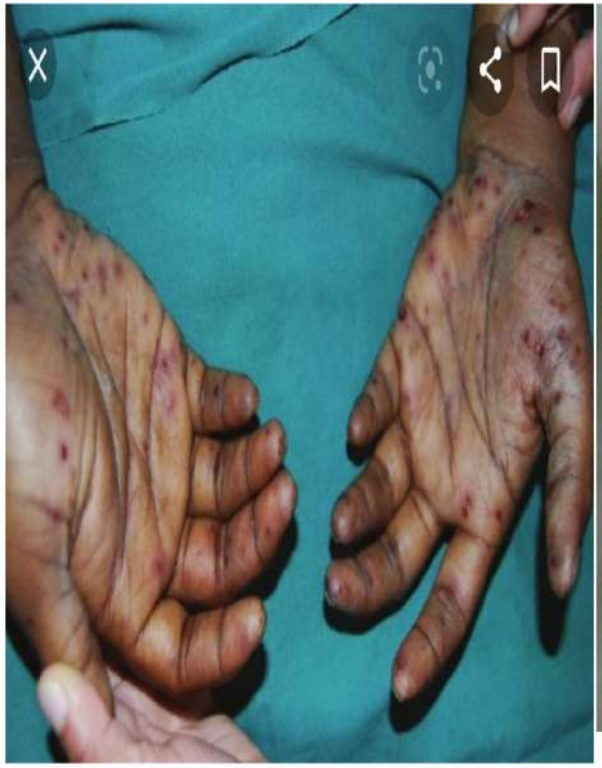
CVS:

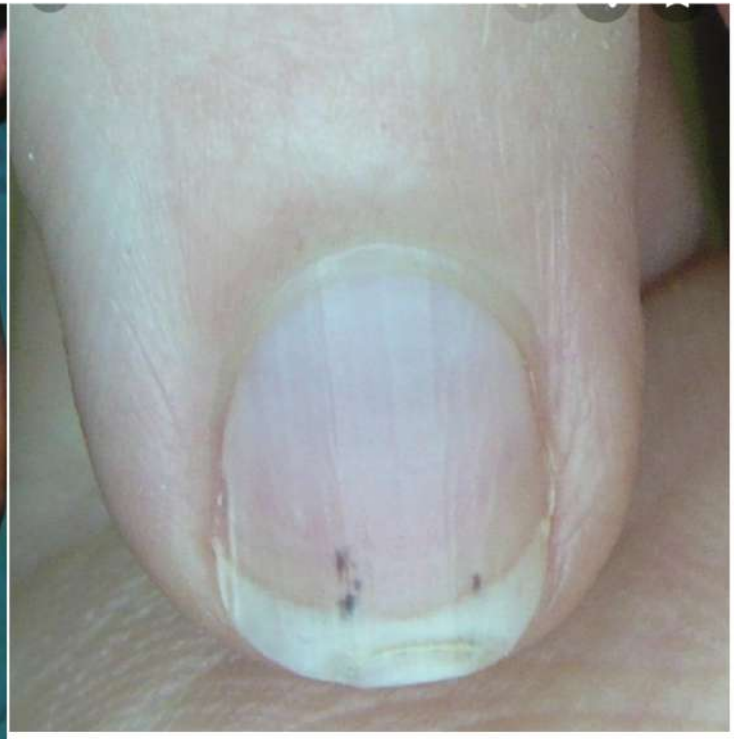
1) Infective endocarditis
2) Tetratology of Fallot
3) Atrial Myxoma





3)Pt with fever 3 weeks duration ...and new murmur





Diagnosis ? Infective endocarditis

Most common organism staph aurus

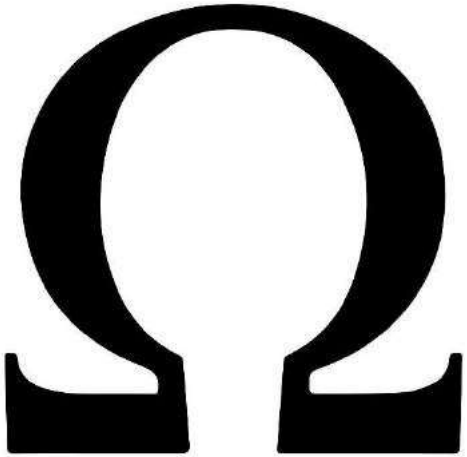

Respiratory

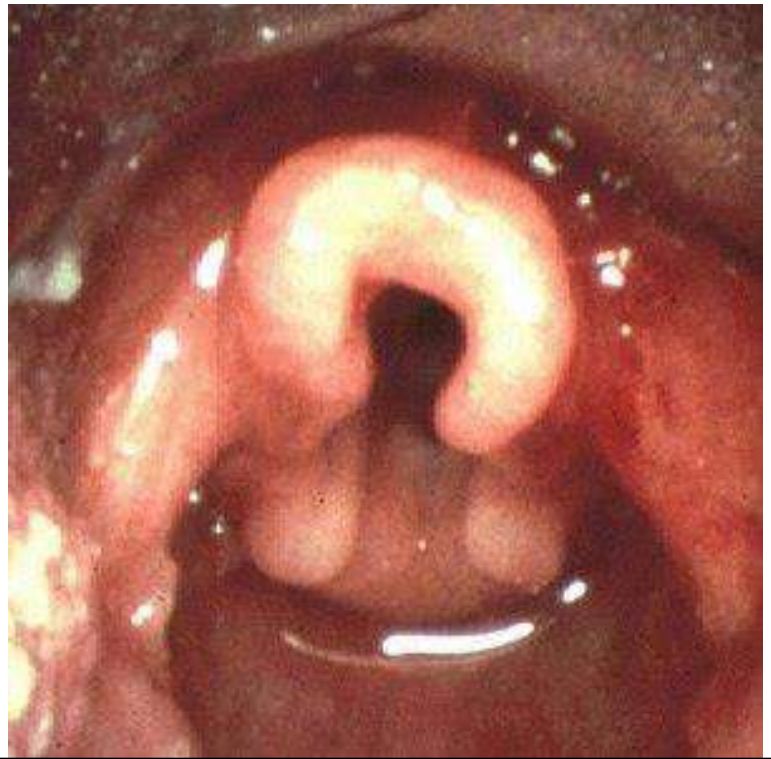
Q1: What is this sign?

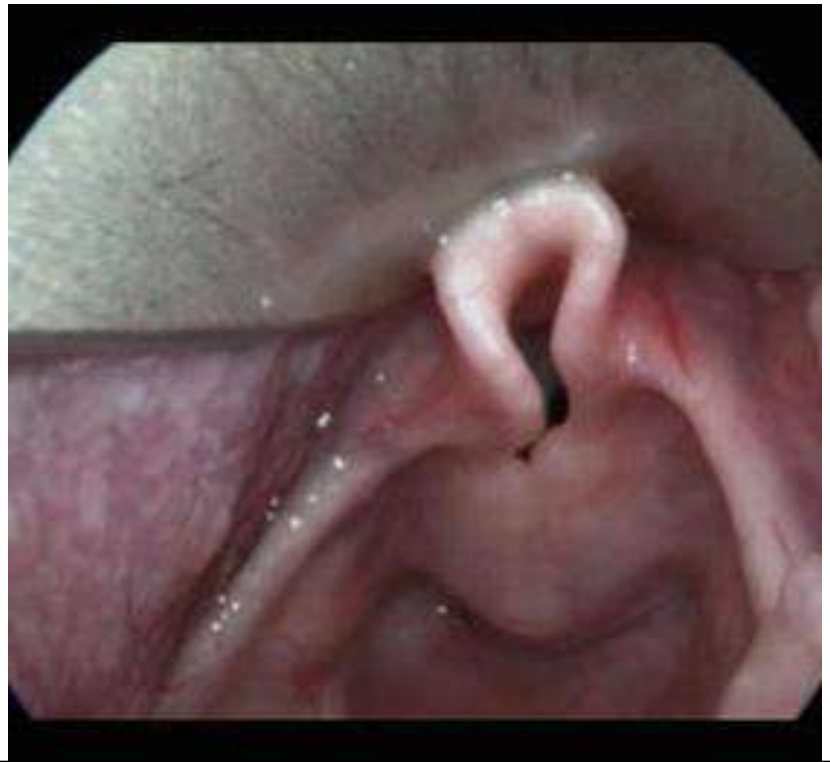
- Omega sign

Q2: What is the Dx?

- Laryngomalacia





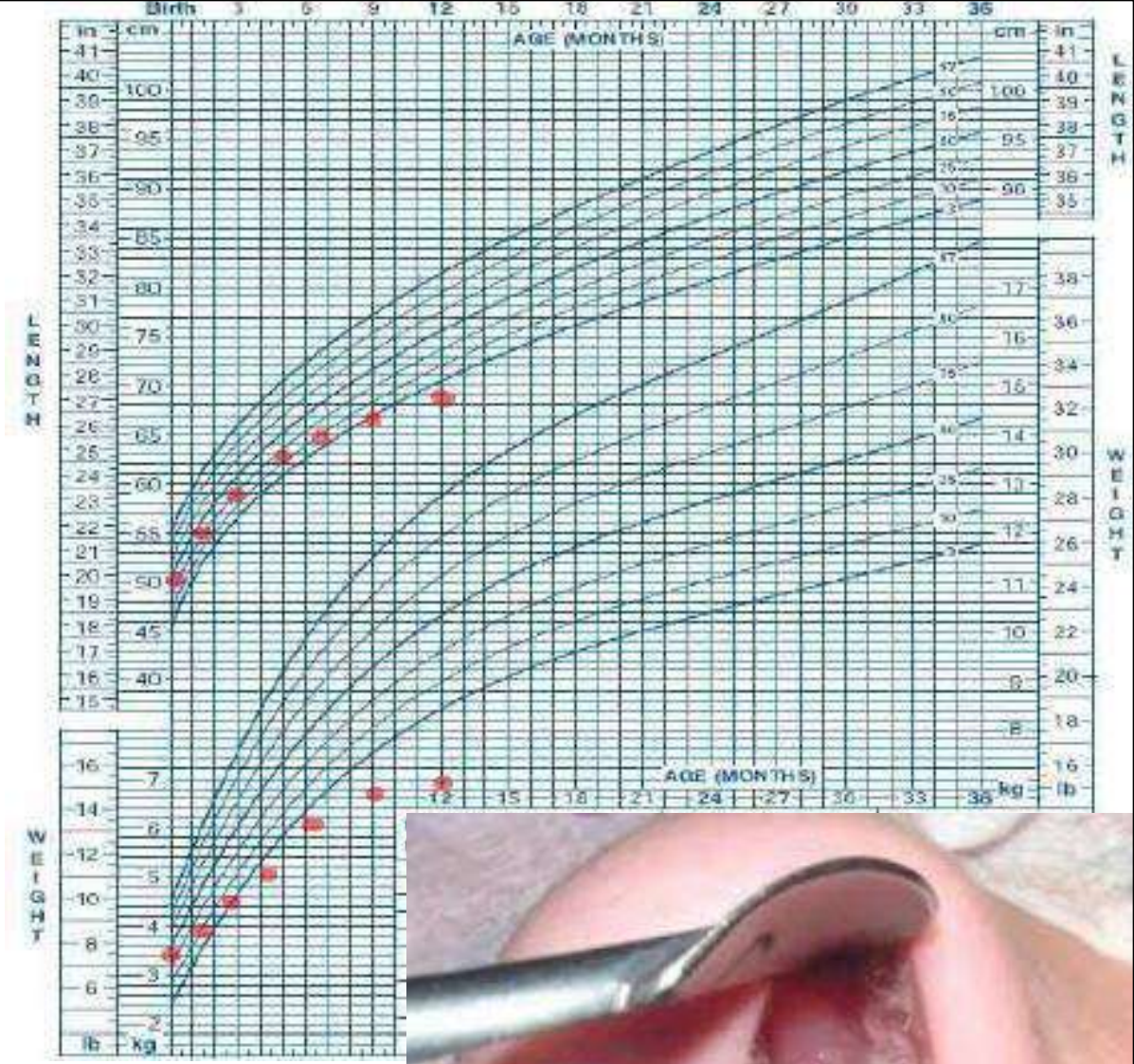


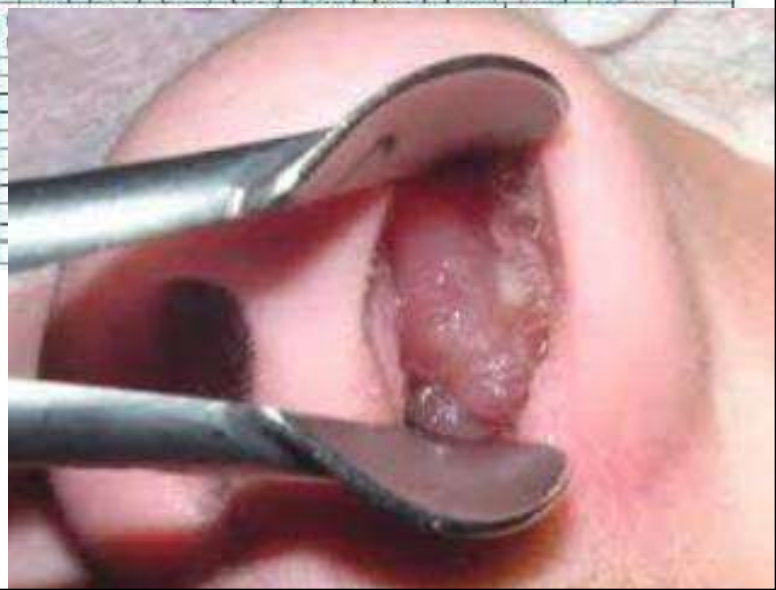
Q: Child with Hx of delayed meconium and recurrent chest infections?

1. **What is the Dx?**
   Cystic fibrosis

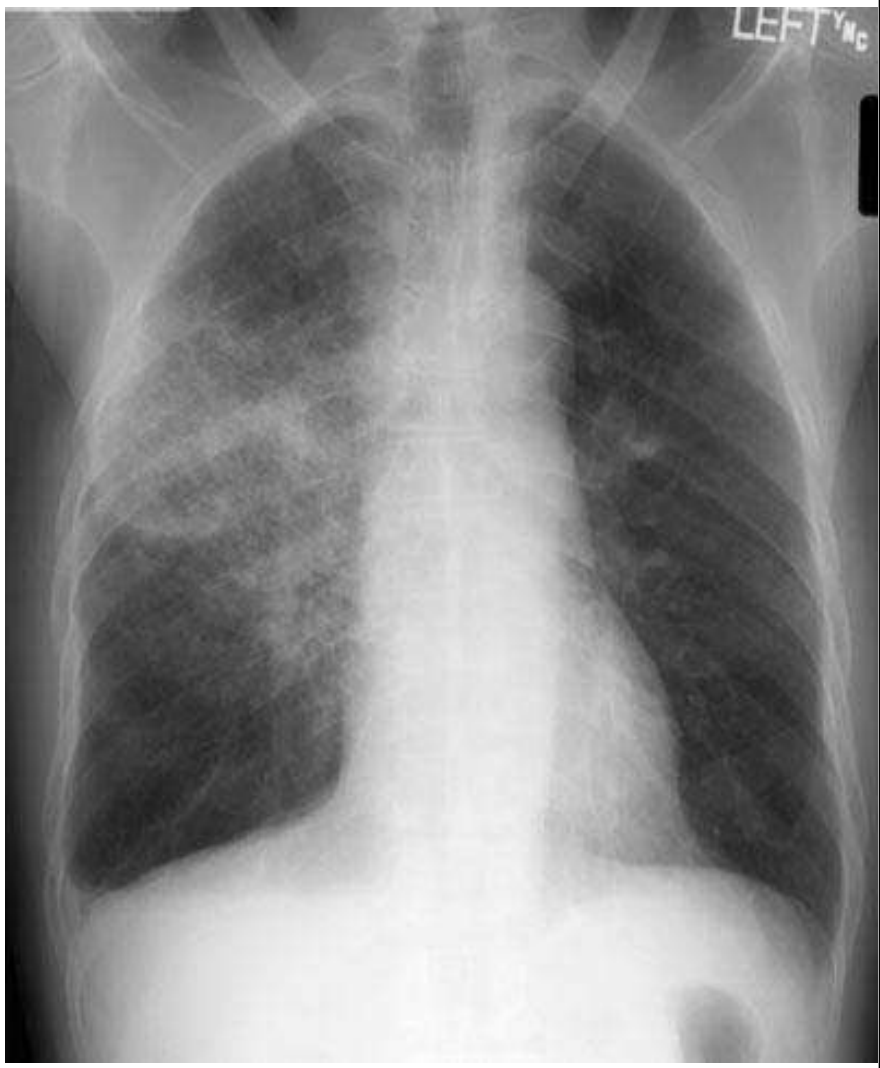
2. **What is the mode of inheritance?**
   Autosomal Recessive

3. **Initial test to do?**
   Sweat chloride test





Q: 10 y/o with recurrent chest infections and FTT:



1. What is the Dx?

Cystic Fibrosis

2.How to confirm your Dx?

Chloride Sweat test >60 on 2 separated days, or genetic studies (>2 mutations), or abnormal nasal potential discharge, fecal elastase.

3.Name two organisms causing this image?

- Step. Pneumonia
- Mycoplasma
- Pseudomonas

1

This child is being tested for cystic fibrosis.
What is the name of the test, which is the gold standard for diagnosis? *
(0/1 Point)

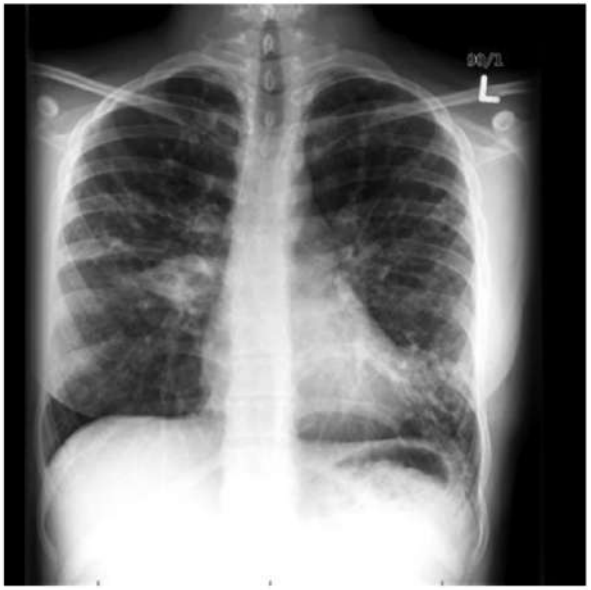
Q6. A 10 yrs old boy presenting to you with cough and fever, his father said it is recurrent , with steatorrhea and failure to thrive, his brother complains from the same symptoms too

1. What is the test of choice for dx

2 sweat chloride test above 60

1. What is the commonest organism you want to orotect the child from

Pseudomonads auregnoisa



A 13 year old male pt. known to have CF , presented to ER complaining of severe productive cough & fever.

Q1 : What is the possible Dx?

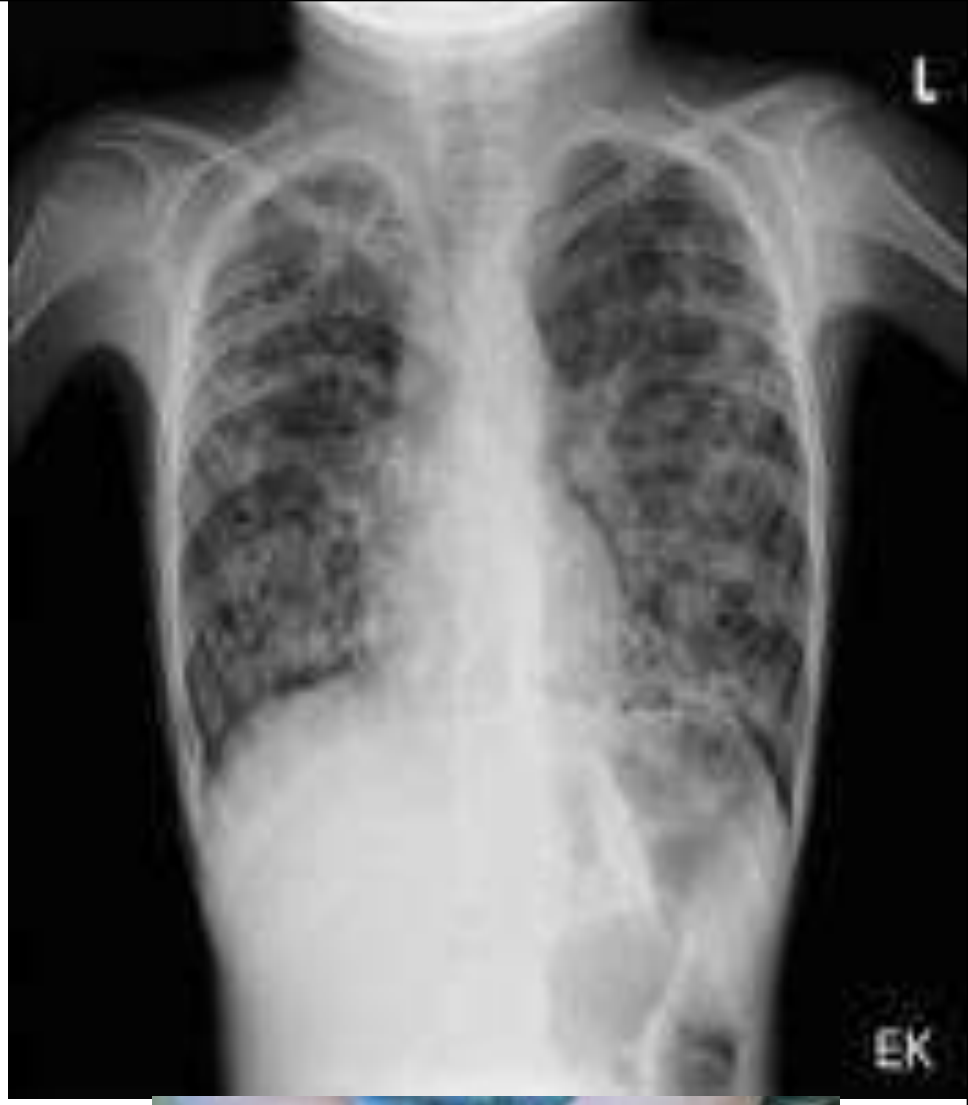
- Bronchiectasis

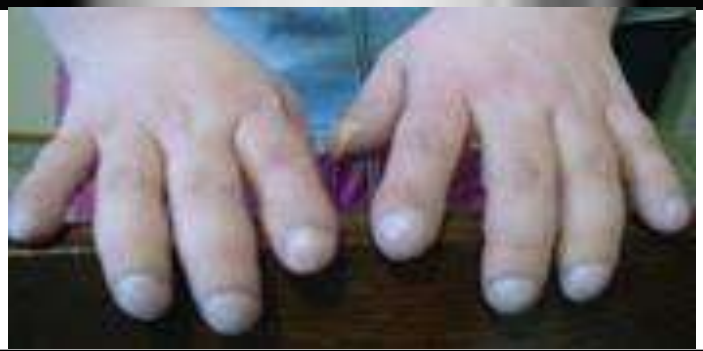
Q2 : What is the hand sign?

- Finger Clubbing

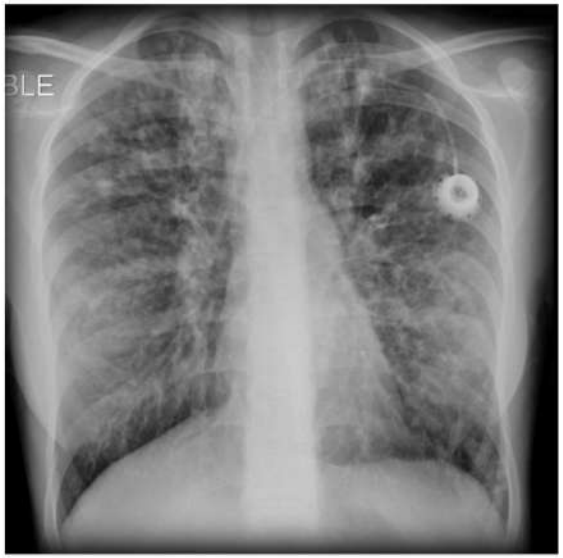
Q3 : Mention 2 other respiratory manifestation pt. with CF can present ?

- Recurrent bacterial infection
- Pneumothorax
- Nasal polyps



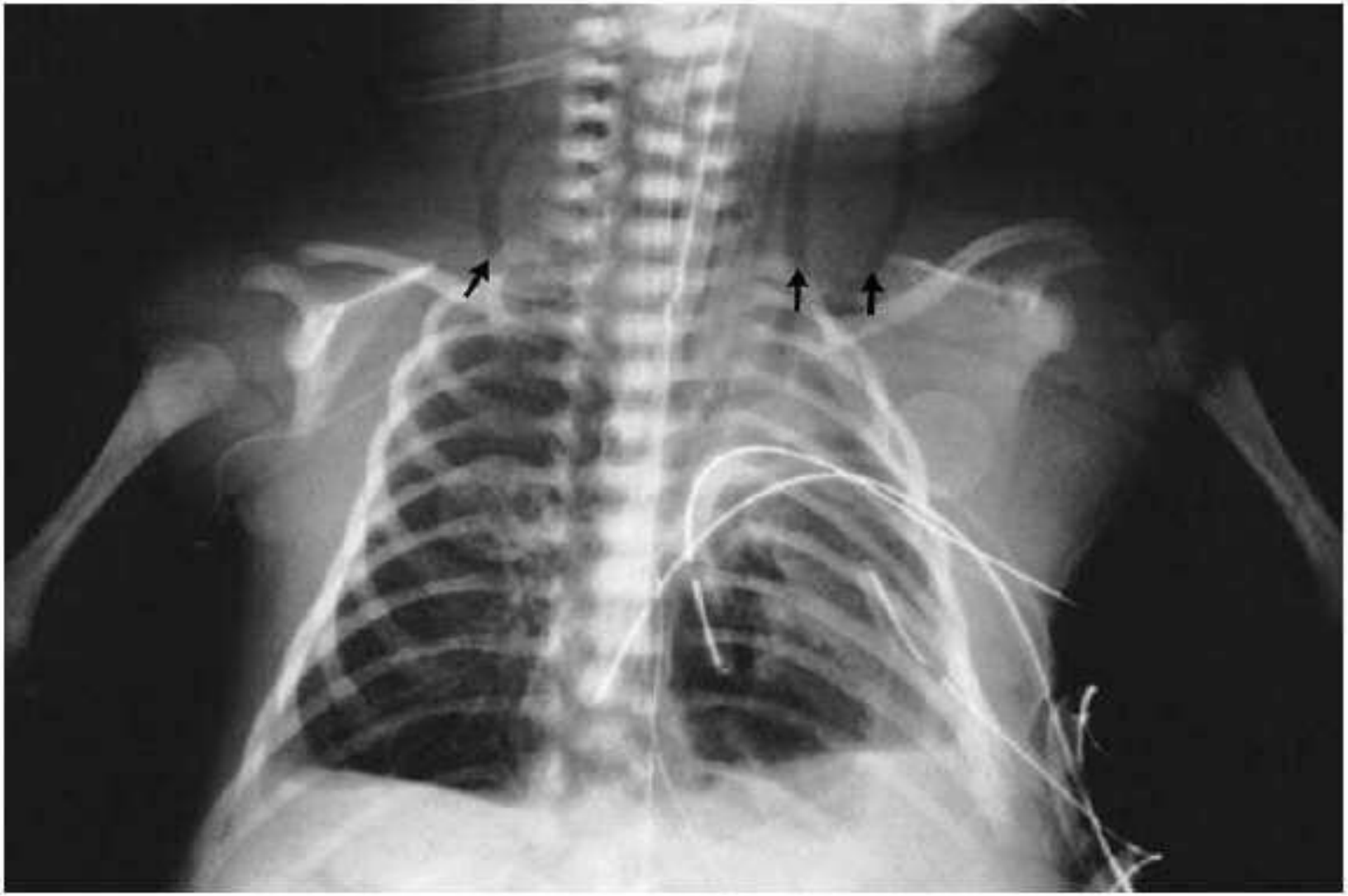


PT present with FTT , Recurrent infection, bronchiactasis & situs inversus
Diagnosis ?
Extra vaccine should given ?



Q: What is the Dx?

Surgical emphysema



1.Name two types of injuries that could occur?

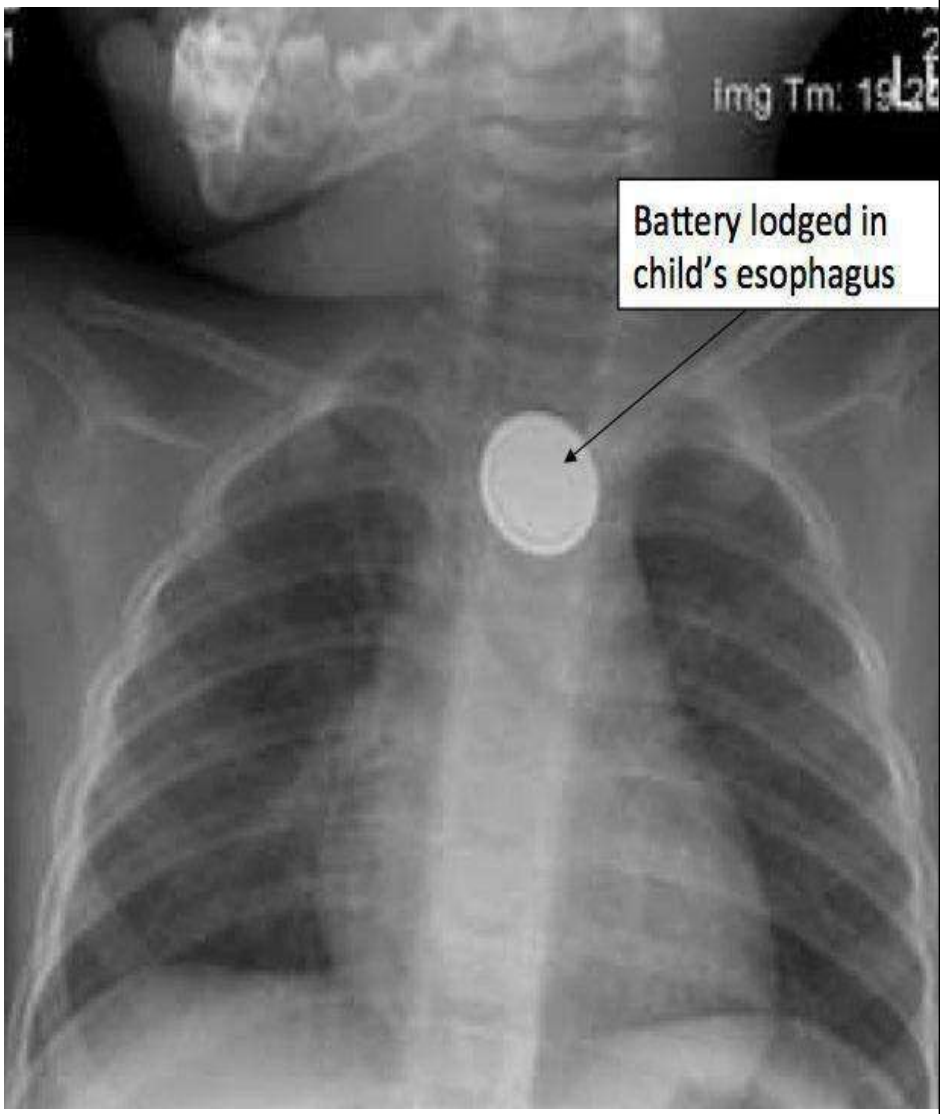
A. Chemical

B. Electrical

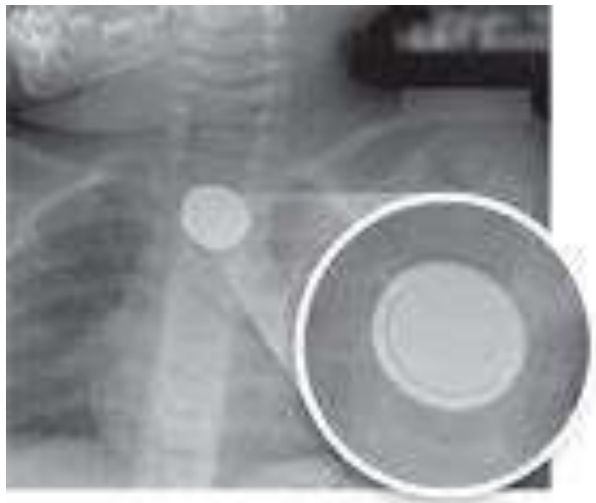
C. Physical

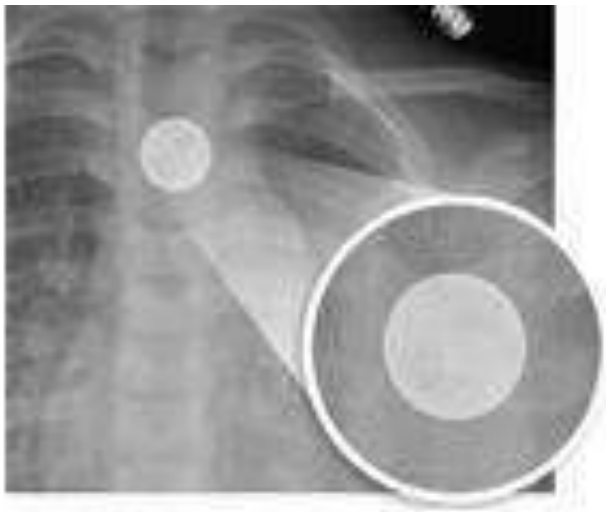
2. What is the immediate urgent Mx?

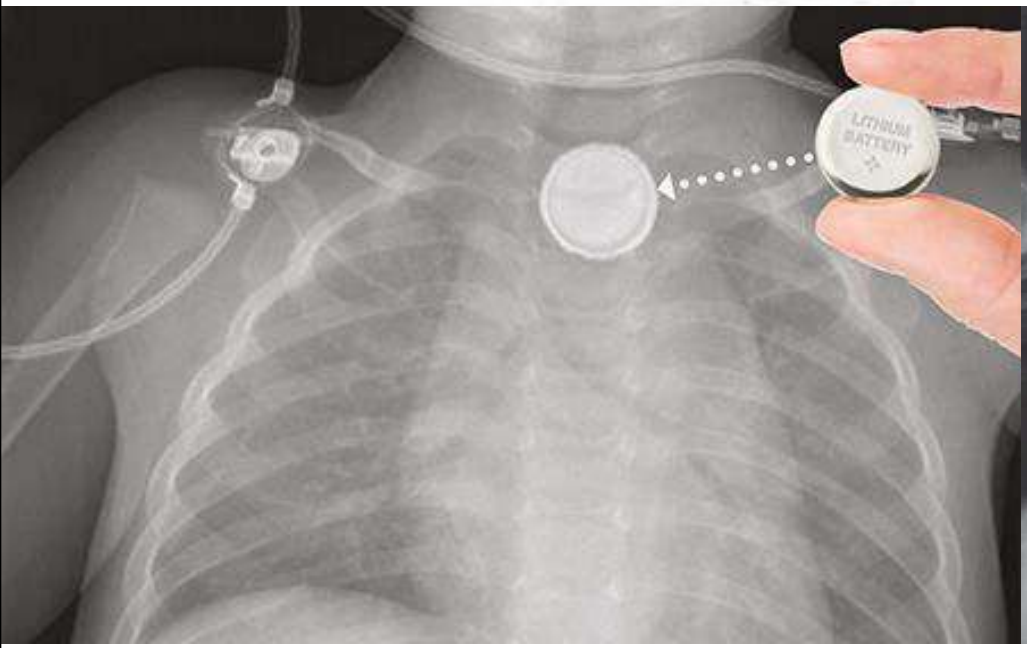
Emergent upper endoscopy

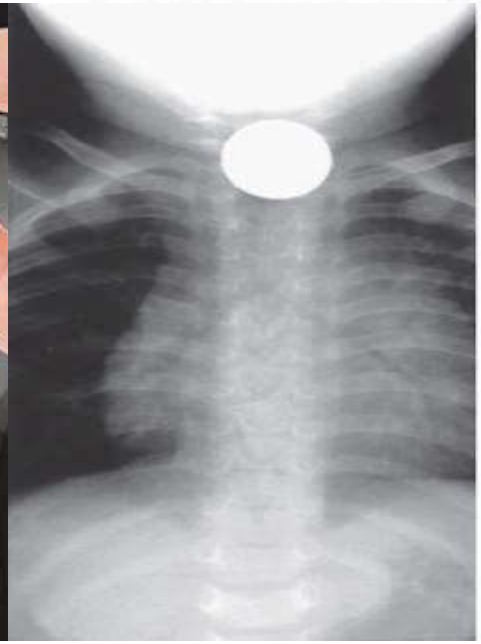


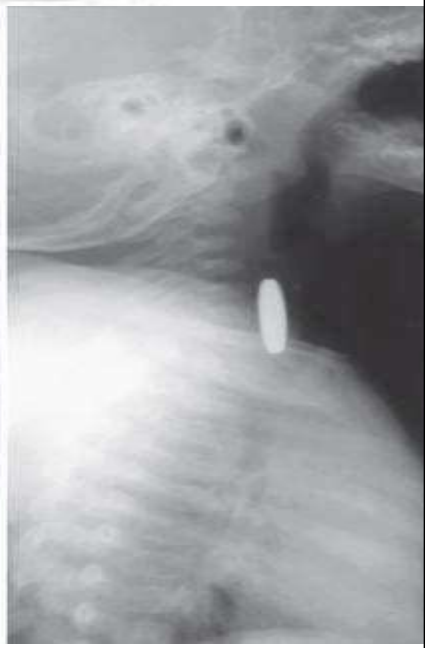
The button battery has the **double ring**, or **halo sign**, as opposed to a single ring of the coin.









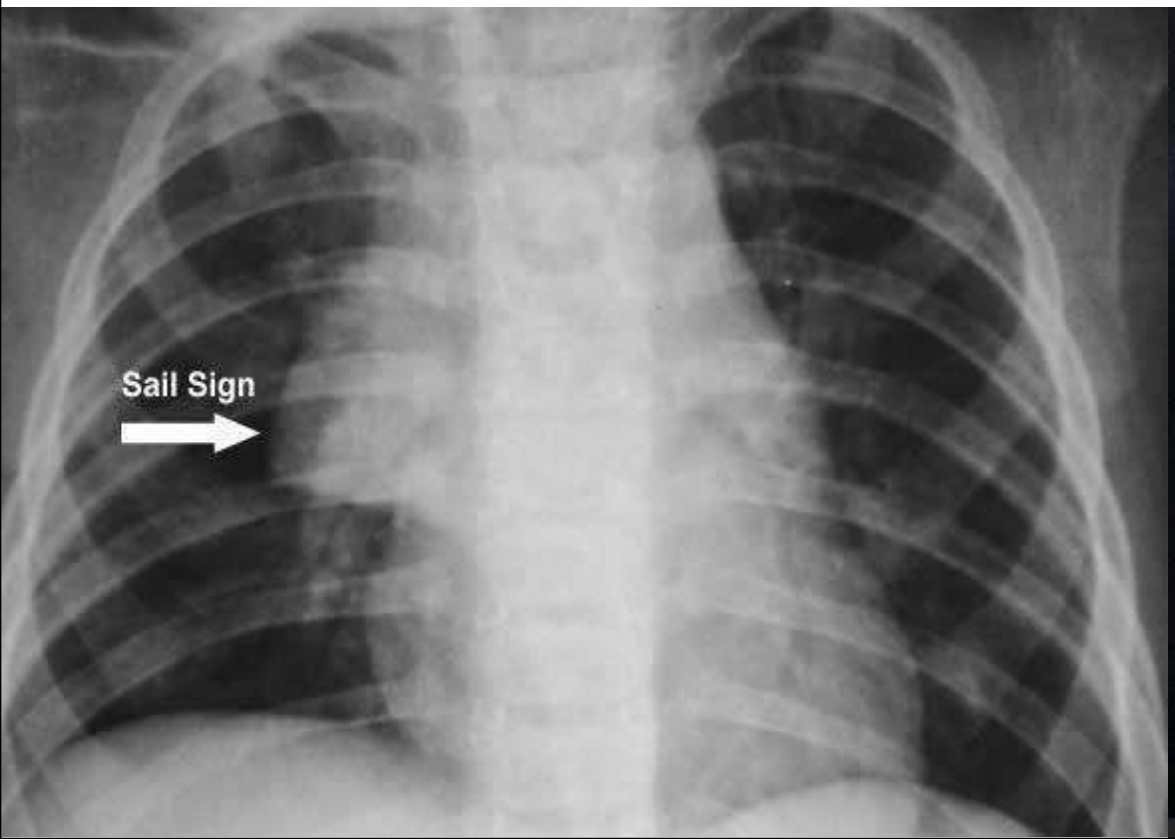


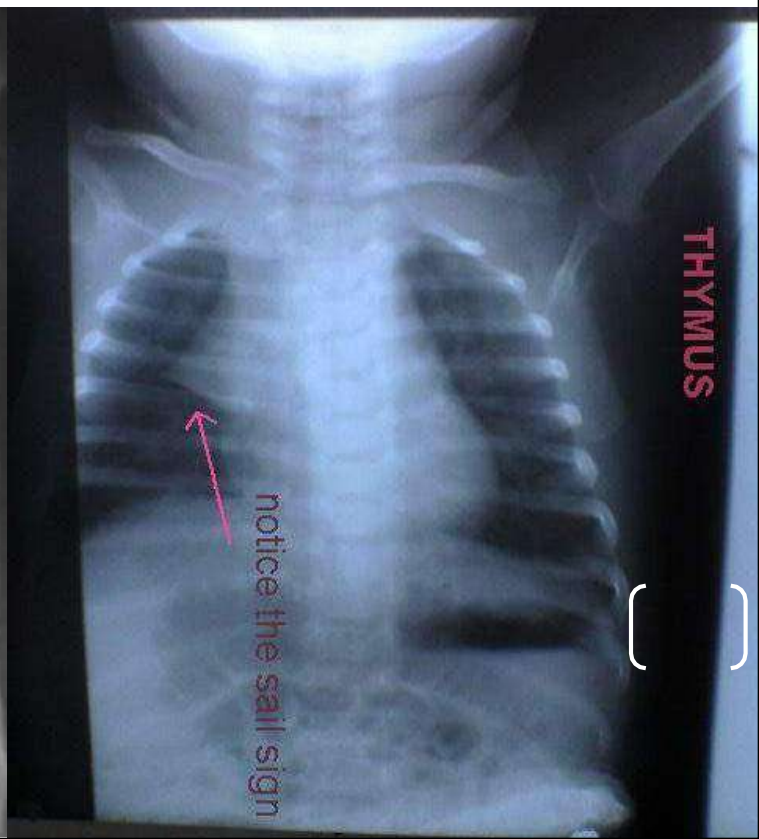
1- mention the name of this sign?

Sail sign of the thymus

2-What is the most likely Diagnosis?

Normal CXR





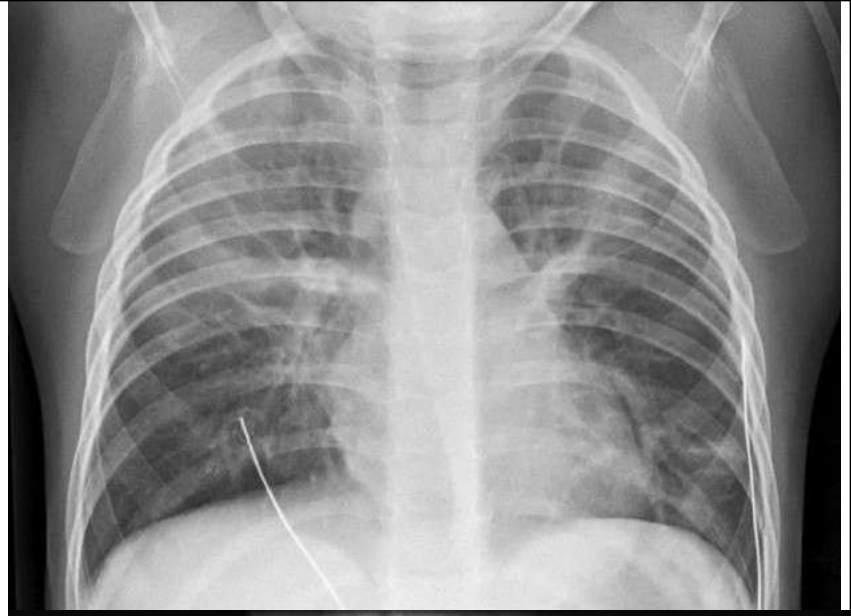
Q: 5 month old comes in winter with crackles, difficulty in breathing and low grade fever:

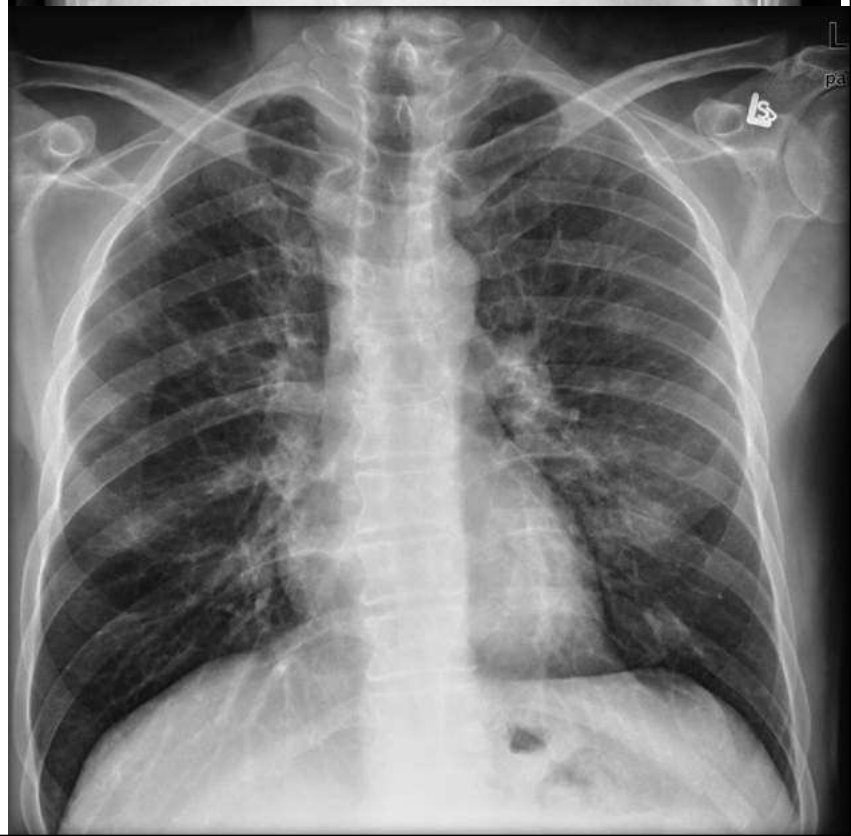
1. **What is the Dx?**

Bronchiolitis

2. Give 2 causes?

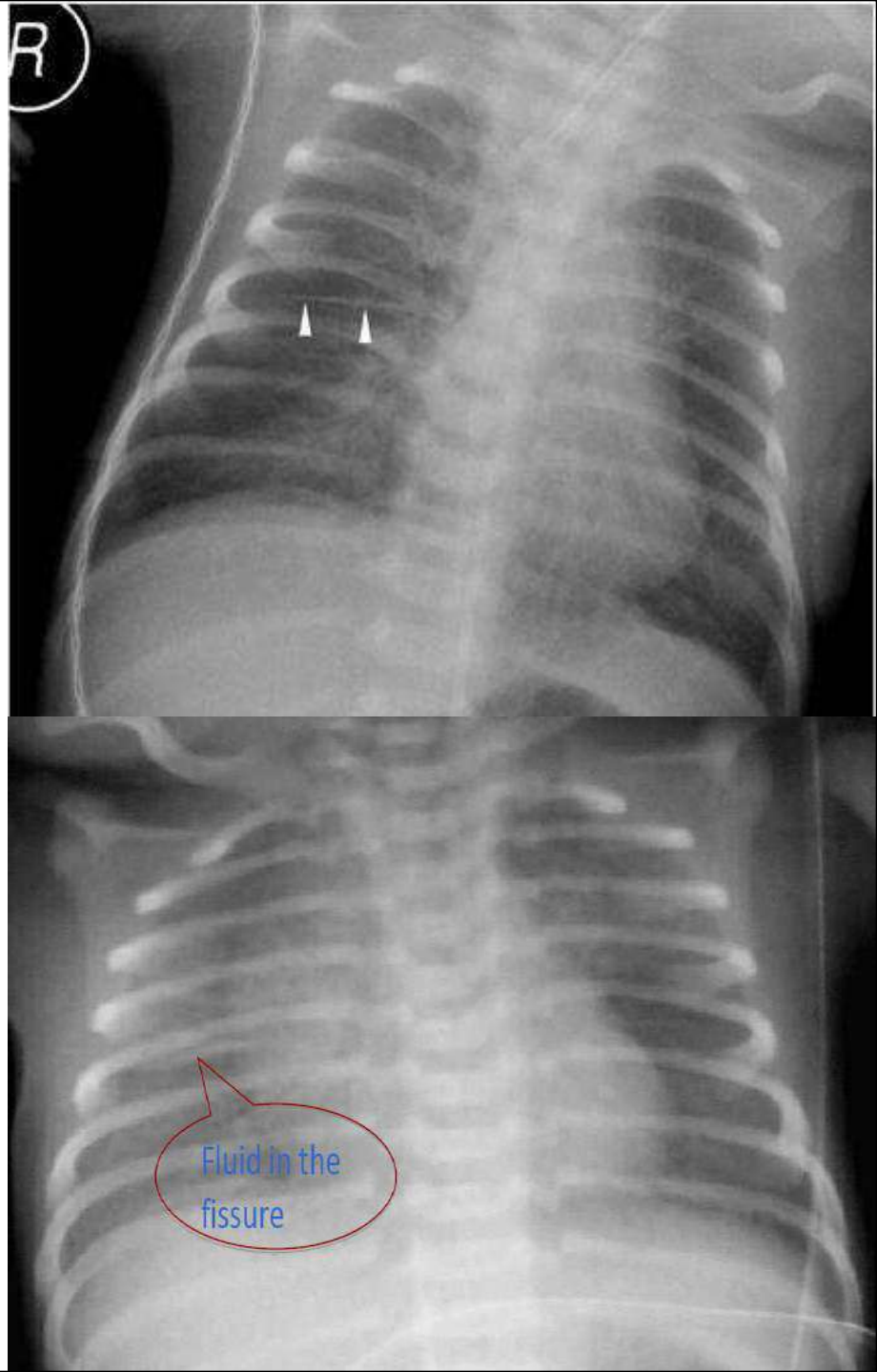
- Respiratory syncytial virus (RSV – most common cause)
- Parainfluenza
- Adenovirus
- Mycoplasma





Q: a full term newborn born by C/S with this X-ray, What is the Dx?

Transient Tachypnea of newborn (TTN)
(Notice: fluid in the fissure)



Q: 32 week old infant X-RAY:

1. What is the Dx? RDS

2. Give 2 Signs?

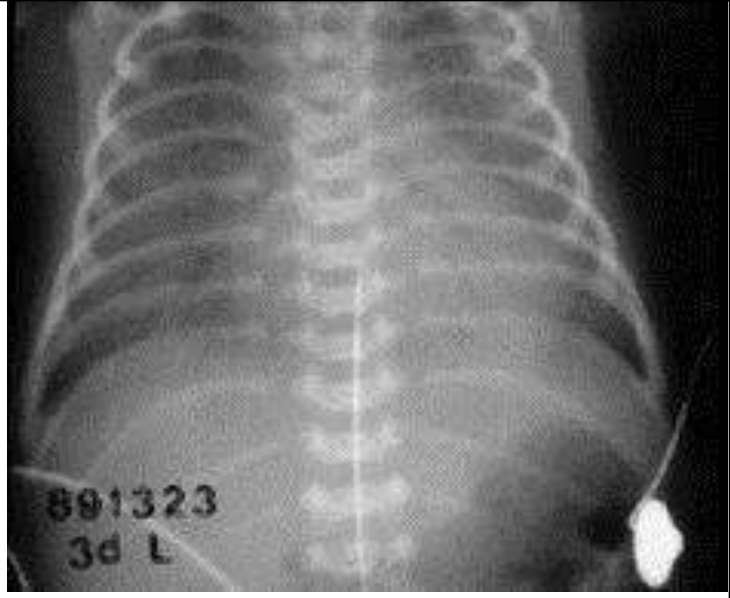
Cyanosis, Retraction, nasal flaring, use of accessory muscles

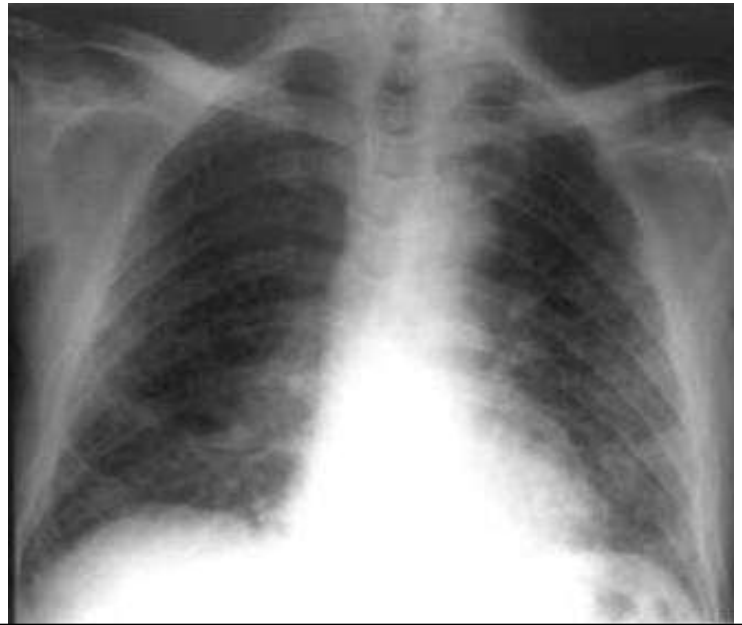
3.Name 2 radiological signs?

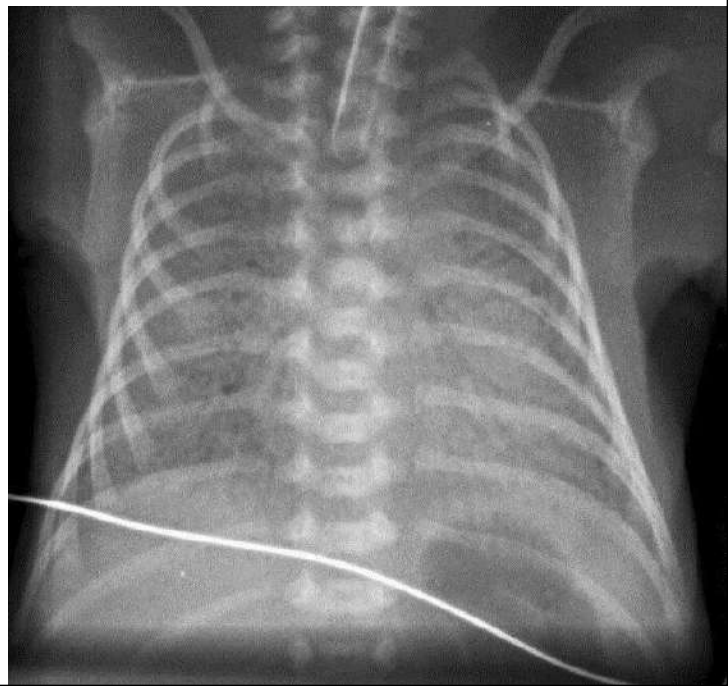
Ground Glass Appearance

"Reticulogranular pattern"

Air Bronchogram







Q1 : What sign do you?

- Ground Glass (Salt pepper)

Q2 : What does it indicate ?

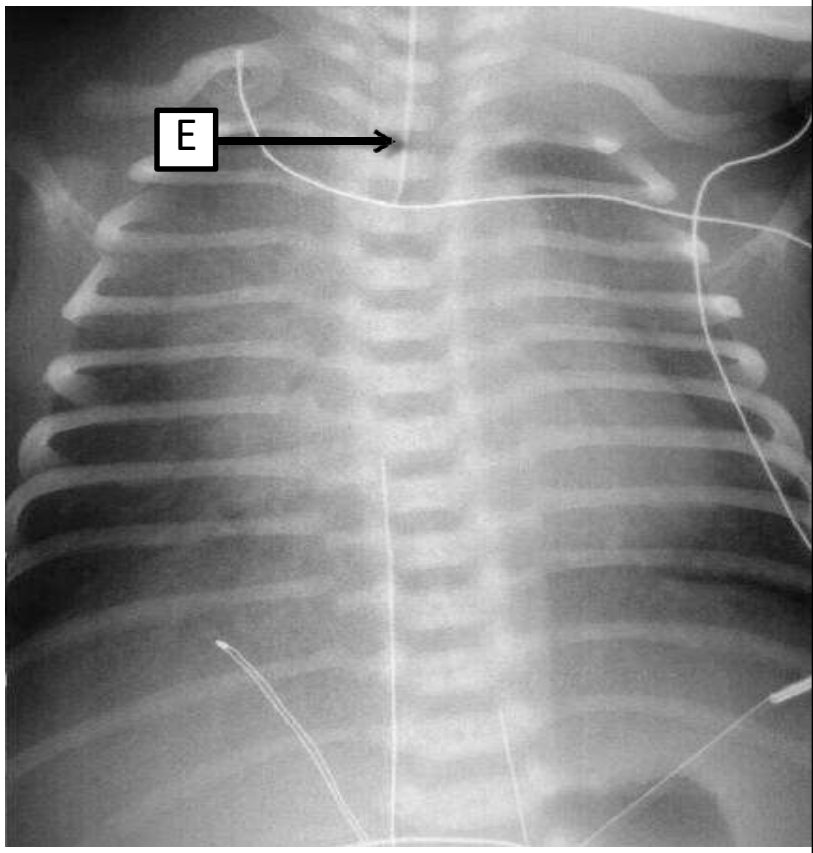
- RDS

Q3 : What is the usual cause ?

- Meconium aspiration

Q4 : What is the device (E)?

- Endotracheal tube



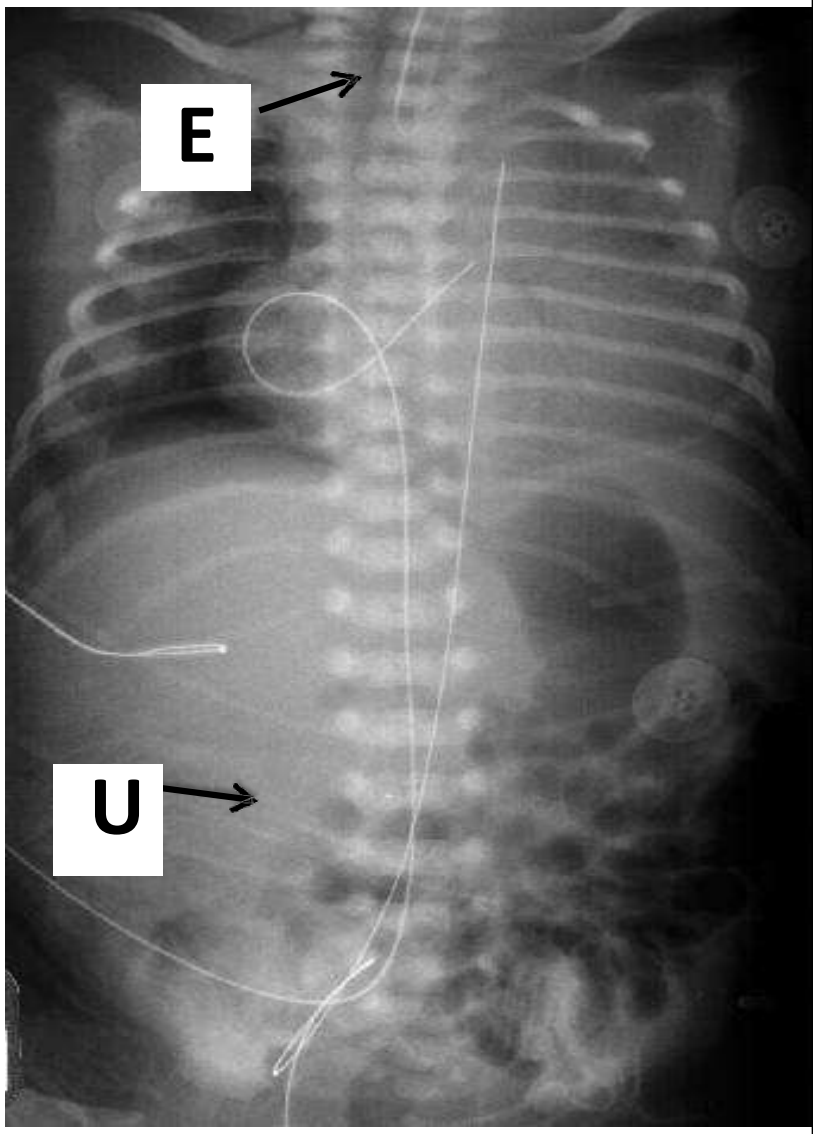
Ground Glass (salt-pepper) sign : areas of hyperinflation near a collapsed area . The cause usually meconium aspiration , when meconium is trapped in small airways and block it (collapsed) , then the adjacent area will receive much air and become hyperinflated .

- This is a child with **severe RDS**
  (as you see , the left lung is whitish in color because a lot of mucus is accumulated)

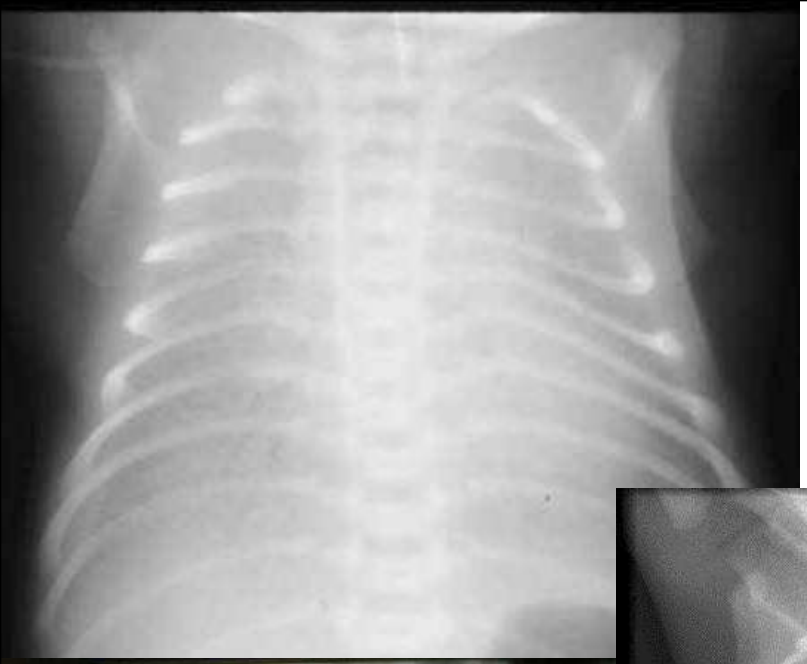
- The cause of RDS here is **patent foramen ovale** .

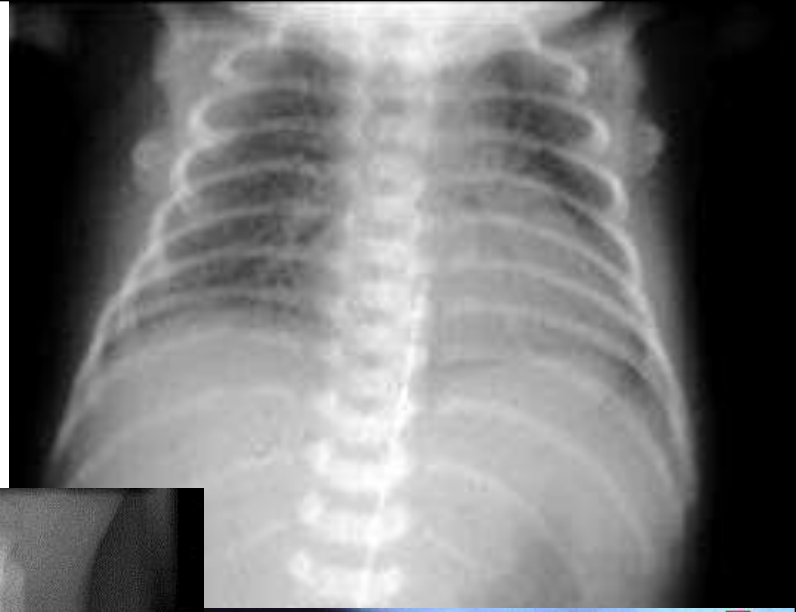
- As you see, there is a catheter that inters through the **umblical lines** (**U**) , go to the heart , and pass through the patent foramen ovale .

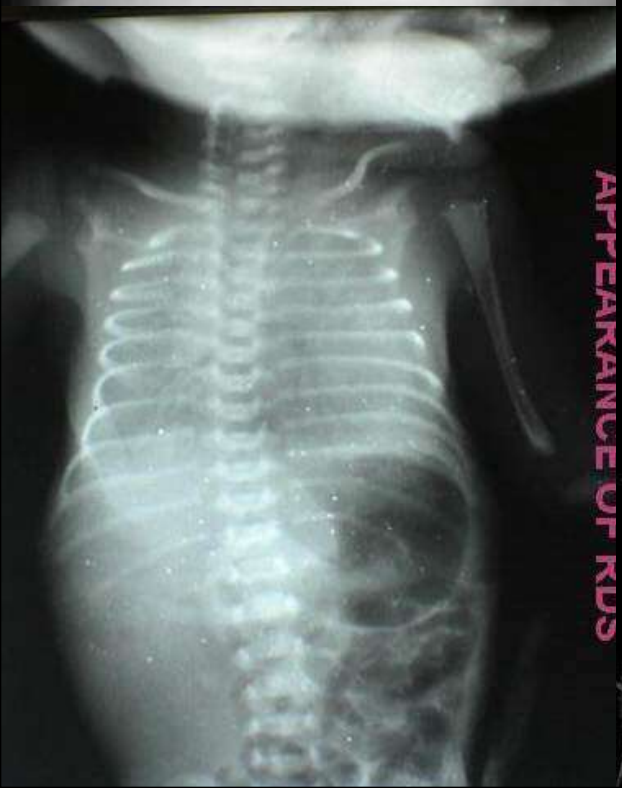
- You can see also **ET tube** (**E**)

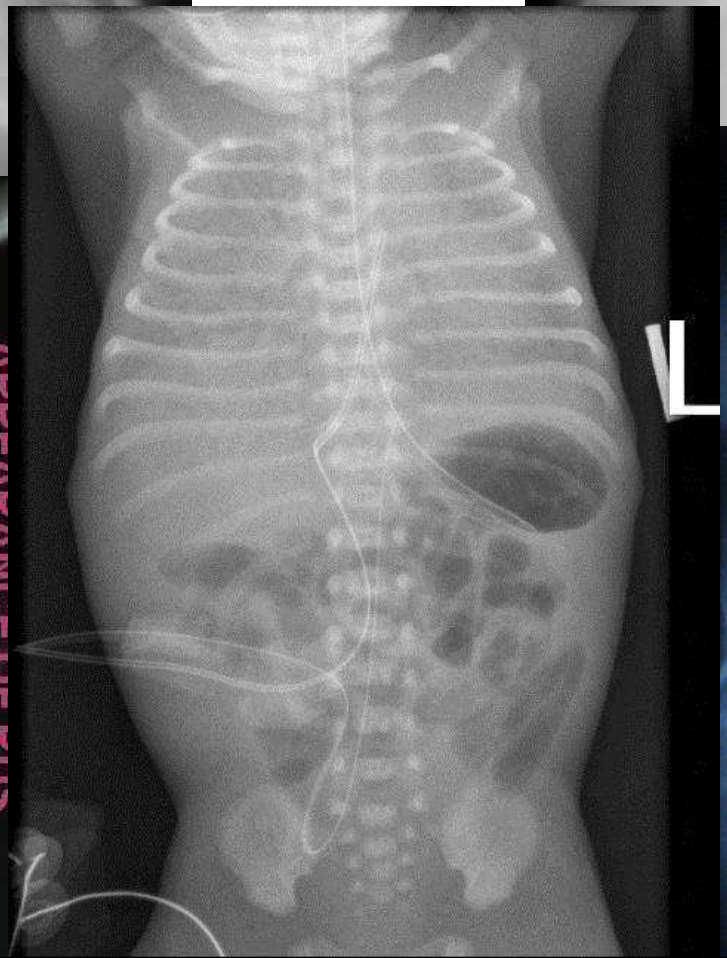


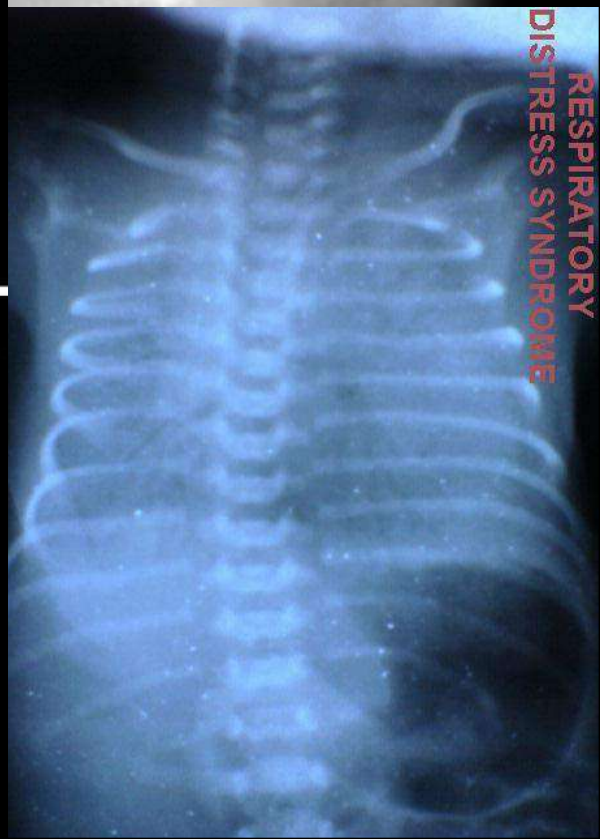
RDS

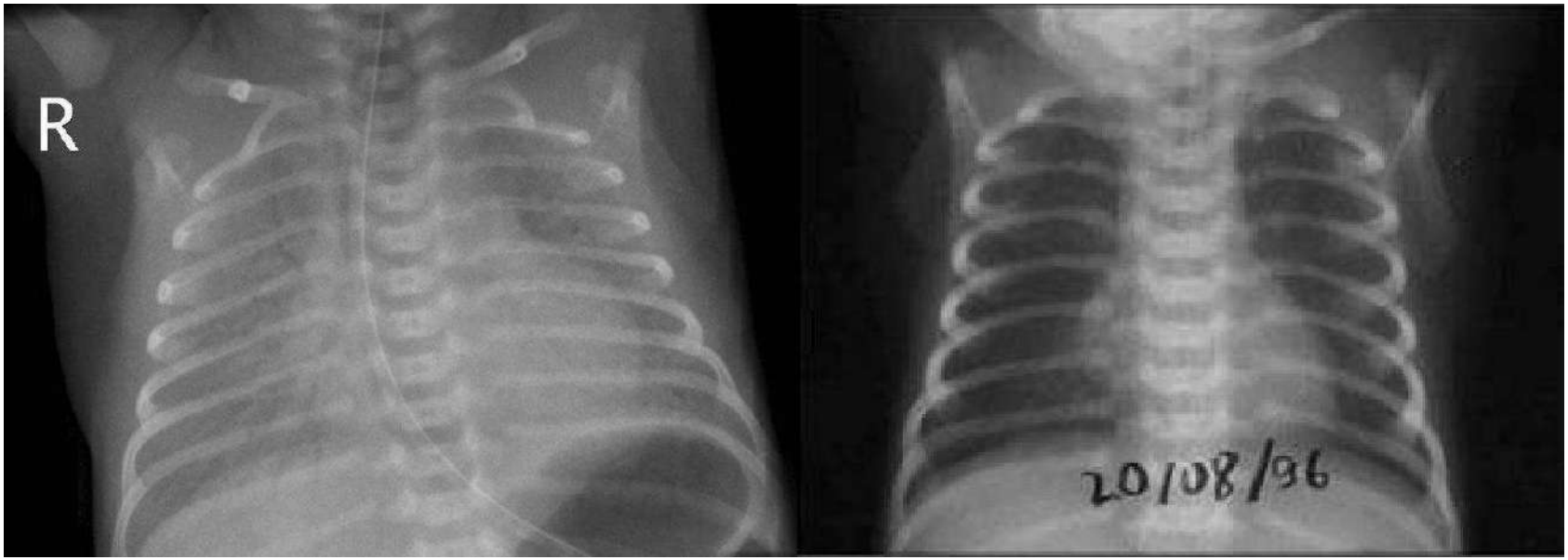












Q: These CXRs for a premature newborn with respiratory symptoms, the 2nd is after receiving management.

1. What is the Mx he received? Surfactant

2. What is the Dx? RDS

Q: History of a patient with fever and cough (Pneumonia). RR is 30/mi.

Q1: What are two physical finding on chest exam without using stethoscope?

- Palpation: reduced expansion
- Percussion: Stony dull
- Auscultation: Diminished vesicular breathing

Q2: name 2 findings on the CXR?

- Hyperdense or consolidation
- Costophrenic angle obliterated or absent

Q3: Next step in Mx?

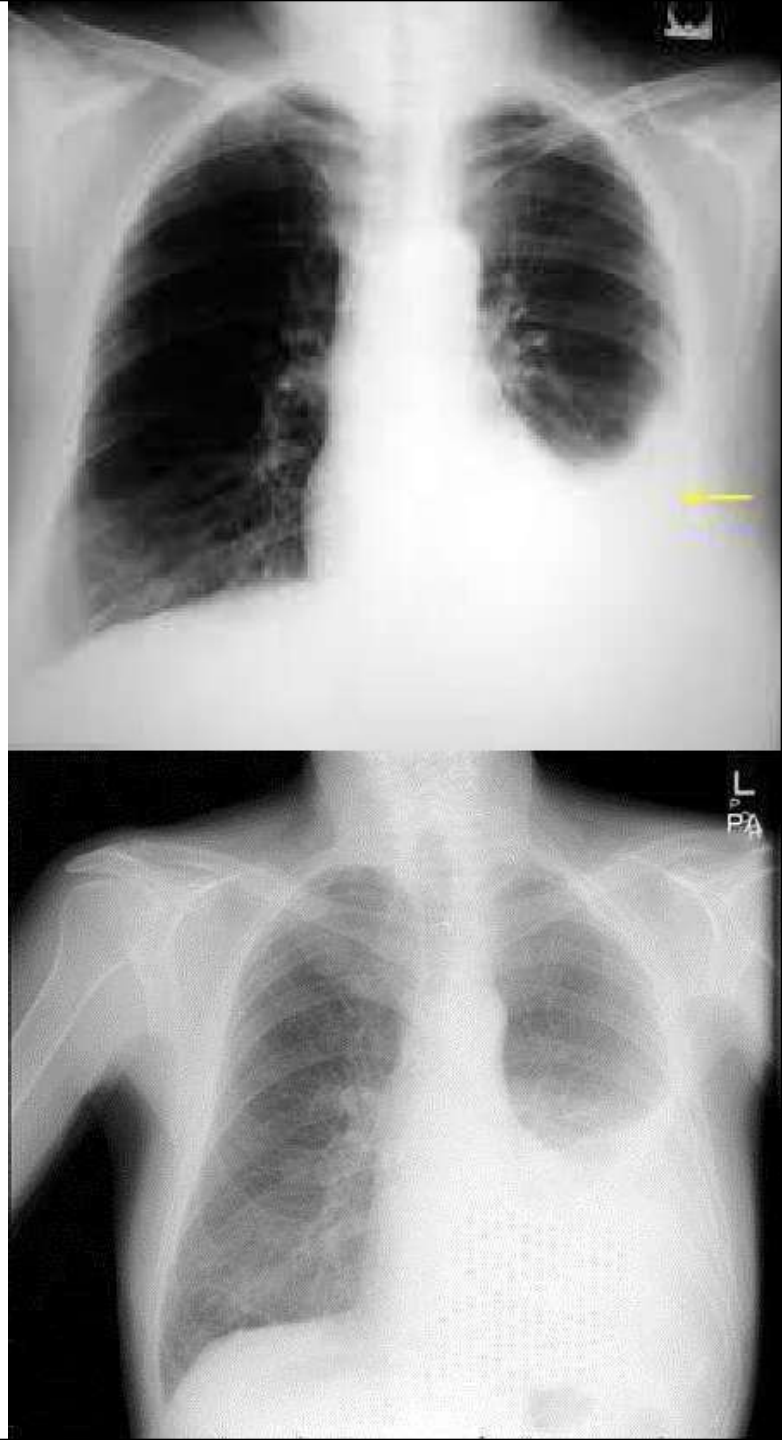
- Chest tube, Antibiotic

Q4: What is your Dx?

Lower lobe pneumonia with pleural effusion

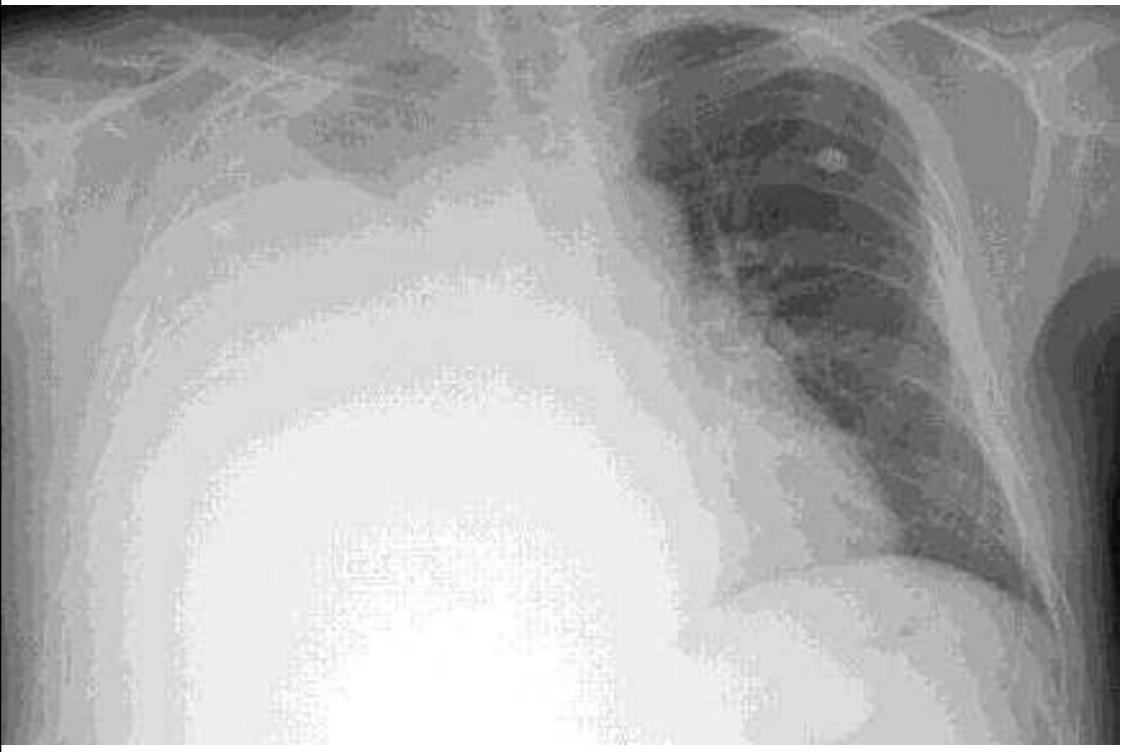
Q5: Name 2 causative organisms?

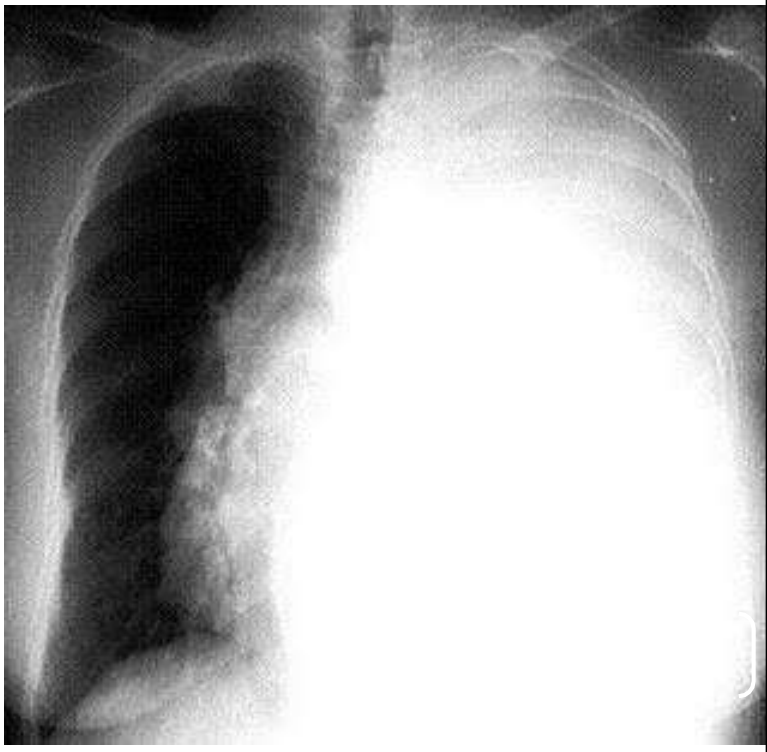
- Strep pneumonia
- Mycoplasma pneumonia



Q: What's your Dx?

- Massive pleural effusion





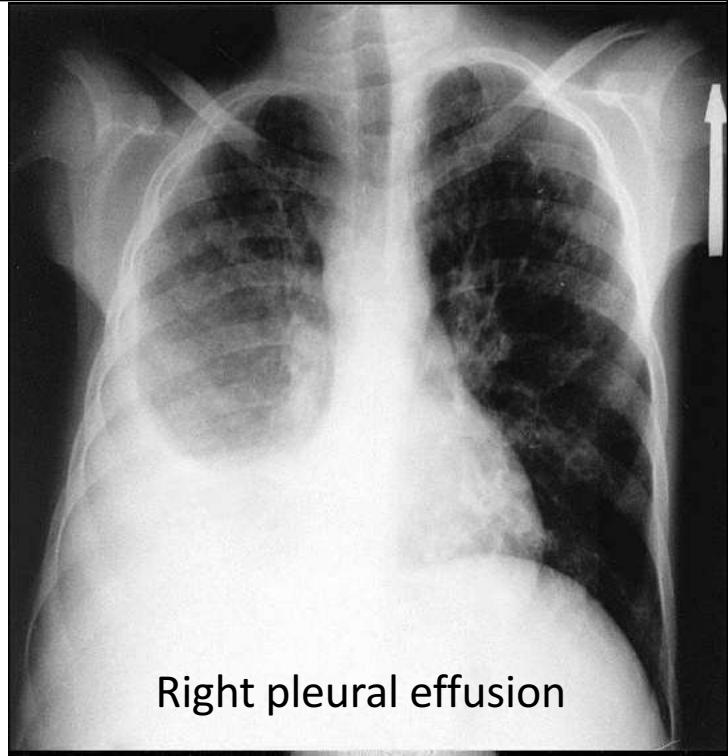
Q: a patient known to have nephrotic syndrome with SOB, his CXR showed the following:

1. What is the abnormality?

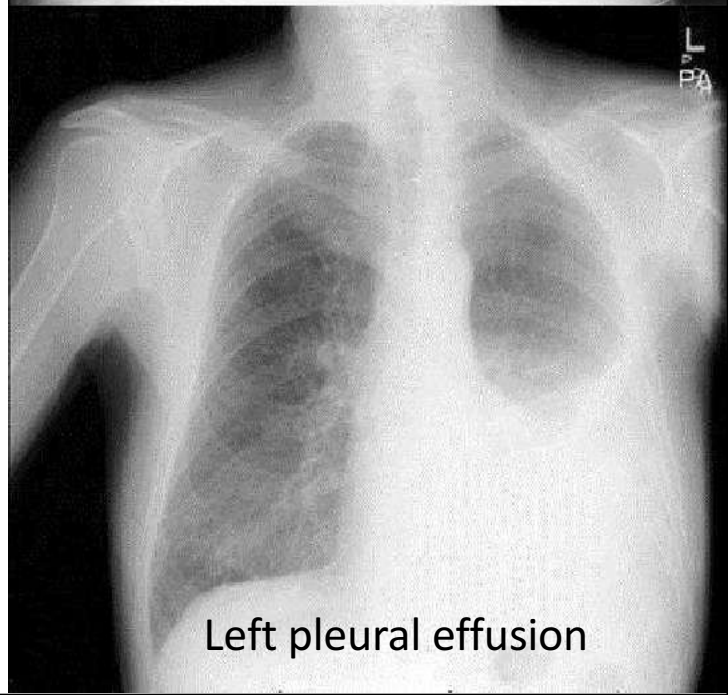
Pleural effusion

2. What medication can be given to treat this problem?

Diuretics (Furosemide)



Right pleural effusion



Left pleural effusion

A common question to ask, what are the causing agents based on the age (so read the question appropriately)

AGE GROUP	FREQUENT PATHOGENS (IN ORDER OF FREQUENCY)
Neonates (<3 wk)	Group B streptococcus, Escherichia coli, other gram-negative bacilli, Streptococcus pneumoniae, Haemophilus influenzae (type b,* nontypable)
3 wk-3 mo	Respiratory syncytial virus, other respiratory viruses (parainfluenza viruses, influenza viruses, adenovirus), S. pneumoniae, H. influenzae (type b,* nontypable); if patient is afebrile, consider Chlamydia trachomatis
4 mo-4 yr	Respiratory syncytial virus, other respiratory viruses (parainfluenza viruses, influenza viruses, adenovirus), S. pneumoniae, H. influenzae (type b,* nontypable), Mycoplasma pneumoniae, group A streptococcus
≥5 yr	M. pneumoniae, S. pneumoniae, Chlamydophila pneumoniae, H. influenzae (type b,* nontypable), influenza viruses, adenovirus, other respiratory viruses, Legionella pneumophila

Q: A 14-month-old boy had high fever and cough for 3 days prior to admission , depending on CXR :

Q1: What is the prominent finding?

- Lung Consolidation

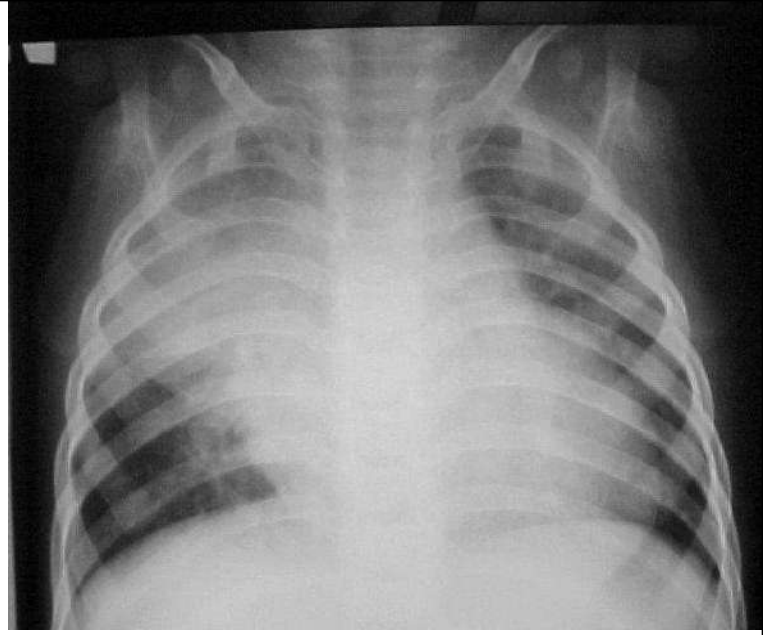
Q2 : What is your diagnosis?

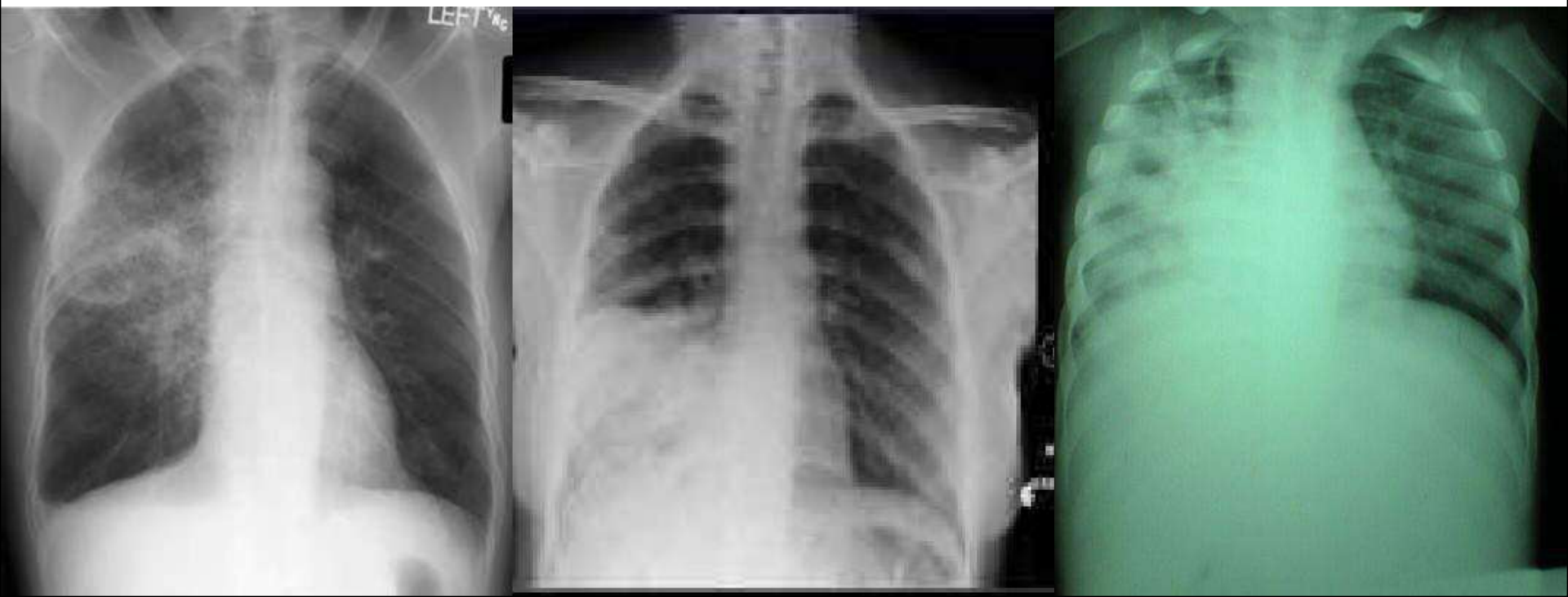
- Pneumonia

Q3 : What is the most common cause?

- Strep pneumonia

(check the organisms in the table according to age)



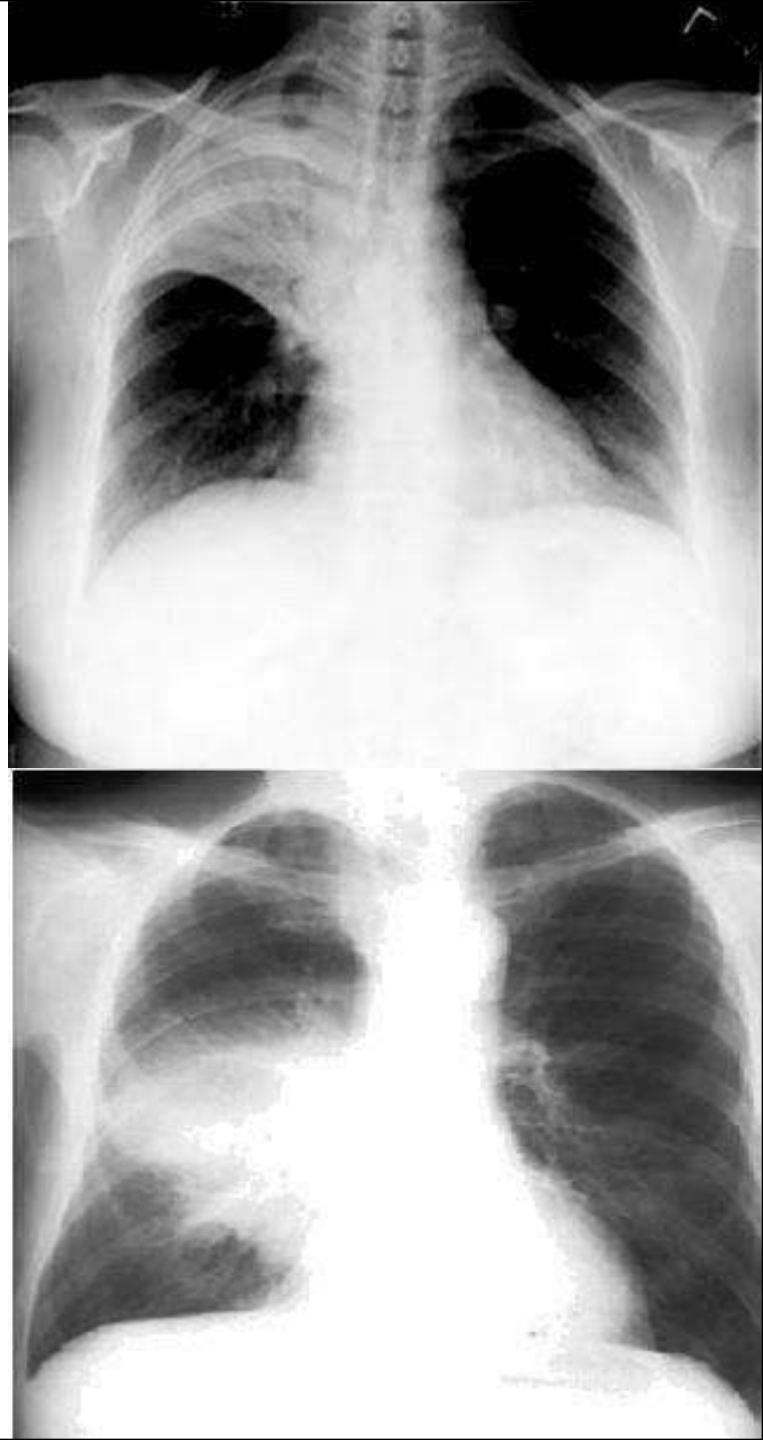


Q4 : Mention 3 complications ?

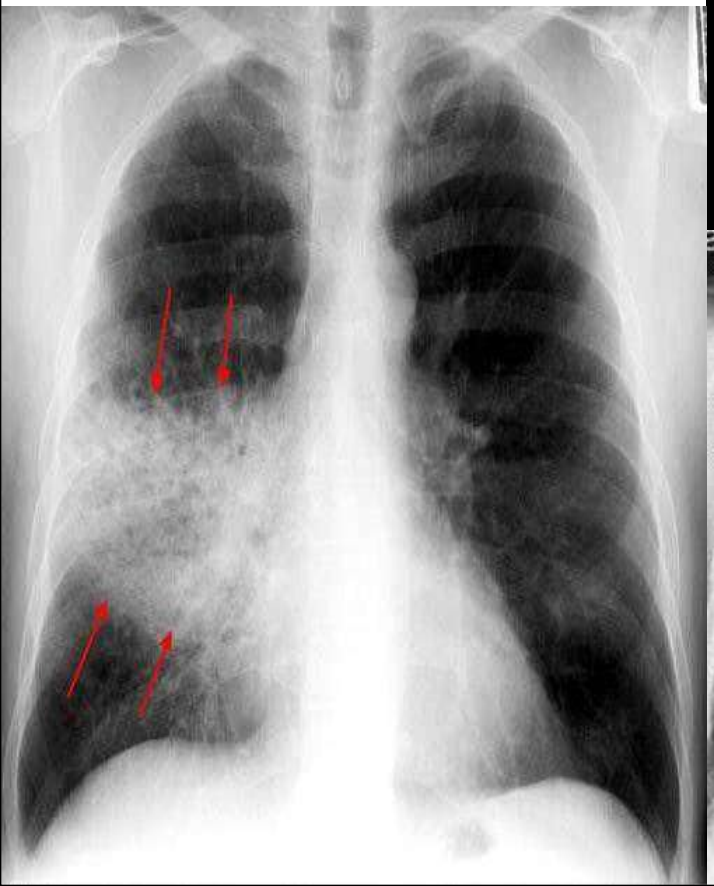
- Pleural effusion,
- Empyema,
- Pericarditis

Q5: Mention physical findings?

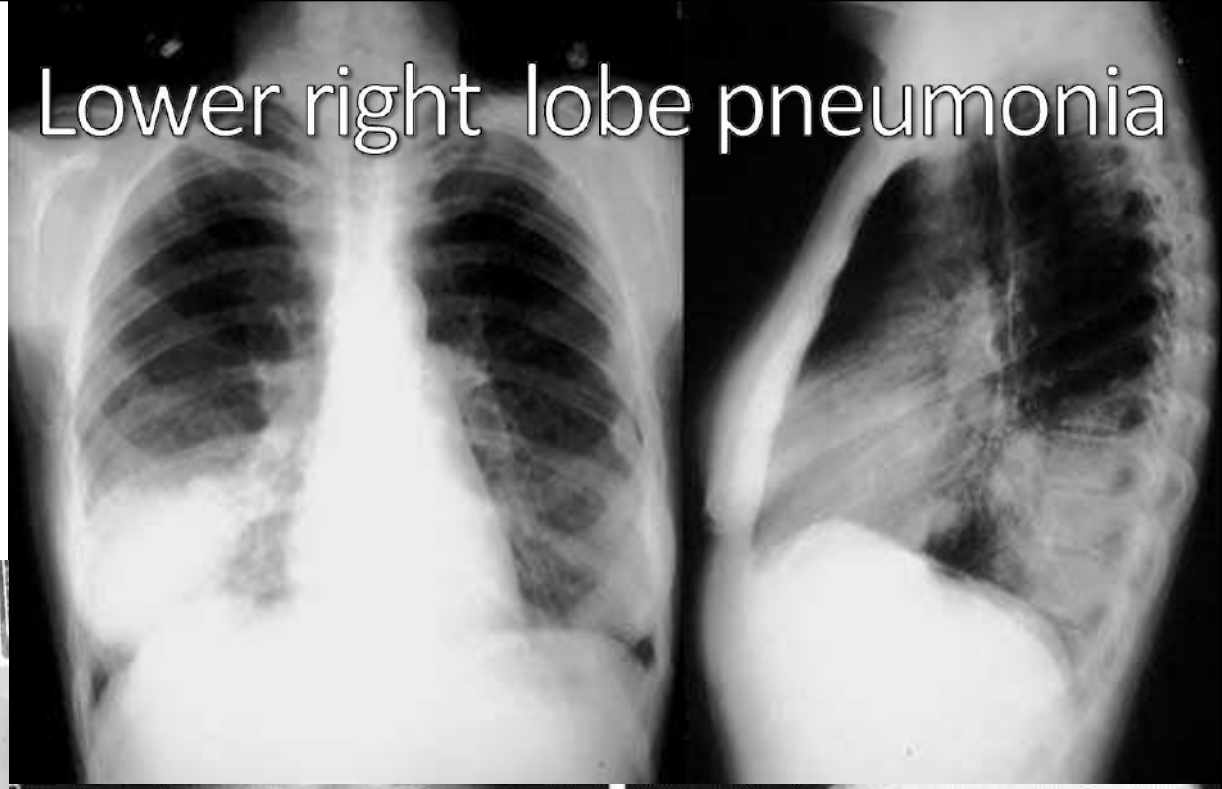
- Palpation: decrease chest expansion
- Percussion: dullness
- Auscultation: decreased air entry on the affected side



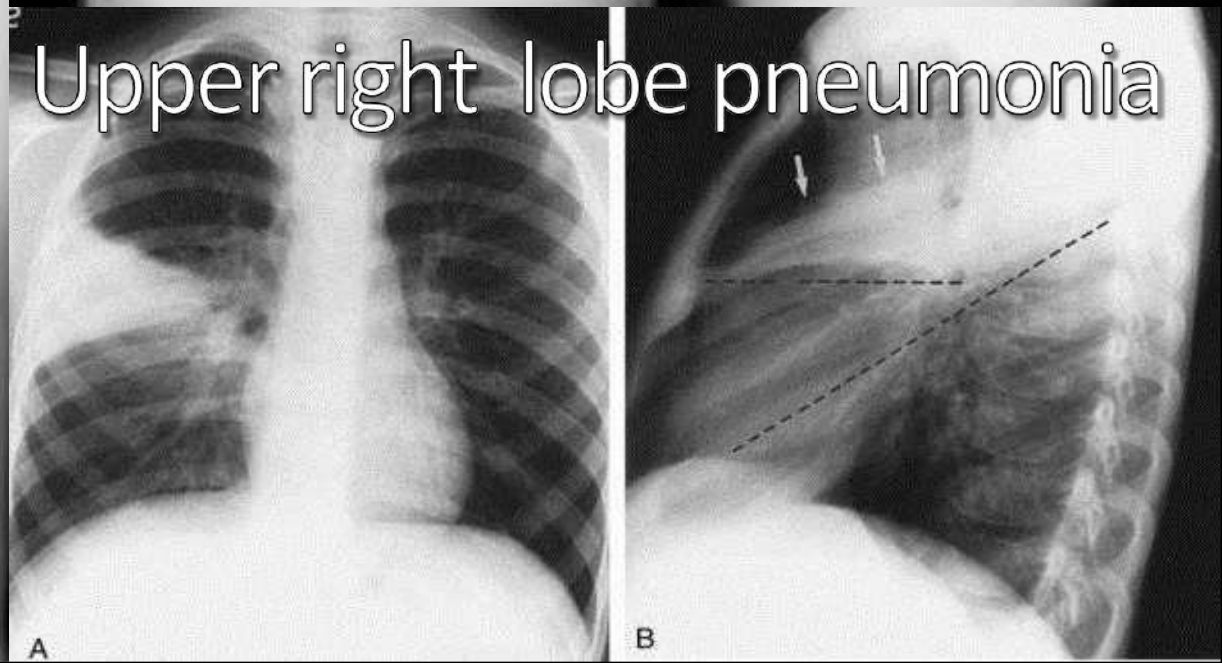
Middle right lobe pneumonia



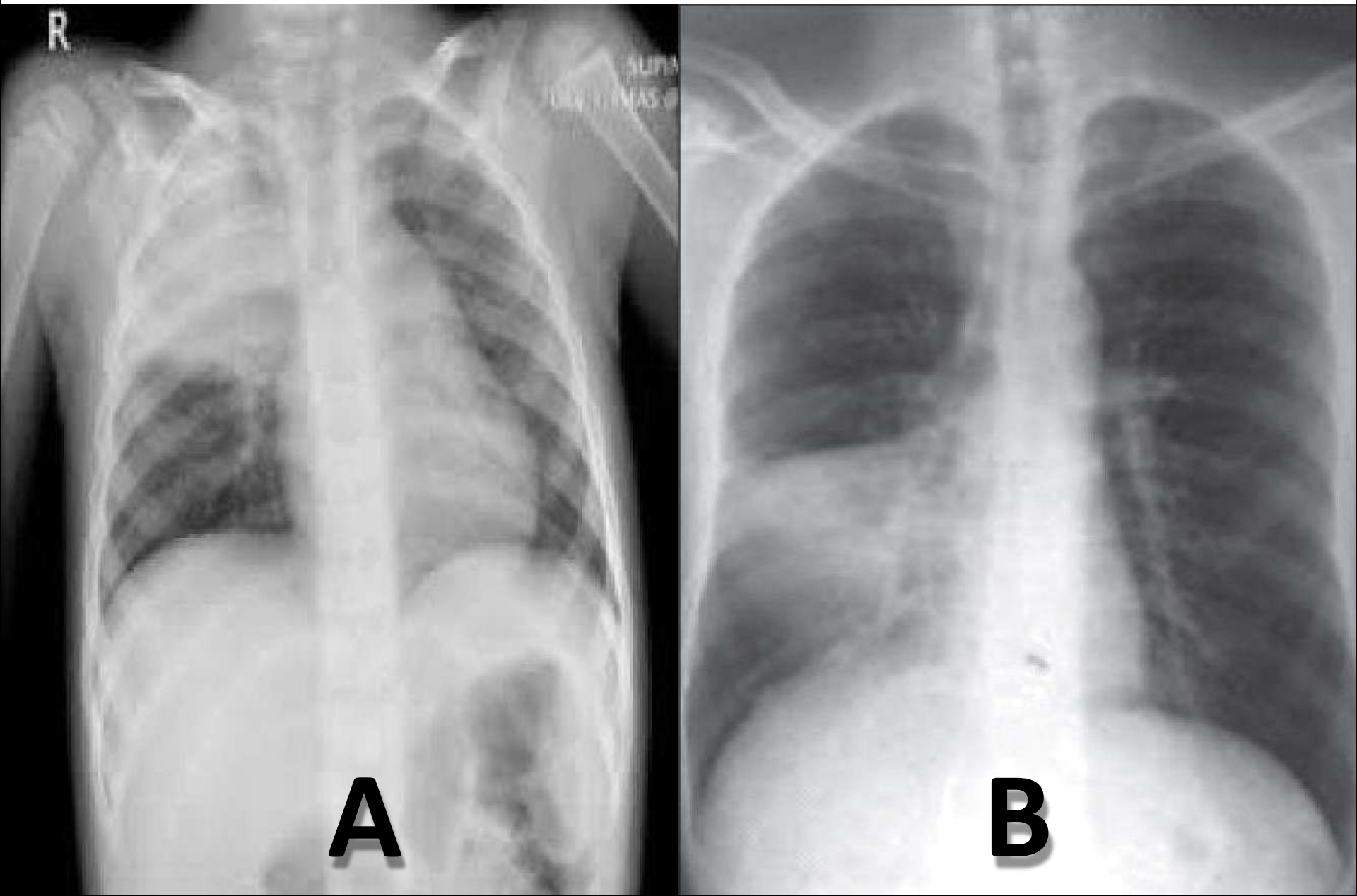
Lower right lobe pneumonia



Upper right lobe pneumonia



Q: Study the following pictures and answer the questions below



1. What is your diagnosis?

A- Right upper lobe pneumonia

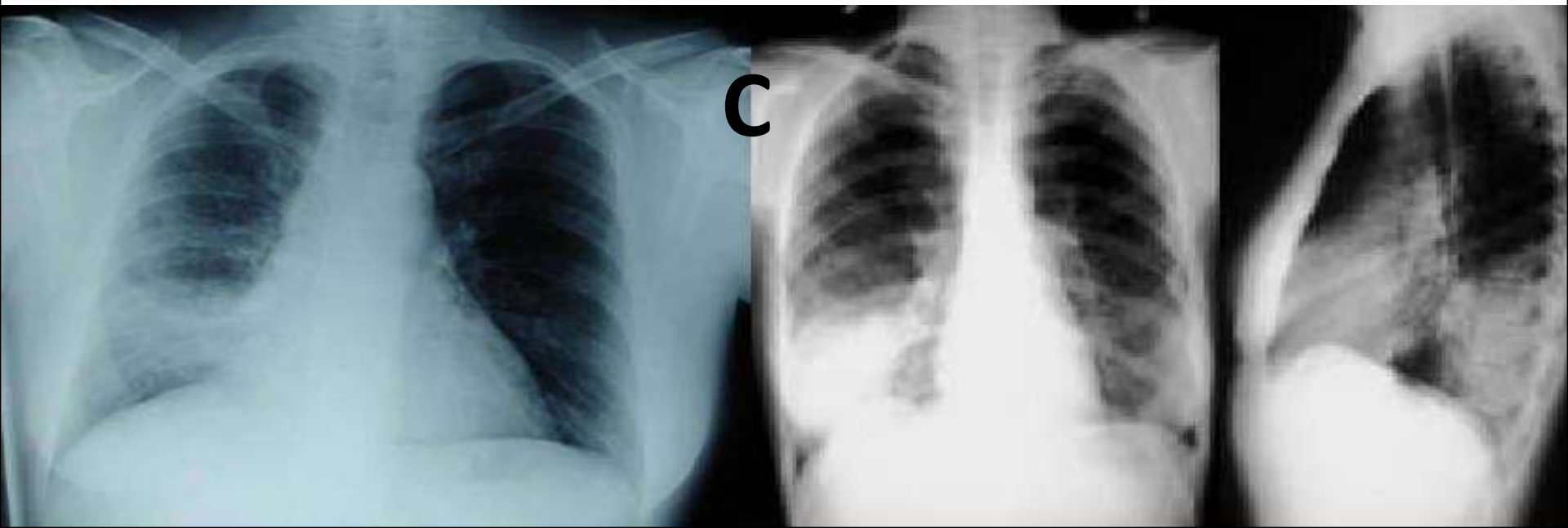
B- Right middle lobe pneumonia

(because there's silhouette sign of the heart)

C- Right lower right lobe pneumonia

2. what is the most common causative organism?

Strep Pneumonia

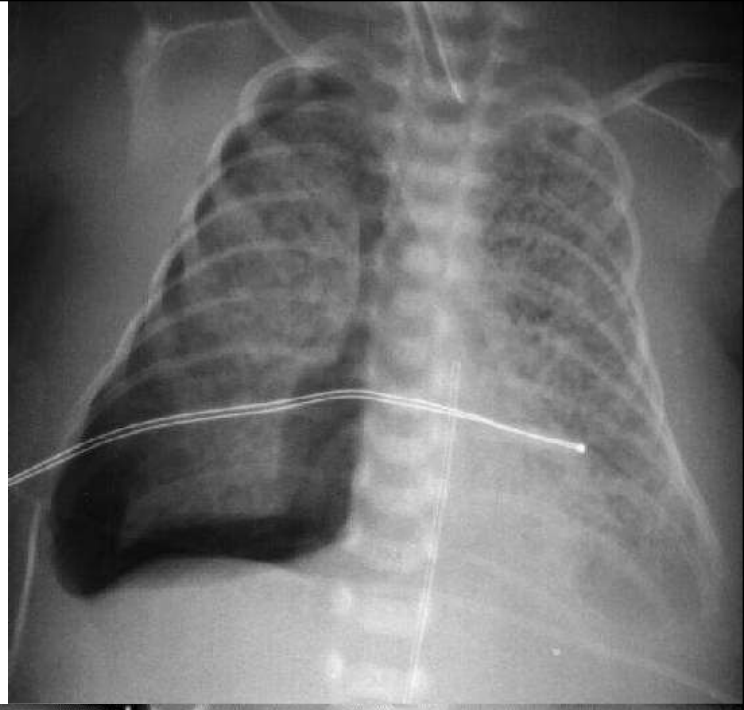


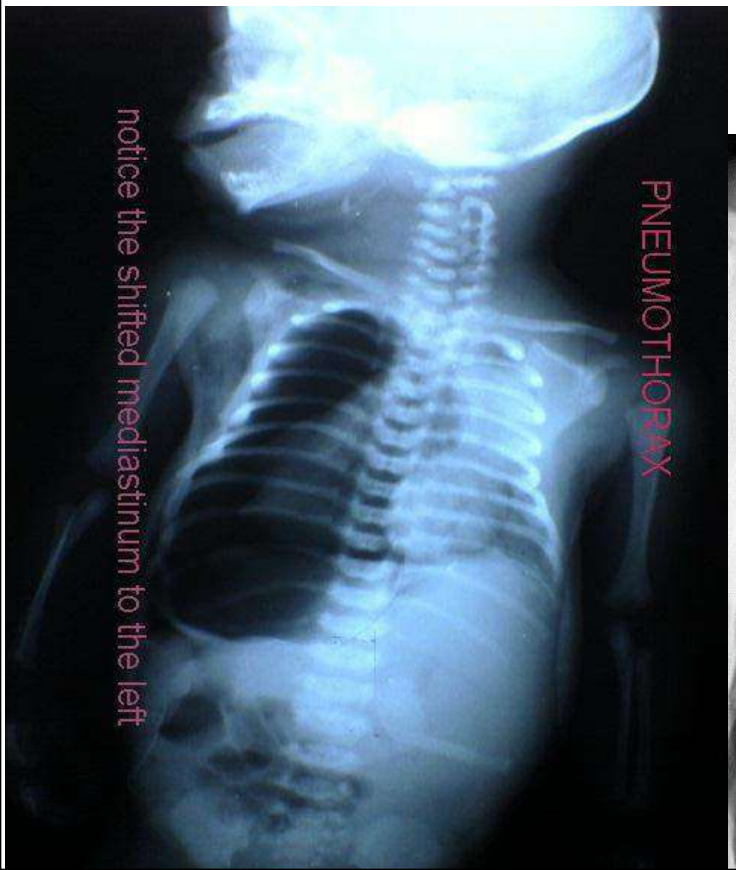
Q1 : Identify the condition ?

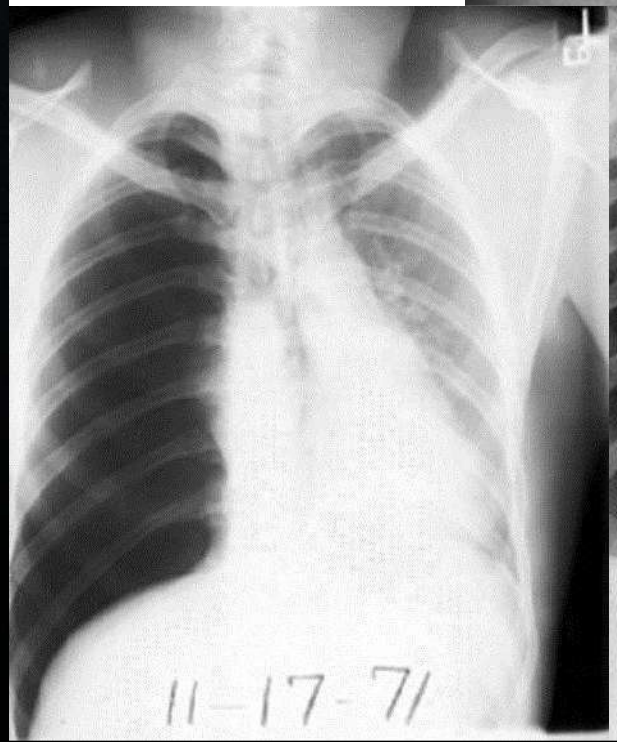
- Pneumothorax

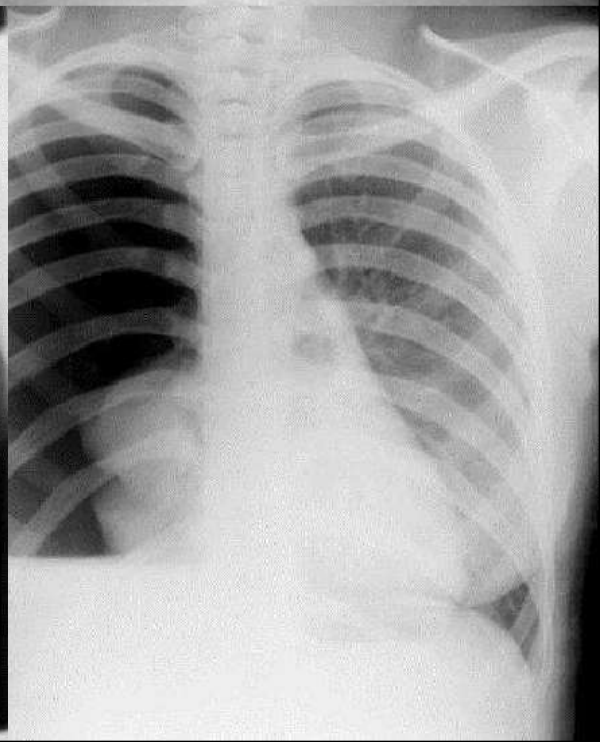
Q2: mention 2 causes?

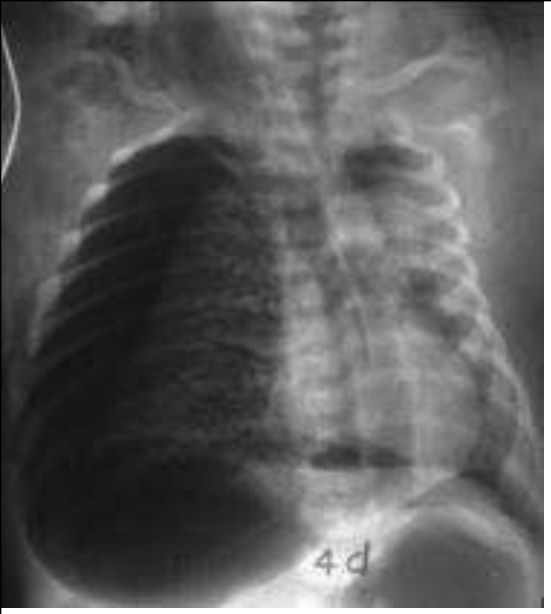
- Trauma, Infection











1. What is the Dx?

Tension Pneumothorax

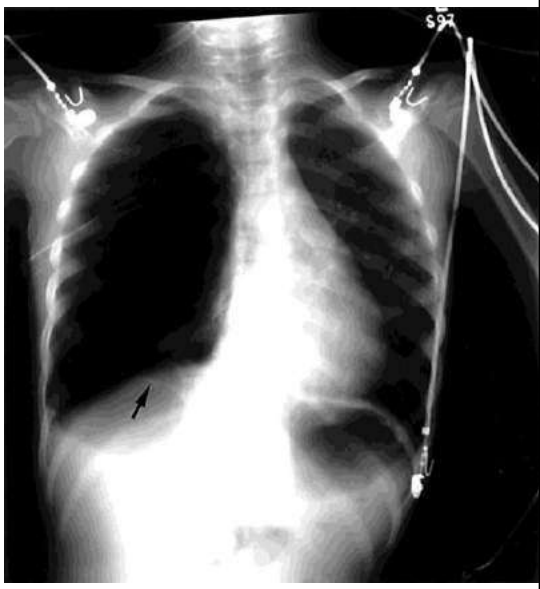
(Notice: shifted mediastinum)

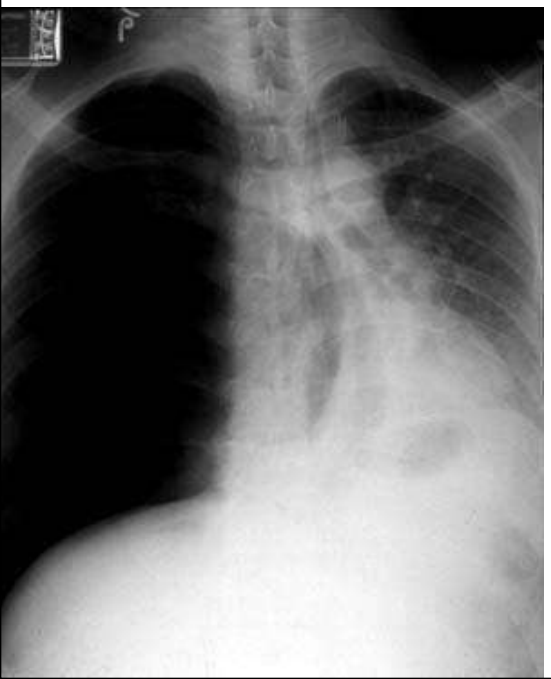
2. Immediate urgent Mx?

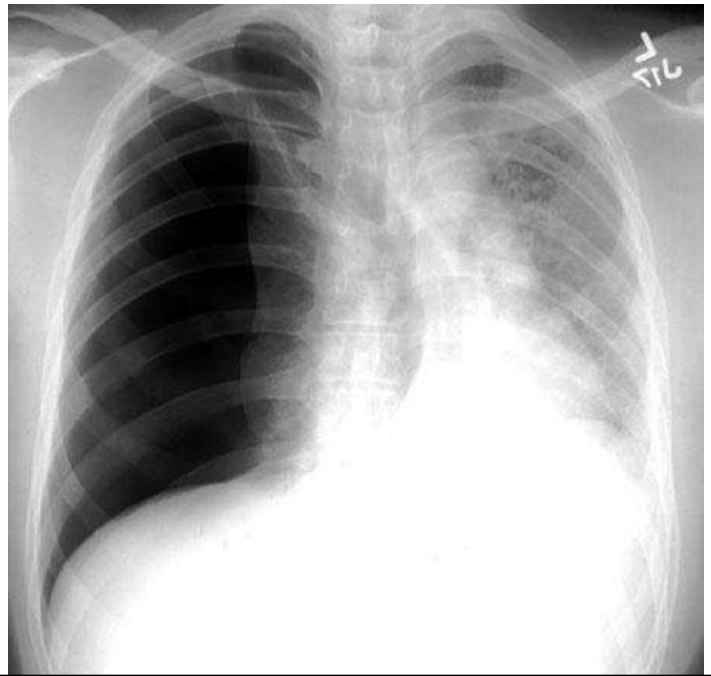
Thoracocentesis then chest tube

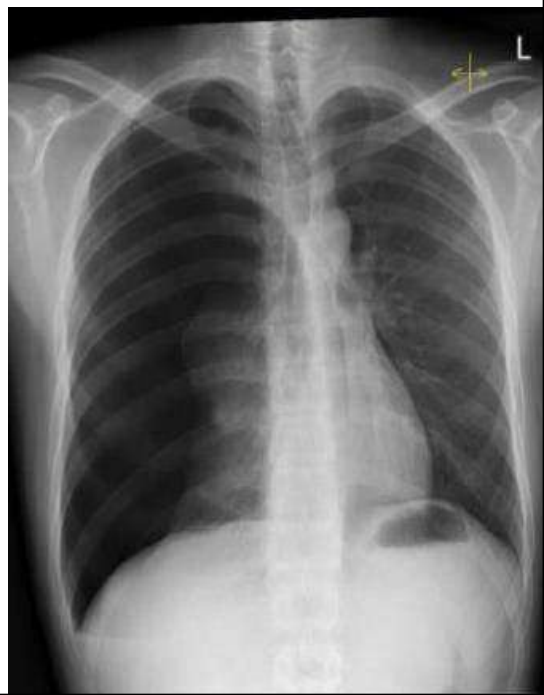
3. Name 2 signs?

- Shifted mediastinum
- Hyperlucent right lung

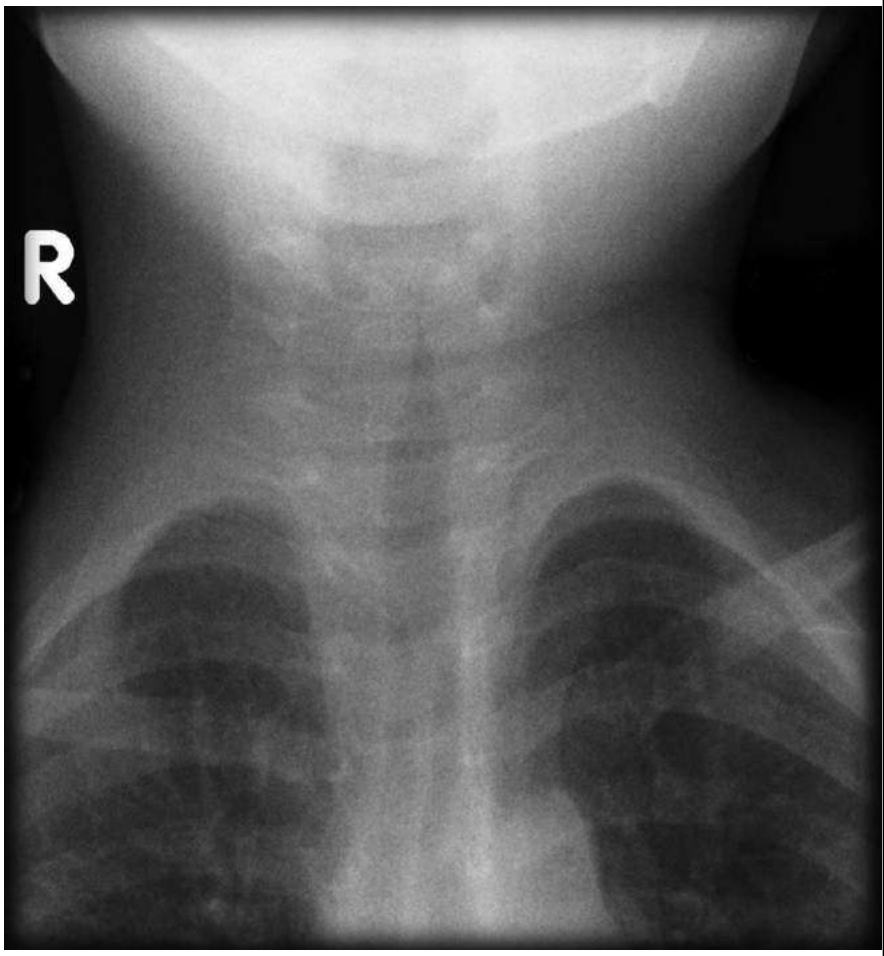








Q: Hx of barking cough, inspiratory stridor and distress.



Q1: Name the sign?

Steeple sign

Q2: Name the Dx?

Croup

Q3: name the causing organism?

Parainfluenza virus

Q4: What is the Mx?

Mild-Moderate:

Dexamethasone

Severe:

Dexamethasone + Epinephrine

Q: Hx about a child who came with acute stridor:

Q1: Name of this sign?

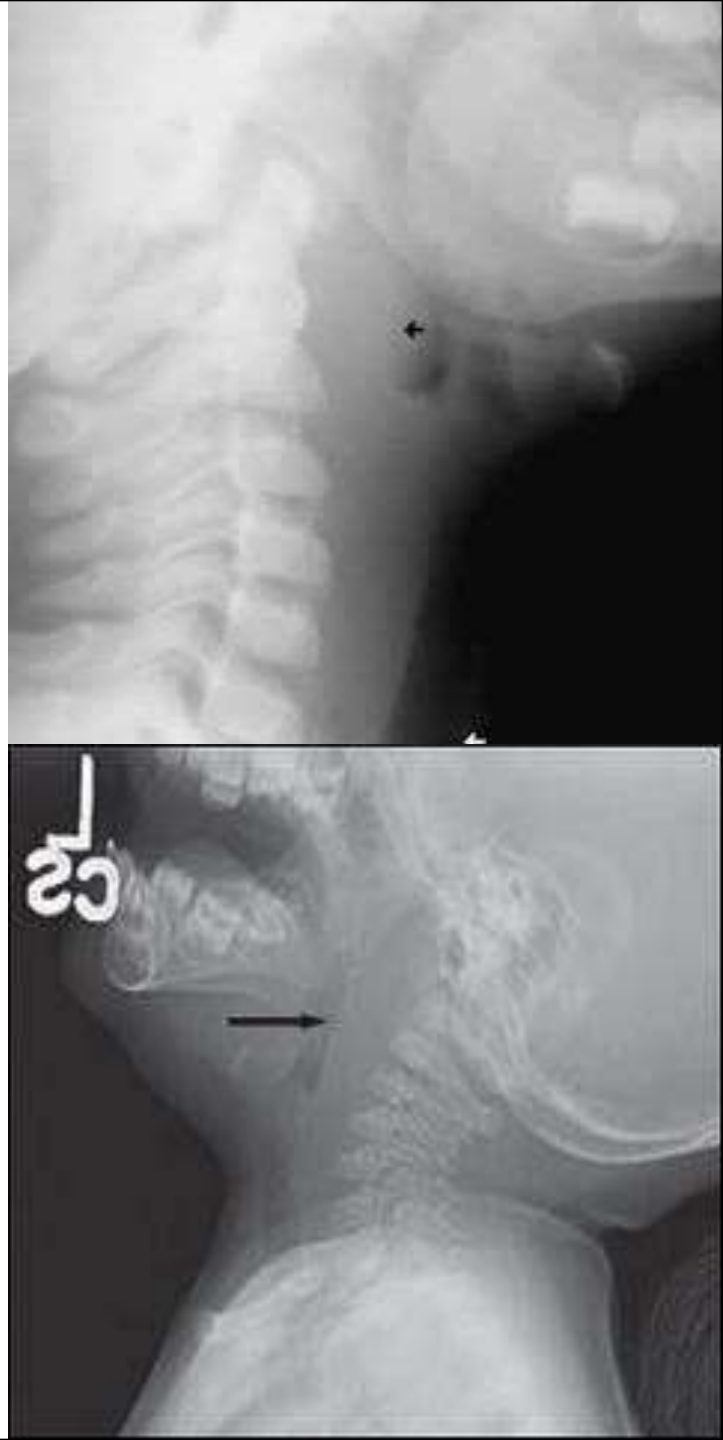
- Wide pre-vertebral space

Q2: What is your Dx?

- Retropharyngeal Abscess

Q3: What is your Mx?

- IV antibiotics and drainage

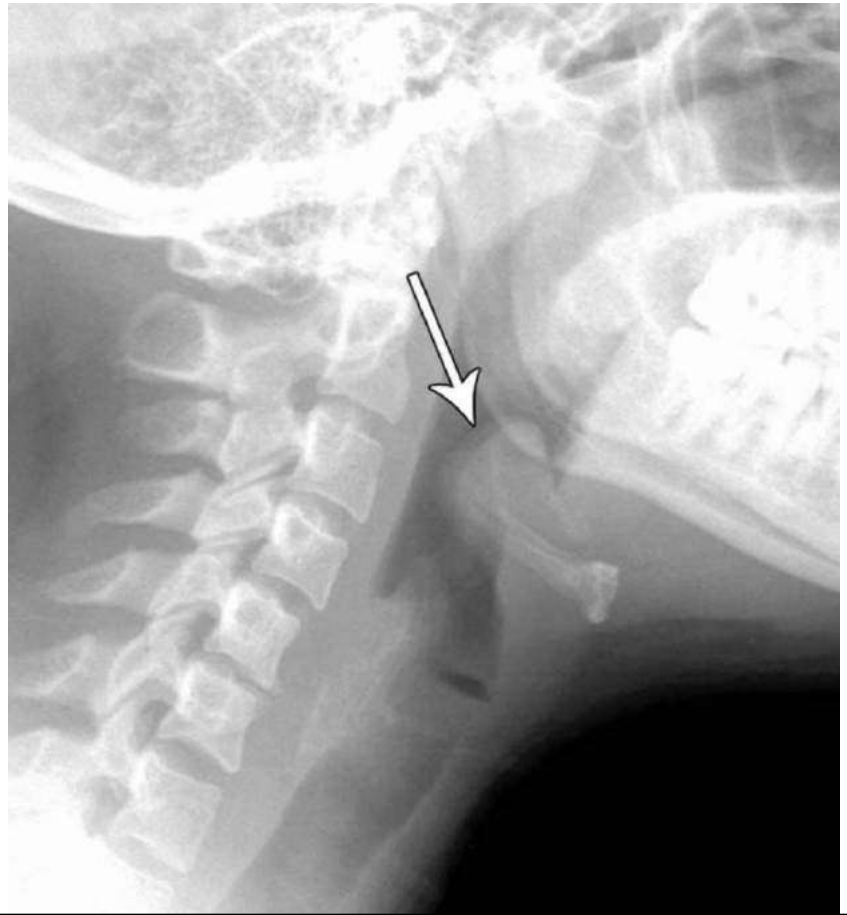


Q: Hx: patient presents with drooling ,dysphagia and distress and he is in tripod position

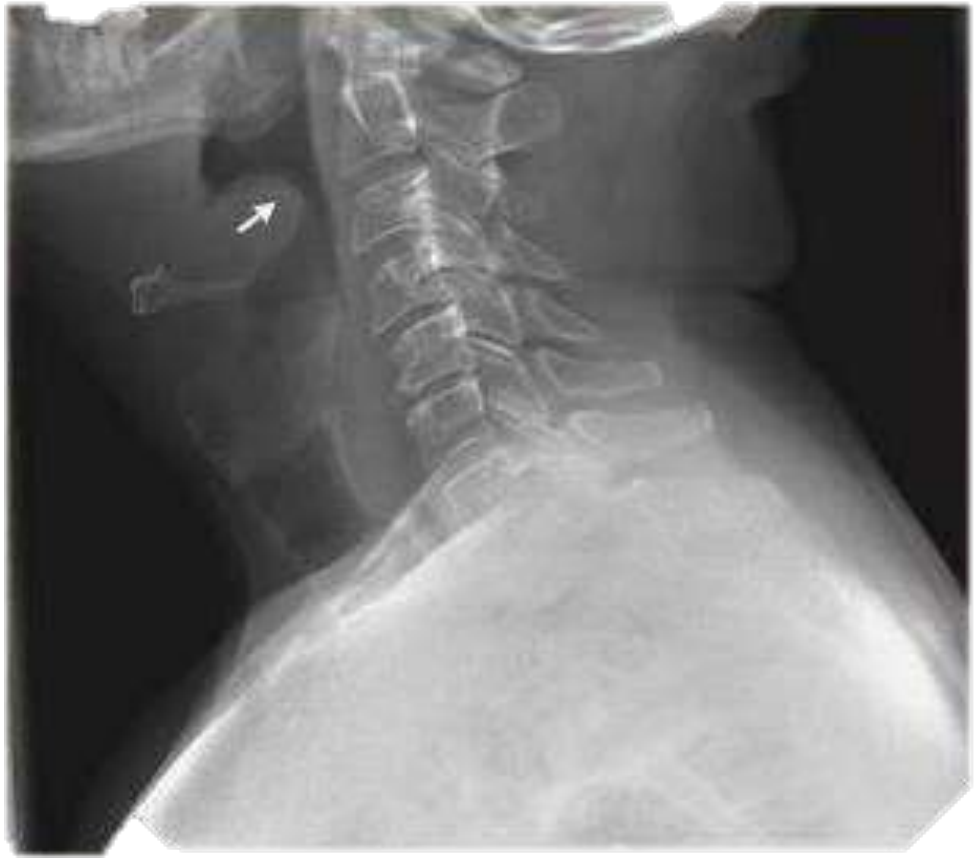
Q1: Name the sign? thumb sign

Q2: Name the Dx? epiglottitis

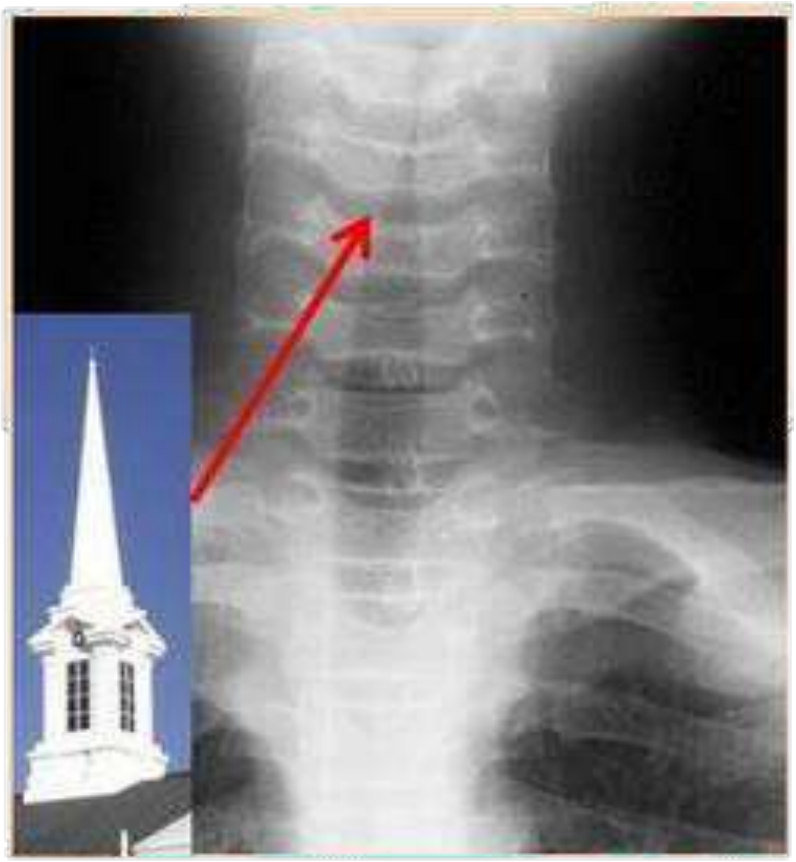
Q3: Name the causing organism? haemophilus inflenza b



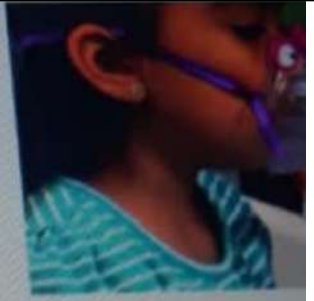
Thumb sign (Epiglottitis)



Steeple sign (Croup)



15



This 3 year old patient came to the ER in respiratory distress, she had whee
is her 4th episode.

What is device do you see in the picture? *
(-/1 Point)

spacer nebulizer

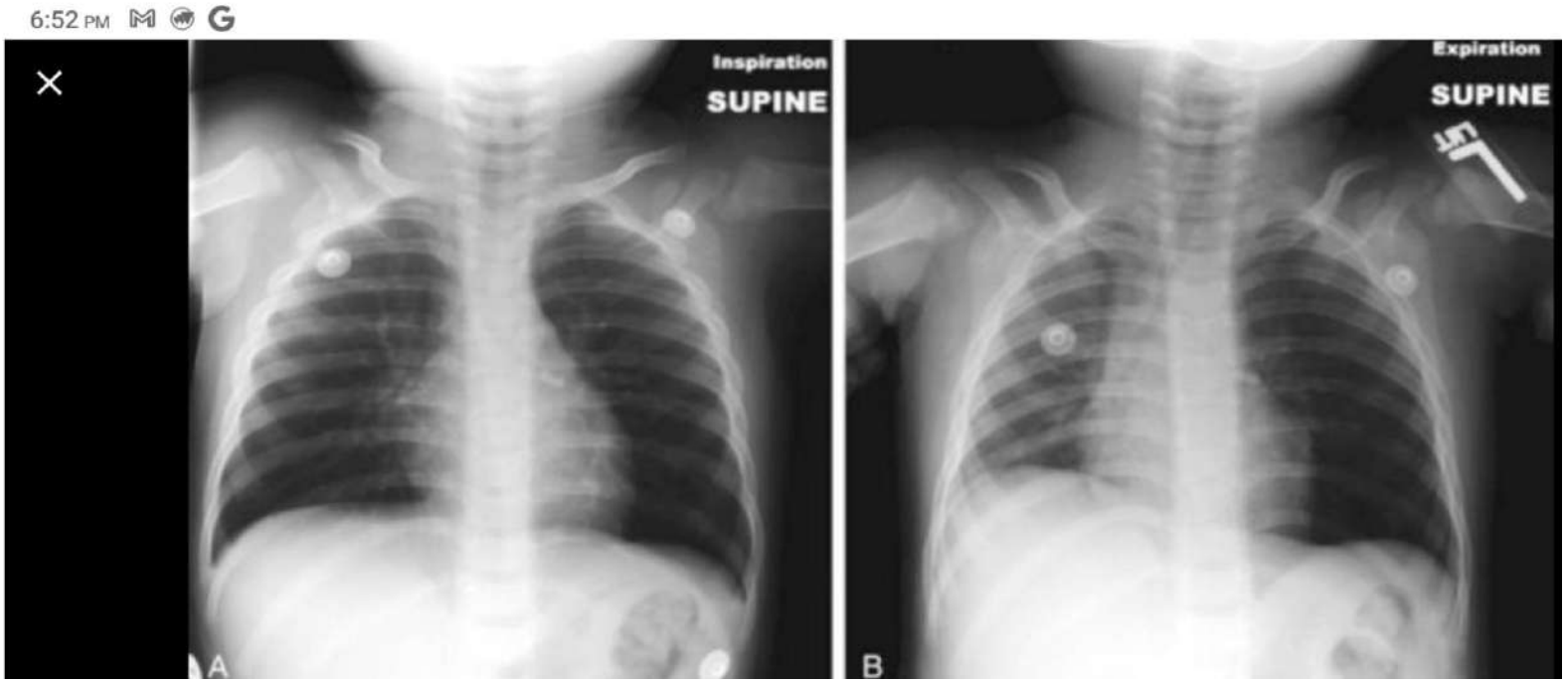
-What is this device called?

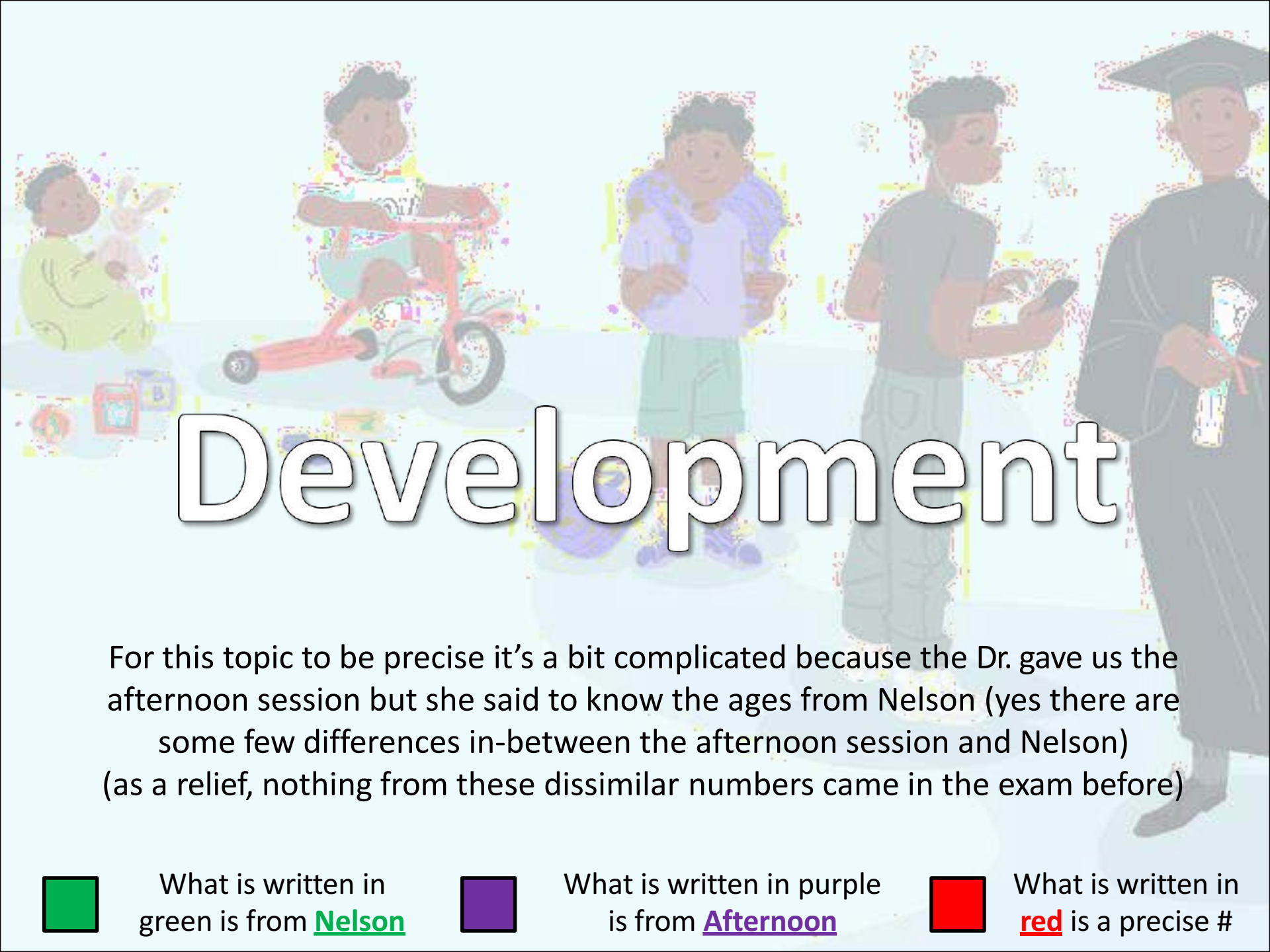
Spacer

-What is the most common medication administered?

SABA

PT with FB aspiration …
1-which side is affected ?
2-managmant ?





Development

For this topic to be precise it's a bit complicated because the Dr. gave us the afternoon session but she said to know the ages from Nelson (yes there are some few differences in-between the afternoon session and Nelson)
(as a relief, nothing from these dissimilar numbers came in the exam before)

What is written in green is from **Nelson**

What is written in purple is from **Afternoon**

What is written in **red** is a precise #

A- a boy who says few words other than mama, dada, baba, has just started to walk well and has a mature pincer grasp: what is the baby's age?

1 year (12 months)

B- A child walk independently, give a range age?

12-18 month

C- left her head, says goo, ahh, what is the age?

3 month

D- Child who can pull to stand, has immature pincer grasp, wave bye bye, say mama and baba indiscriminately, what is the child age?

Crawls Pratt apoo

9 months

Table 8-1 | Developmental Milestones

AGE	GROSS MOTOR	FINE MOTOR–ADAPTIVE	PERSONAL-SOCIAL	LANGUAGE	OTHER COGNITIVE
2 wk	Moves head side to side		Regards face	Alerts to bell	
2 mo	Lifts shoulder while prone	Tracks past midline	Smiles responsively	Cooing Searches for sound with eyes	
4 mo	Lifts up on hands Rolls front to back If pulled to sit from supine, no head lag	Reaches for object Raking grasp	Looks at hand Begins to work toward toy	Laughs and squeals	
6 mo	Sits alone	Transfers object hand to hand	Feeds self Holds bottle	Babbles	
9 mo	Pulls to stand Gets into sitting position	Starting to pincer grasp Bangs two blocks together	Waves bye-bye Plays pat-a-cake	Says *Dada* and *Mama*, but nonspecific Two-syllable sounds	
12 mo	Walks Stoops and stands	Puts block in cup	Drinks from a cup Imitates others	Says *Mama* and *Dada*, specific Says one to two other words	
15 mo	Walks backward	Scribbles Stacks two blocks	Uses spoon and fork Helps in housework	Says three to six words Follows commands	
18 mo	Runs	Stacks four blocks Kicks a ball	Removes garment "Feeds" doll	Says at least six words	
2 yr	Walks up and down stairs Throws overhand	Stacks six blocks Copies line	Washes and dries hands Brushes teeth Puts on clothes	Puts two words together Points to pictures Knows body parts	Understands concept of *today*
3 yr	Walks steps alternating feet Broad jump	Stacks eight blocks Wiggles thumb	Uses spoon well, spilling little Puts on T-shirt	Names pictures Speech understandable to stranger 75% Says three-word sentences	Understands concepts of *tomorrow* and *yesterday*
4 yr	Balances well on each foot Hops on one foot	Copies O, maybe + Draws person with three parts	Brushes teeth without help Dresses without help	Names colors Understands adjectives	
5 yr	Skips Heel-to-toe walks	Copies □		Counts Understands opposites	
6 yr	Balances on each foot 6 sec	Copies Δ Draws person with six parts		Defines words	Begins to understand *right* and *left*

DEVELOPMENTAL MILESTONES

(Nelson Textbook of Pediatrics, 20th Edition)

GROSS MOTOR		
	Age	**Milestone**
Head Lag	3 m	Head lag partially compensated with bobbing
	4 m	No head lag
Sitting	4-5 m	Sits with truncal support
	7 m	Sits with pelvic support
	8 m	Sits without support; rounded back
	9 m	Sits without support; straight back
Vertical Suspension		Normal
		Hypotonic: slips
		Hypertonic: scissoring of legs
Ventral Suspension	1 m	Head below plane of the body
	6 wk - 2 m	Head within plane of the body
	3 m	Head above plane of the body
		If C-shaped: truncal hypotonia
Prone	At birth	Head side to side; flexed body
	1 m	Lifts chin up; lefts head momentarily; legs more extended
	2 m	Lifts head 15°
	3 m	Lifts head & chest with arms extended & outstretched; head above body plane
	4 m	Head vertical
	5-6 m	Rolls over from prone to supine
	8 m	Creeps
	9 m	Crawls
Supine	At birth	Flexed
	1-3 m	Tonic-neck posture
	4 m	Symmetric posture; hands in midline
	6-7 m	Rolls over from supine to prone; lifts head
Standing & Walking	4 m	Supports some weight; pushes with feet
	7 m	Supports most of the weight; bounces
	9 m	Pulls to stand

	10 m	Cruises
	1 yr	Stands alone; walks with hands held or alone unsteadily
	15 m	Walks alone well; crawls upstairs
	1.5 yr	Runs stiffly; climbs upstairs with one hand held; sits on small chair
	2 yr	Runs well; goes upstairs & downstairs one step at a time; jumps
	2.5 yr	Goes upstairs alternating
	3 yr	Pedals a tricycle; stands momentarily on one foot
	4 yr	Hops; stands on one foot for a longer time
	5 yr	Skips
FINE MOTOR		
	Age	**Milestone**
General	<3 m	Hands closed
	3 m	Opens hands spontaneously (hands open >90% of times); reaches & misses
	4 m	Hands in midline; reaches & grasps
	4-5 m	Brings objects to mouth
	6 m	Transfers objects from hand to hand
	9 m	Pincer grasp
	1 yr	Releases objects on command; drinks from a cup; turns pages of a book
	1.5 yr	eats with spoon with missing
	2 yr	Eats with spoon without missing
	5 yr	Ties shoes
Cubes	15 m	3
	18 m	4
	2 yr	6
	2. 5 yr	9
	3 yr	10
Drawing	15 m	Scribbling; vertical lines
	2 yr	Circular scribbling; horizontal lines
	3 yr	Copies a circle
	4 yr	Copies square & cross
	5 yr	Copies triangle

LANGUAGE	
Age	**Milestone**
3 m	Coos
4 m	Laughs
6 m	Babbles (ba; ma; da)
9 m	Mama; dada (not specifically)
1 yr	Mama; dada (specifically) PLUS 3 words
15 m	6 words; responds to name; follows a simple command; jargons
1.5 yr	10 words; tells body parts when pointed at
20 m	20 words
2 yr	(2-3)-word sentence
2.5 yr	Refers to self using "I"; knows full name; listens to a story
3 yr	Knows age & sex; counts 3 objects; repeats 6-word sentence or 3 numbers
4 yr	Counts to 4; tells a story
5 yr	Names 4 colors; repeats 10-word sentence; prints name
SOCIAL	
Age	**Milestone**
1 m	Prefers human face
2 m	Social smile to anyone; listens to voice
3 m	Social smile to known people; listens to music
4 m	Laughs out loud; gets excited at sight of food
6 m	Laughs to strangers
7 m	Shows likes & dislikes; prefers mother; enjoys mirror
9 m	Plays peek-a-poo & pat-a-cake
10 m	Waves bye-bye
1 yr	Plays simple ball game; adjusts to dressing
15 m	Hugs parents; shows needs by pointing
1.5 yr	Kisses parents; seeks help; complains when wet; plays alone symbolically
2 yr	Listens to stories; helps undress; plays with clay
2.5 yr	Pretends to play; helps putting things away
3 yr	Plays with others; helps in dressing (unbuttons clothing; puts on shoes); washes hands
4 yr	Goes to toilet alone; brushes teeth
5 yr	Understands rules; dresses & undresses; asks questions about meaning of words; engages in domestic-role playing


Gross Motor

Ventral suspension:
C-shaped
2 months

Ventral suspension:
Head above body level
3 months

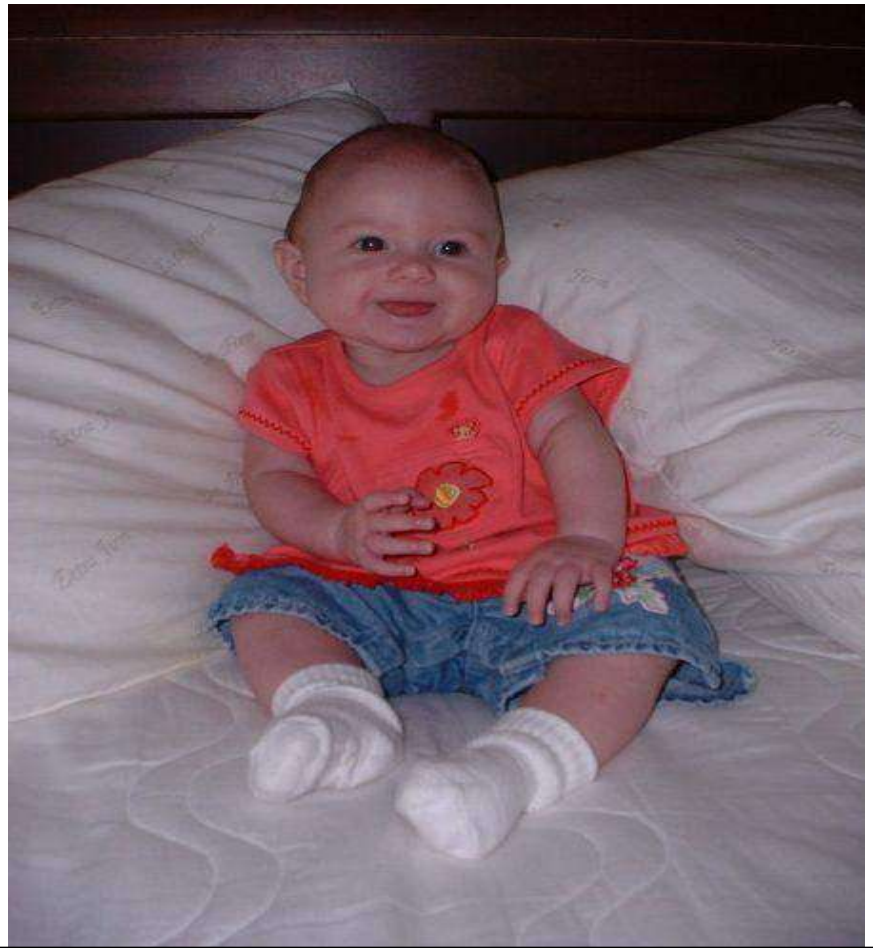
Ventral suspension:
Head & chest above body
3-4 months

Head pulled without head lag

3-4 months

Sits with pelvic & truncal support

4-5 months



Q7. A 28 wks premie reaches this developmental milestone, what is <u>his chronological age</u>

- 40 -28=12 wk =3 months /head control achieved on 3 months +3
- **=6 months**

Sitting with truncal support

4 – 5 months

Sitting with pelvic support

7 months

Sitting without support rounded back

6-7 months / 8 months

Sitting without support straight back

8-9 months / 9 months

Q8. Answer the following questions based on the pictures

1. What is his developmental age

8 months

2. What nutrient supplement will you give him
    1. Iron
    2. vit.d

Rolls from prone to supine

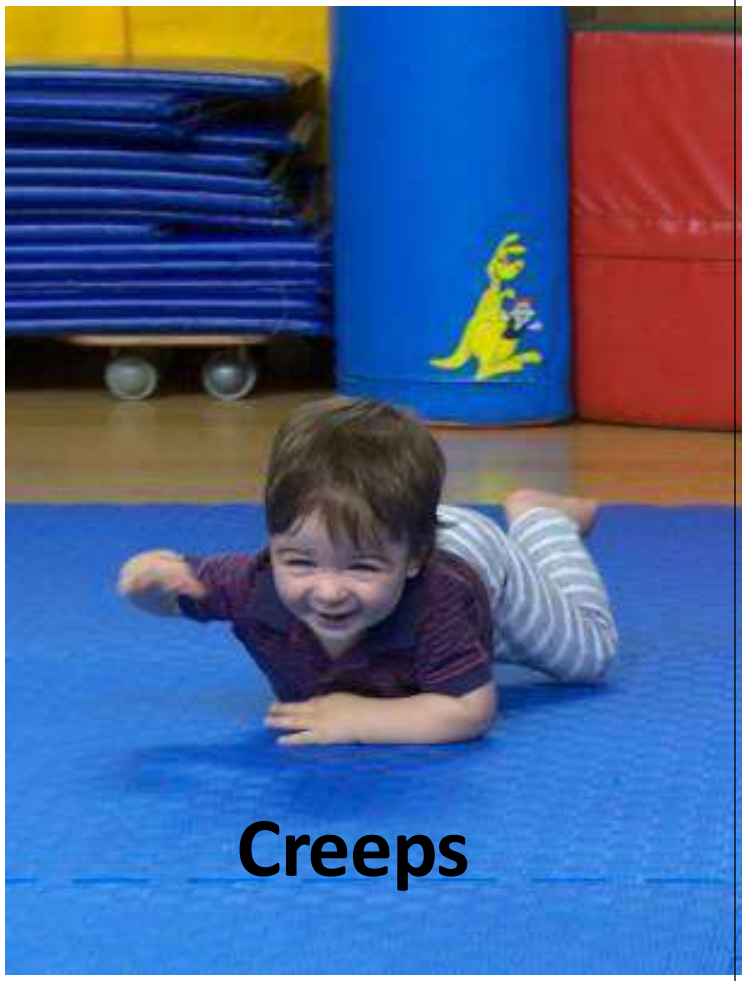
5-6 months

Rolls from supine to prone

6-7 months

5-6 months

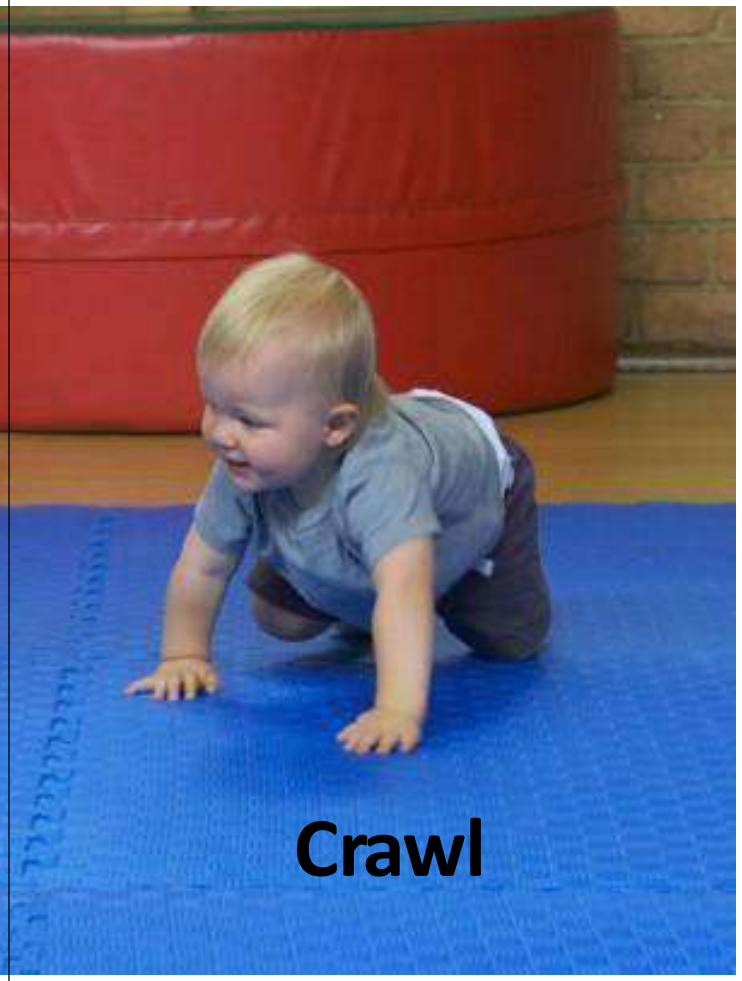
6 months / 8 months



Creeps

(notice the stomach is on the ground)

6-7 months / 9 months



Crawl

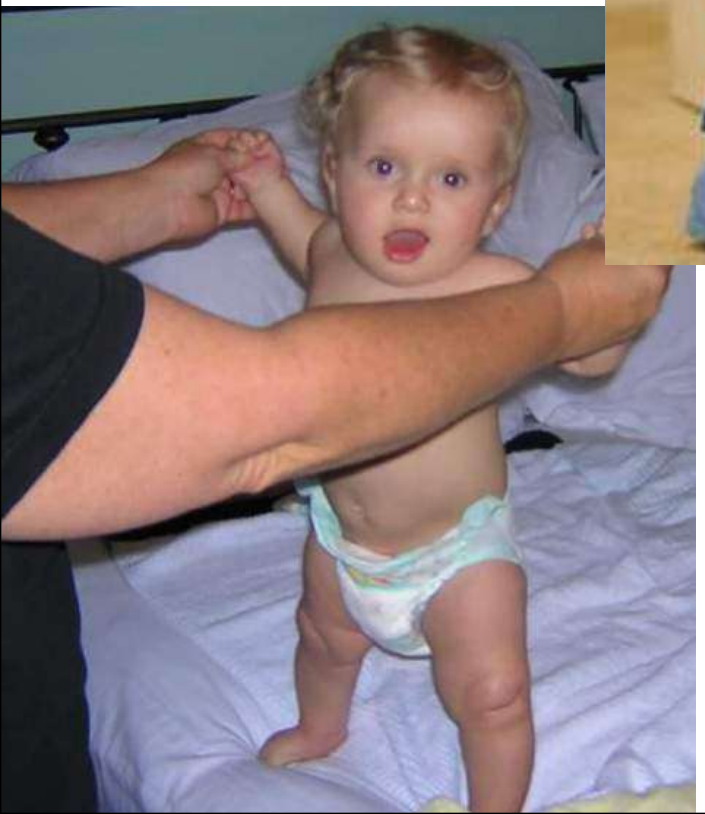
(notice the stomach is above the ground)

Standing with support

9-10 months

Stands Alone

12 months



Cruises

10-11 months

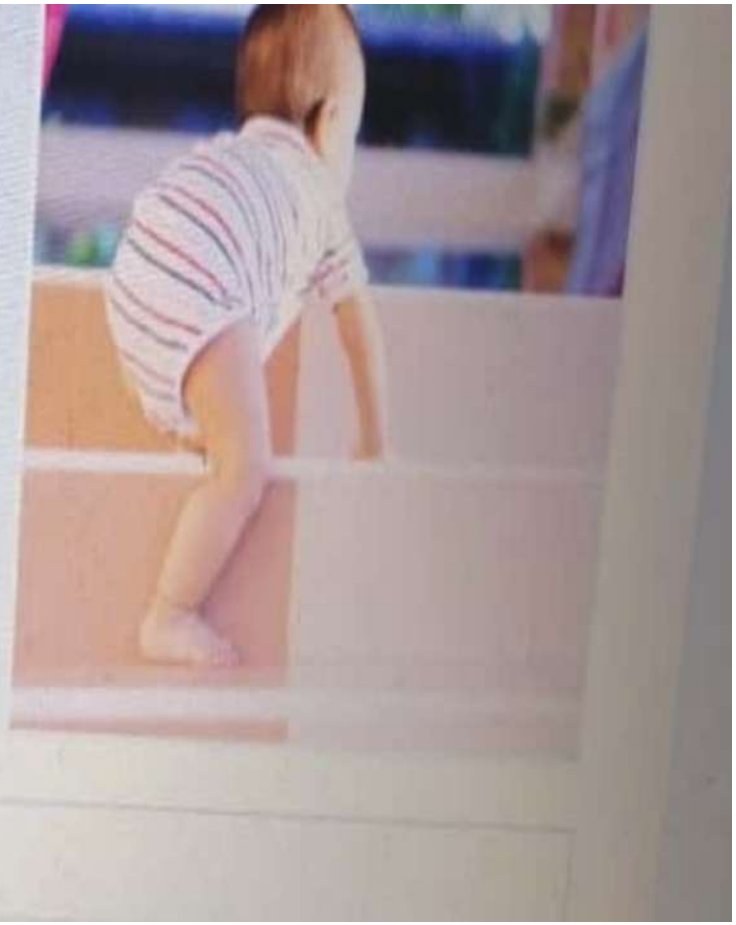
Walks Alone
12-13 months

Walks supported – 12 month
Walks well – 15 months

Runs 24 month

Runs stiffly – 1.5 years (18 m)
Runs well – 2 years

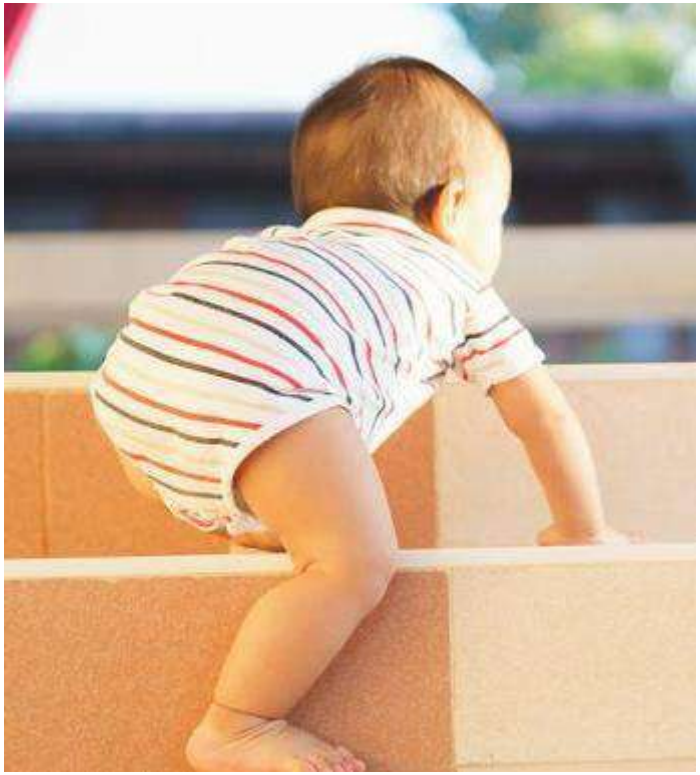
Crawls up stairs *
(1 Point)



15 month age old

Up/Down Stairs

18 months



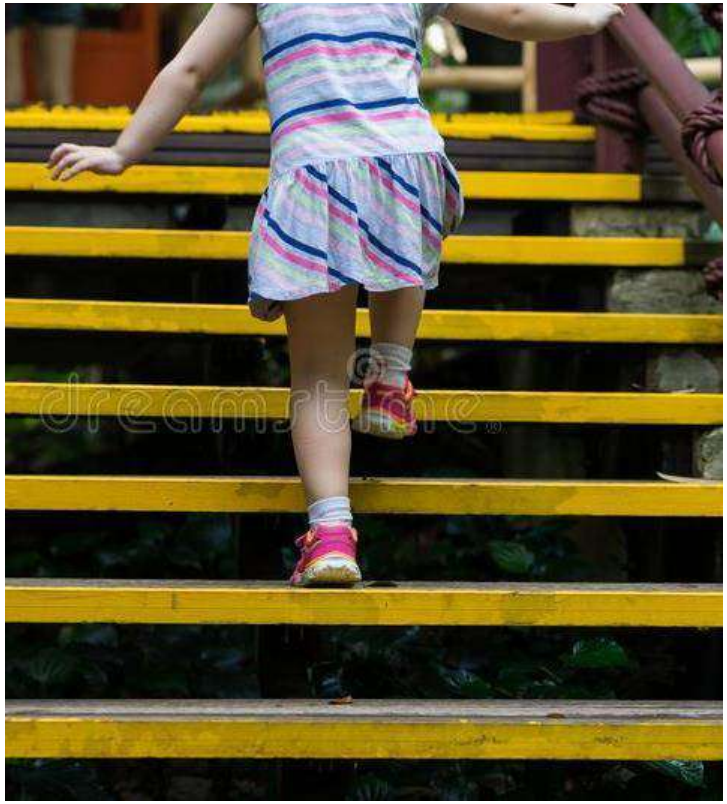
Up one stair
at a time

24 months

Down one stair
at a time

Up/Down Stairs

30 months



Upstairs
alternating feet

36 months

Downstairs
alternating feet

Hops

4 years

Skips

5 years

Tricycle riding

3 years

Rope Jumping

5 years


Fine Motor
& Adaptive

Hand fisting

0-2 month

Mouthing

4-5 months

Reaching for objects

4 months

Transfer objects

6 months

Grasp objects with radial palm

7 months

Uncover hidden toys

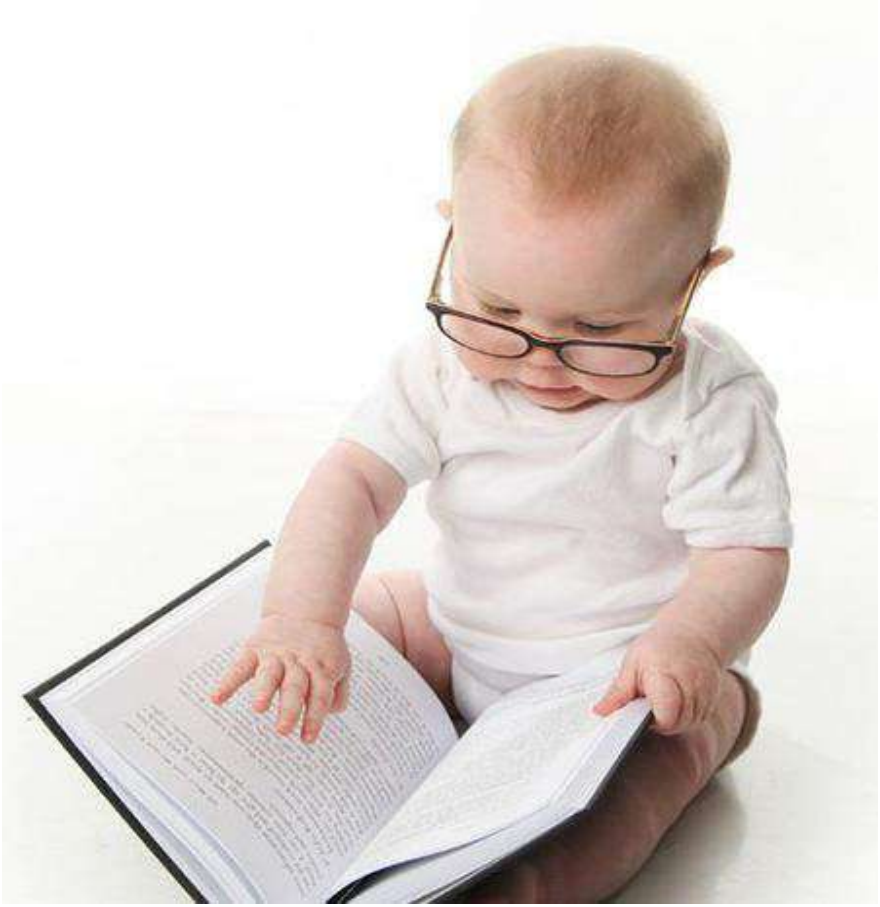
8-9 months

Release object upon request

12 months

Turning pages

12 months



Immature Pincer Grasp (Thumb-forefinger)

8-9 months

Mature Pincer Grasp

12 months

Tie Shoes

5 Years

8- what is the expected age :

child reach and grasp intresting thing: 4m

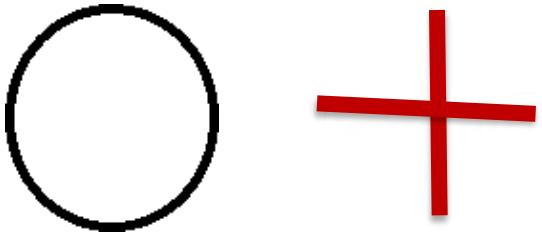
Child start using the scissor : i dont know , maybe 5

Vertical line, making a copy: 18 months

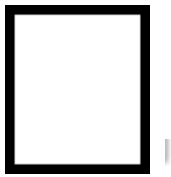
Horizontal line: 24 months

Horizontal & Vertical lines without crossing: 30 months

Horizontal & Vertical lines with crossing + Circle: 36 months



Square: 48 months



Triangle: 60 months

Scribbling – lines

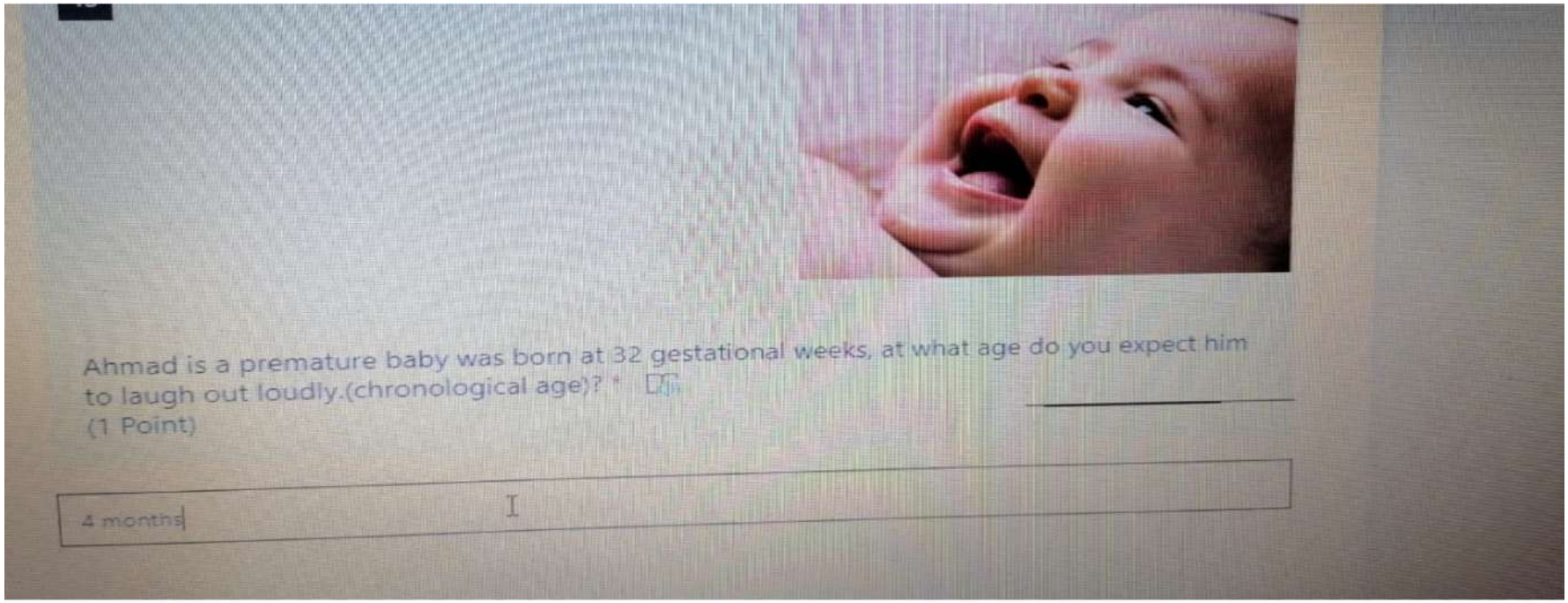
15 months

Scribbling – circular

2 years


Language &
Communications

Act	Age
Cooing	3-4 months
Babbling	5-6 months
Mama, Baba (non-specific)	7-8 (9) months
Mama, Baba (specific), follow 1 step commands	9-10 (12) months
Speaks 2-3 word (beside mama, baba)	12 months
Speaks 6 words, Respond to name	15 months
Speaks 10-15 words	18 months
Speaks 2-3 phrases	22-24 months
Use self pronoun (I)	30 months
Known age & sex	36 months
Tells brief history, uses past tense	48 months
Name 4 colors, uses future tenses	60 months



- What is the age for

- Social smile?? 0-2month
- scissoring ??


Social

Fixes eyes at light source

0-1 months

Follow objects moving 180 degrees

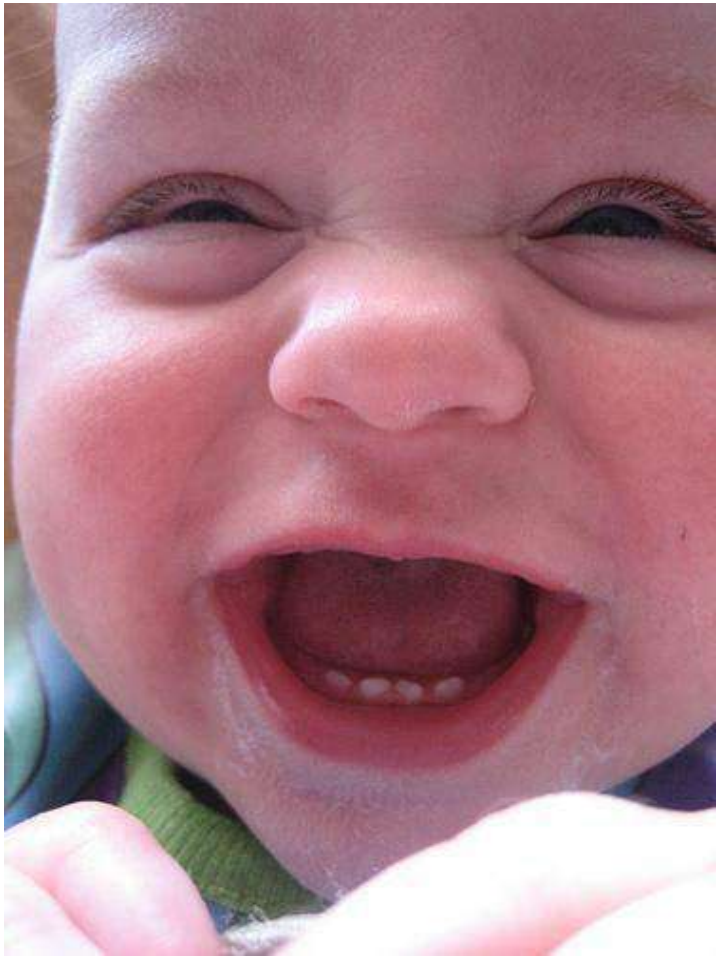
2 months

Social smile

2 months

Laughs loudly

4-5 months



Stares at his own hands

4 months

Wave bye bye

9 months

9 months

Plays Peek-a-poo

Eats with spoon

24 month

Eats with spoon

with missing – 18 m

Without missing – 24 m

Prefers mother

6-7 months

Separation Anxiety

9 months

Hugs parents

15 months

Kisses parents

18 months

Helps in undressing

24 months

Helps in dressing

36 months

Plays parallel to other children

36 months

Plays together with other children

48 months

Red flags

Gross Motor	
6 m	Not sitting
15 m	Not walking
2 y	Not climbing stairs
3 y	Not stand on one foot
4 y	Not hopping

Fine Motor	
4 m	Fisting
10 m	No pincer
20 y	Unable to remove socks
2 y	No scribble
3 y	Can’t copy circle
4 y	Can’t copy square

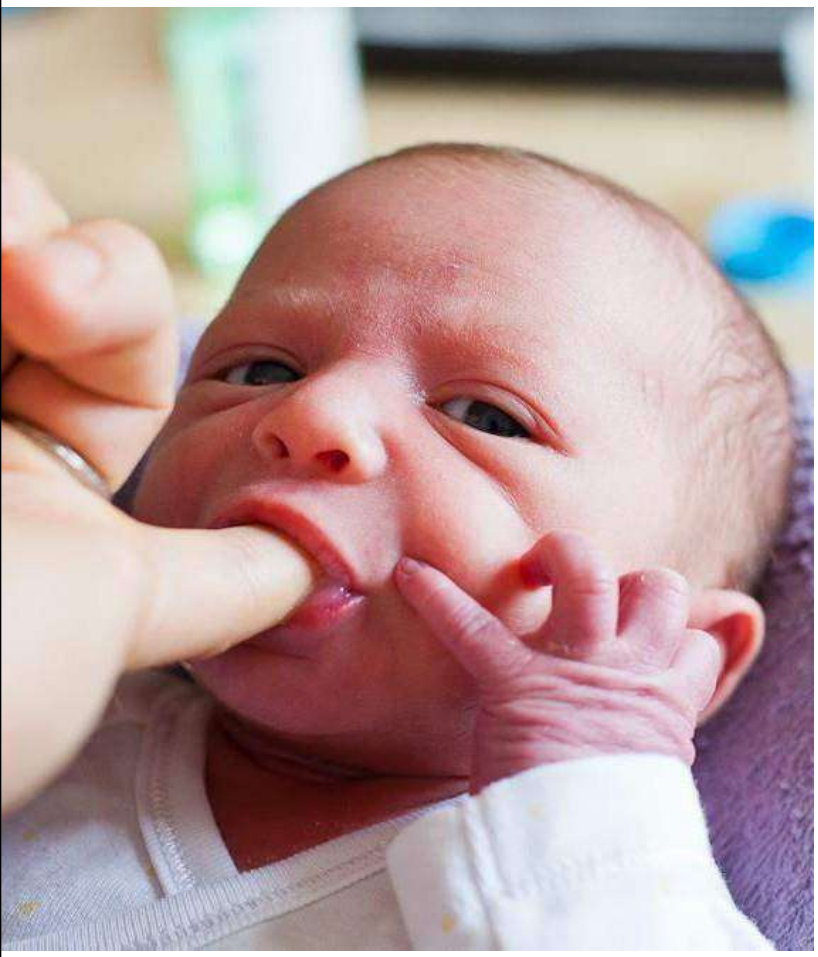
Language	
6 m	No babbling
9 m	No dada / mama
18 m	< 3 words
2 y	No 2 word phrases
3 y	Not comprehensible
4 y	No prepositions

Psychosocial	
3 m	No smile
8 m	No laughing
1 y	Hard to console
2 y	Kicks, bites, poor eye contact
3 y	No playing with other kids


Primitive
Reflexes

Both are present at birth,
and disappear at 3 months

Sucking

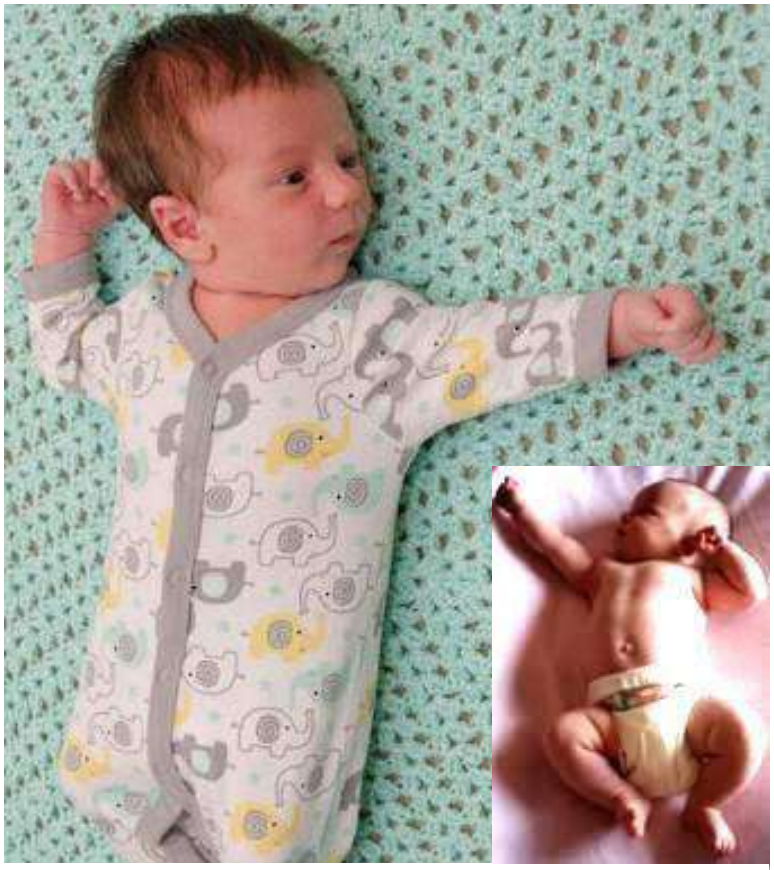


Rooting

Tonic Neck Reflexes

Asymmetrical (ATNR)

disappears 3 – 4 months



Persistent ATNR leads to poor hand eye coordination, poor handwriting, difficulty crossing the midline, mixed lateratliy, and difficulty crossing the midline

Symmetrical (STNR)

disappears 6-7 months

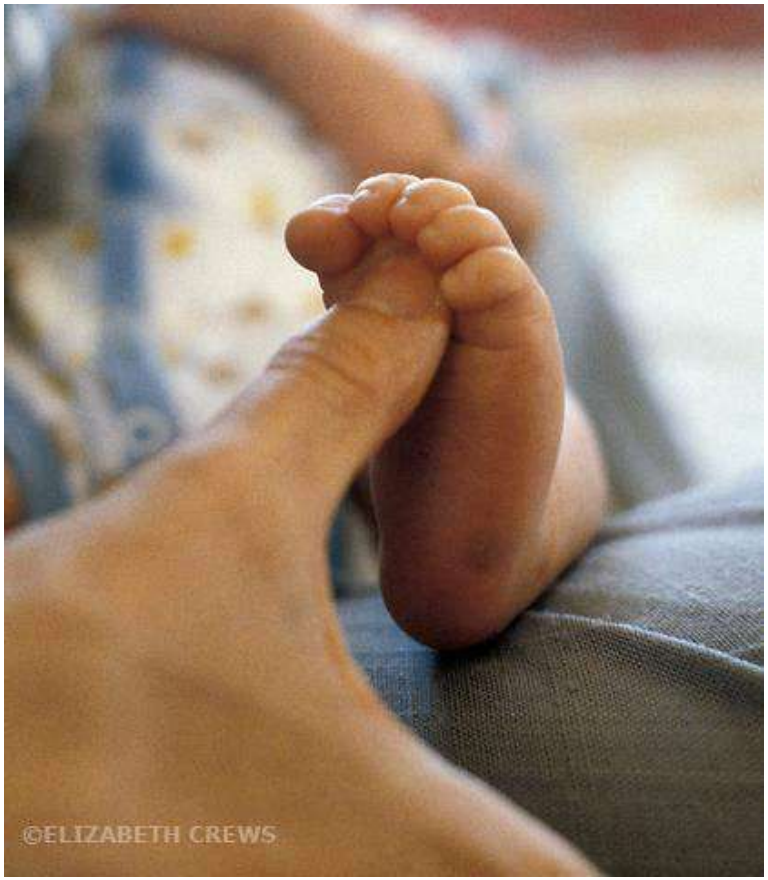
Persistent STNR interferes with hand use as the head moves, results in clumsy child syndrome ”, and slumping when sitting at a desk

Grasp Reflexes

** note: the ulnar grasp appear before the radial, but the radial is more sensitive

Palmer
disappears 3rd month

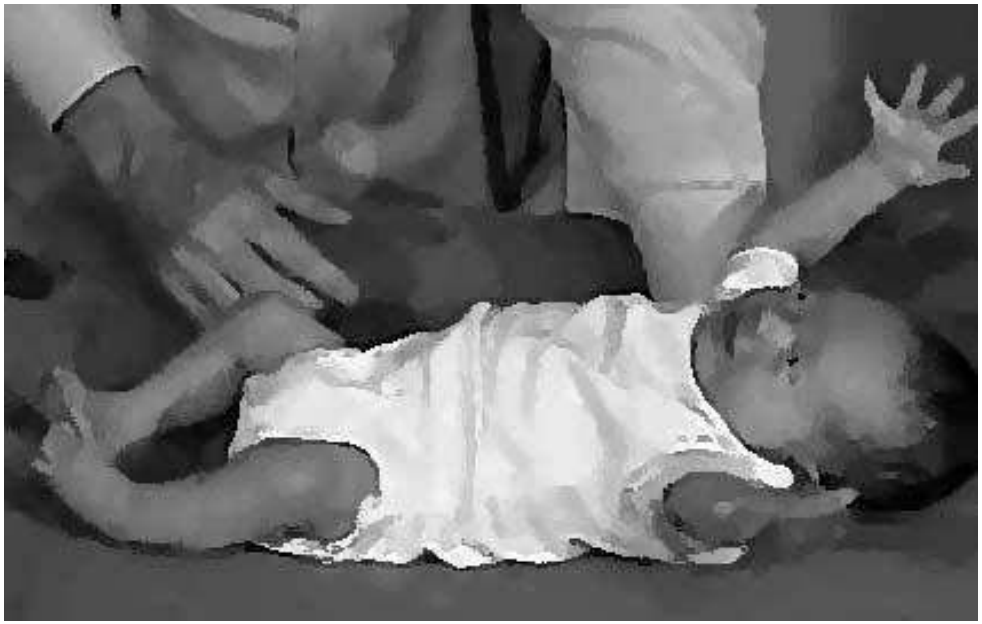
Planter
disappears 6th month



Landau Reflex

develops at 3-10 months

disappears at year 3 (36 m)



Moro Reflex

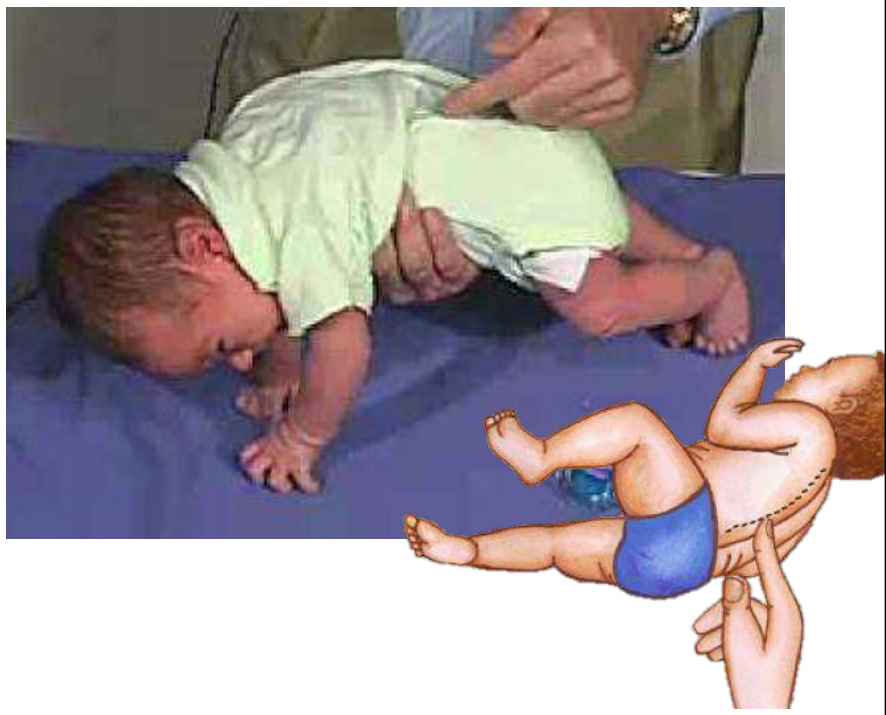
disappears at

4-6 months

Gallant Reflex

disappears at 9-18 months

Persistent Galant associated with fidgeting, bedwetting, poor concentration and short term memory.



Placing or Stepping Reflex

disappears at 5-6 weeks

Parachute Reflex

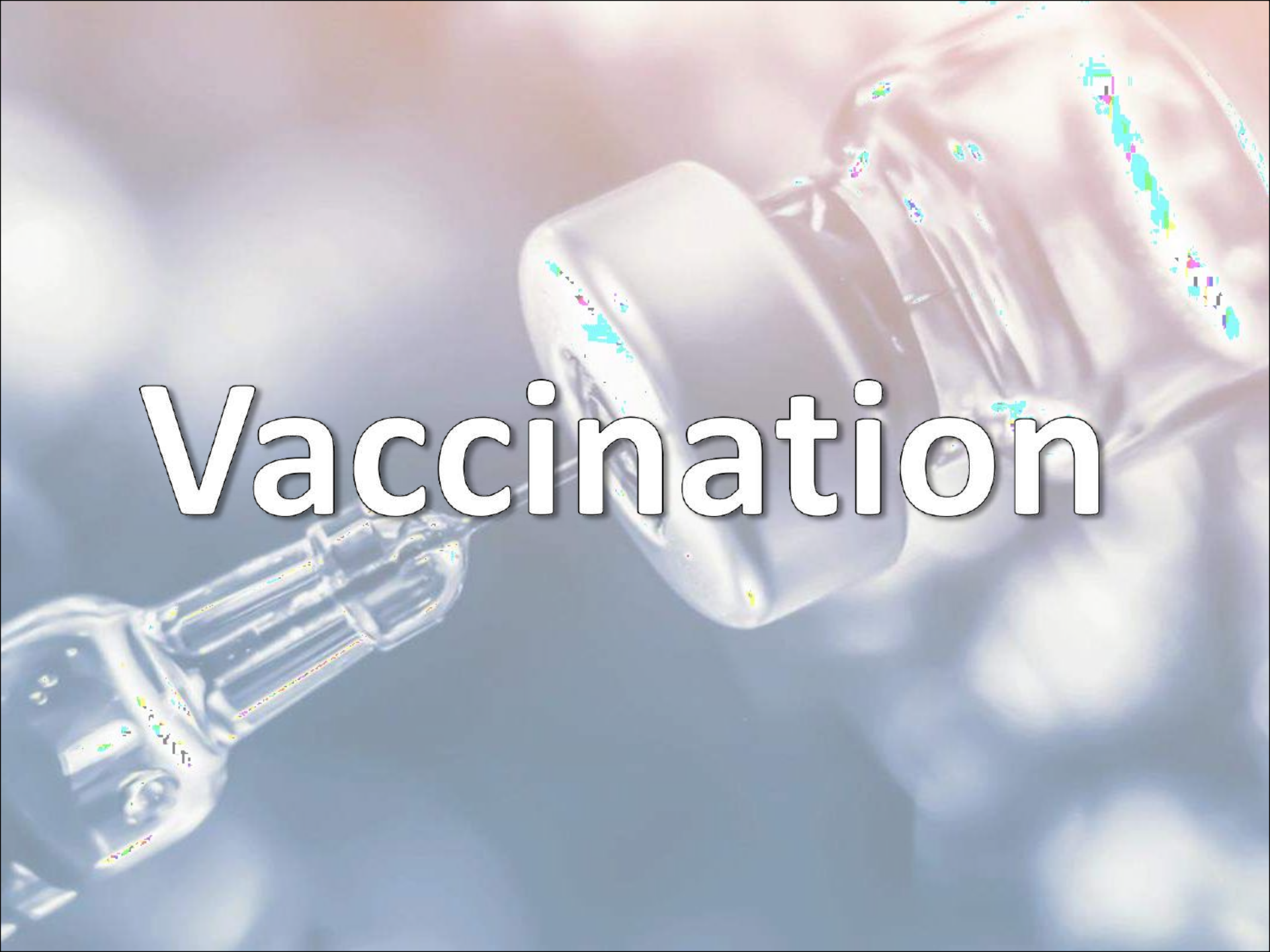
Appears at 6-9 months, and lasts for the rest of life

Q4)a baby born at 32 months of pregnancy at what age he will able to do what shown in the picture? (Chronological age)

answer : 6 months

When will this primitive reflex disappear? *
(1 Point)

last for lifelong


Vaccination

The Jordanian National Immunization Program			
Age	**Recommended Vaccines**		
First Month	BCG		
61 Days	DPT-HBV-Hib	IPV	
91 Days	DPT-HBV-Hib	IPV	OPV
121 Days	DPT-HBV-Hib	OPV	
9 Months	Measles	OPV	
18 Months	DPT	OPV	MMR
6 Years (First Grade)	Td	OPV	
15 Years (10th Grade)	Td		

streptococcus pneumonia MC cause of meningitis

extra vaccines: 1-pneumococcal (PCV) for asthma, CF , chronic lung dz , sickle, spleenectomy , 7g

nisseria meningitis ← 2- meningococcal (before 1 year old) , 3-HPV, 4-VZV (1 year old+booster on 4-6 years)

5-Hep A (inactivated or live attenuated, 2 doses after 1 year old and lifelong, prefer in

- **Vaccination**: chronic liver dz (acute on top of chronic) , 6-influenza (CI before 6 months)

1 drop of blood from baby's heel after 24 hours: screening for phenylketonuria,hypothyroidism,galactosemia

National Jordanian Vaccination Program

Age / vaccine	1 mo.	61 day	91 day	121 day	10 mo.	12 mo.	18-24 mo.	
BCG	☺							
DTP diphtheria tetanus الكزاز pertussis السعال الديكي		☺	☺	☺			BOOSTER DOSE ☺	dT
Polio V. شلل الاطفال		IPV	IPV & OPV	OPV	OPV		OPV	OPV
HIB		☺	☺	☺				
HBV		☺	☺	☺				
Measles +vit.A					☺			
MMR						☺	☺	

measles حصبة
mump نكاف
rubella حصبة المانية

OPV CI in immune deficiency: continue IV
rota virus orally 3 doses with DTP 123

	BCG	DPT	HBV	Hib	IPV	OPV	MMR	MEASLES
TYPE	Live attenuated	killed	Recombinant surface antigen	killed	Killed - inactivated	Live attenuated	Live attenuated	Live attenuated
TIME	1st month	2^{nd},3^{rd},4^{th},18 month,6^{th} yr, 15^{th} yr	2^{nd},3^{rd},4^{th} months **	2^{nd},3^{rd},4^{th} months	2^{nd}, 3^{rd} months	3^{rd}, 4^{th}, 10^{th}, 18th months, 6 yrs.	18^{th} month	10^{th} month
ROOT	Intradermal – left deltoid	IM – lateral upper quadrant of thigh	IM	IM	S/C	orally	S/C	S/C
ADVERSE EFFECTS	Abscess,lymphadenitis,BCG ostietis	Encephalopathy, anaphylaxis, hypotonic-hypo-responsive collapse	Minor local reaction, fever	Minor local reaction, fever	anaphylaxis	Paralytic poliomyelitis	Encephalopathy, anaphylaxis, seizure.	Encephalopathy, anaphylaxis, seizure.
CONTRAINDICATION	Symptomatic HIV	Encephalopathy within 7 days of previous dose, severe allergic reaction, hypo responsive shock, fever >40.5 , seizure*	---	---	Immunodeficiency, contact-Immunodeficiency.	Immunodeficiency, contact-Immunodeficiency, severe allergic reaction in previous dose.	Immunodeficiency, recent administration of immunoglobulin, pregnancy. ***	Immunodeficiency, pregnancy. ***

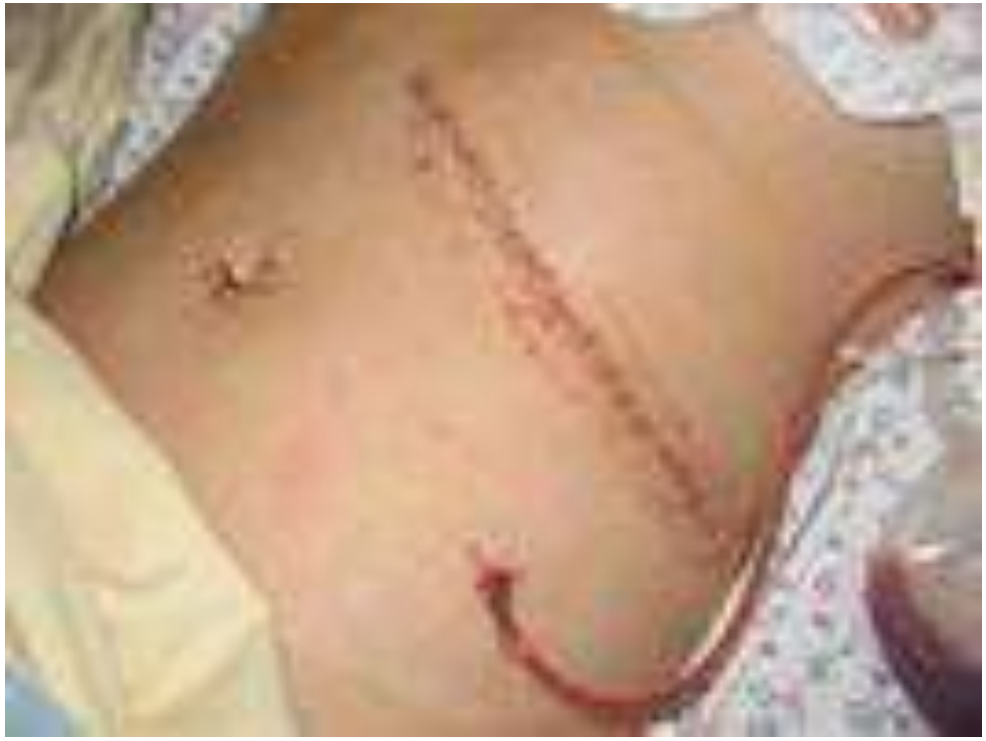
- *: All DPT contraindications occurred in previous dose.
- **: for babies of infected mother, they must take it in the 1st 12 hours.
- ***: in both MMR and measles there is precaution to give it if the child has hypersensitivity to eggs or neomycin.

Q: Mention 3 moderate side effects for DTP:

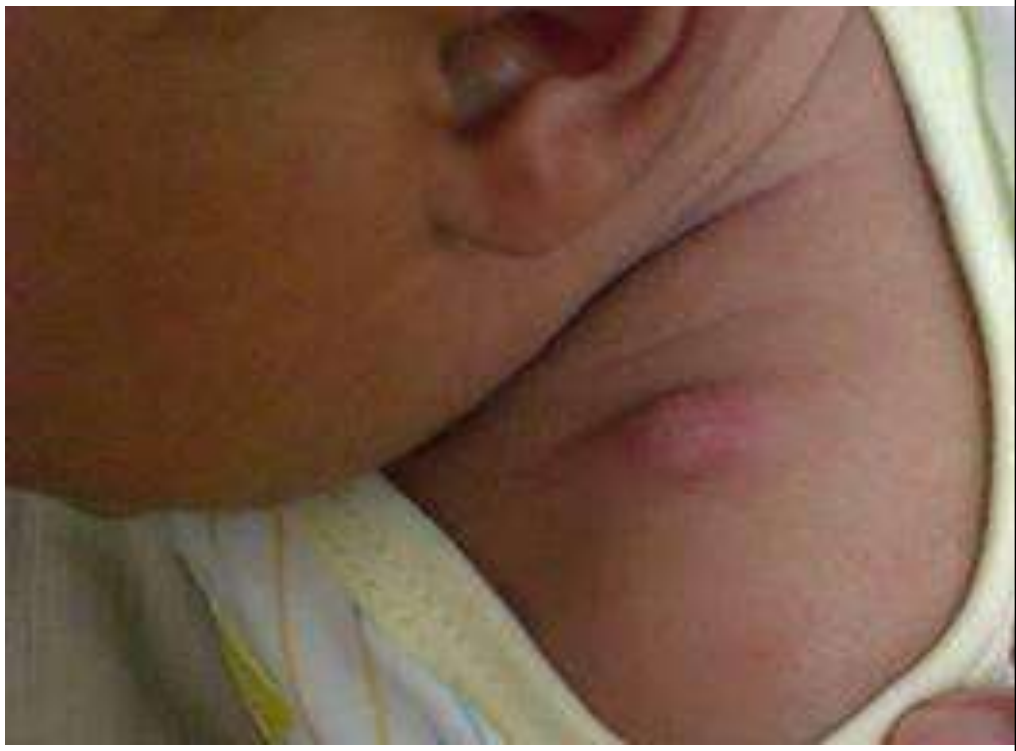
1) Fever
2) Drowsiness
3) Fretfulness
4) Vomiting
5) Weight loss (anorexia)
6) Persistent crying
7) Rarely convulsions

Q: 6 year-old baby with this scar (splenectomy scar) on his abdomen, what vaccines would you like to give him:

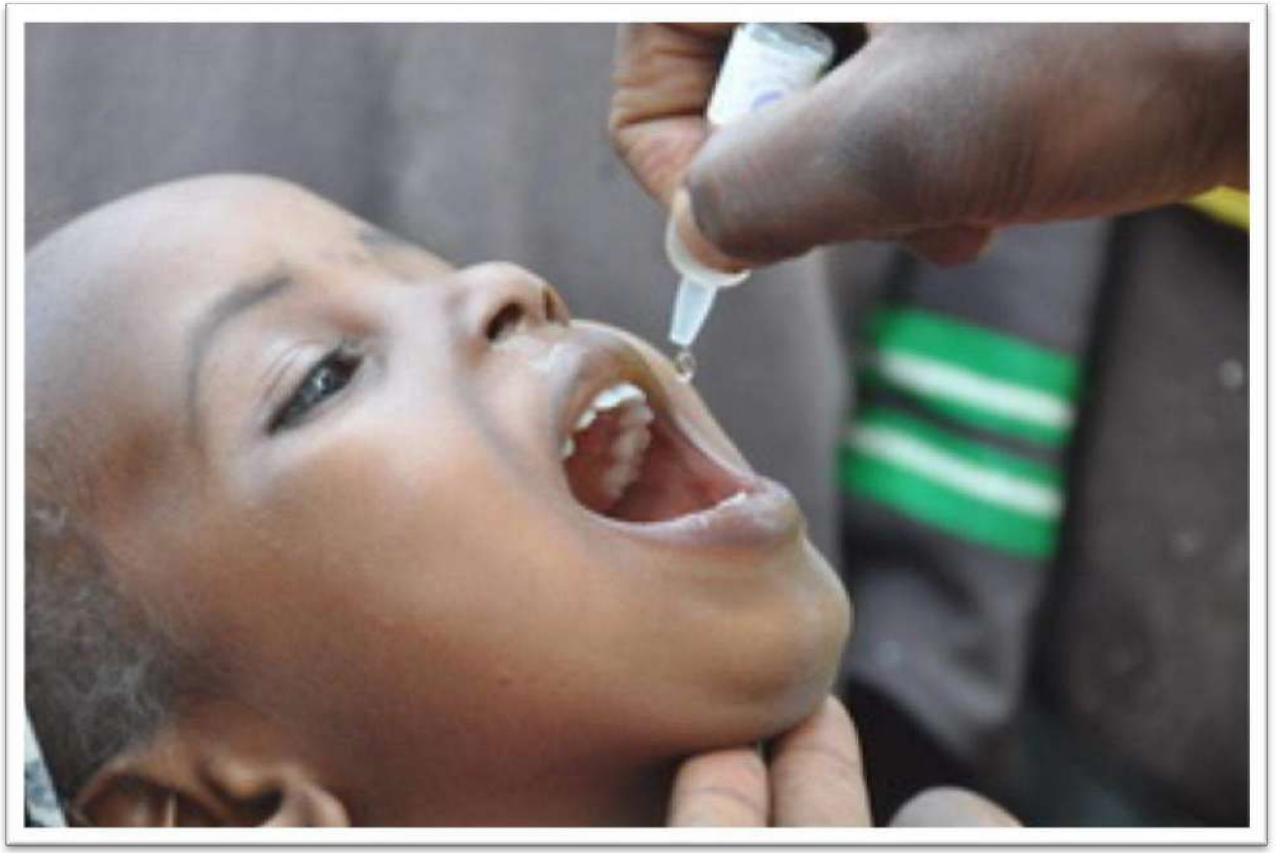
Pneumococcal vaccine or meningococcal vaccine



Q: This baby took a vaccine. and after 6 weeks he developed this lesion with axillary LN enlargement. what is your spot Dx?

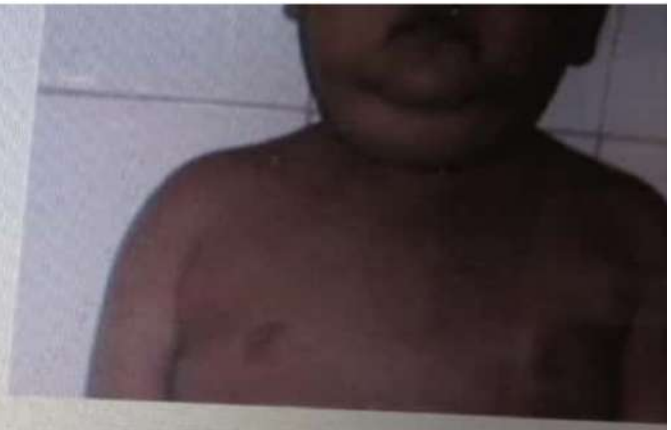


Post-BCG vaccine abscess formation with regional lymphadenitis



Q1: what we call this vaccine? OPV

Q2: what the age of this child? 91 days (& more)



This 6 year old child is on more than 2 mg/kg/day prednisolone for the last 3 months□. What to do with his oral polio vaccine: *
(1 Point)

not recommended due to immunocompromised

Q: A mother of 6-month old baby comes to you on summer asking about vaccinations:

Q1: Mention 3 vaccines not in JNP you can give him.

1) Pneumoccocal
2) Meningococcal
3) HPV

Q2: She asks about vaccine prevents gastroenteritis, do you give him?

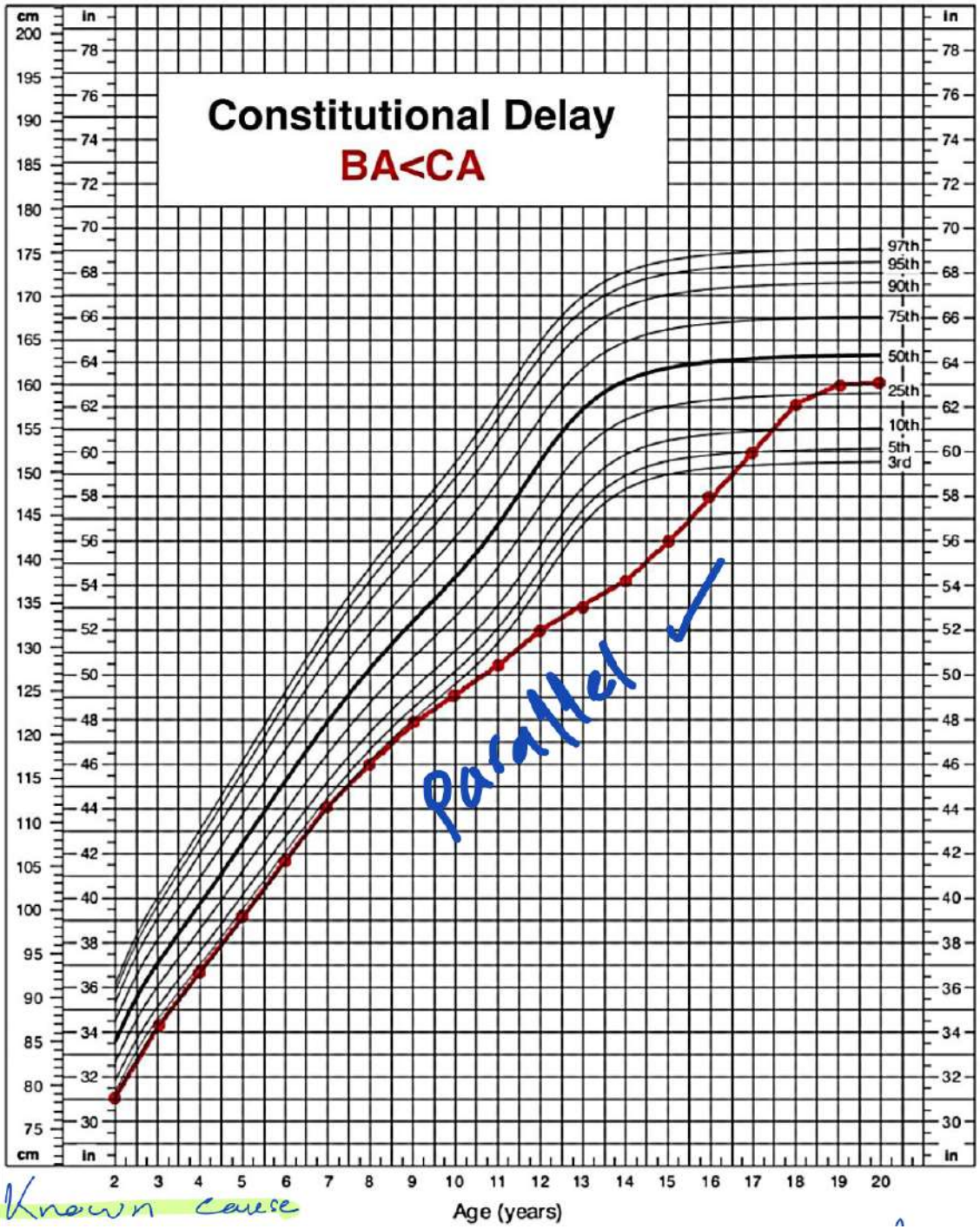
- OPV

3 months	Ipv	Rota, (hib,hbv,dtp)
4 months	Opv	Rota, (hib,hbv,dtp)
9 months	Measles	Opv

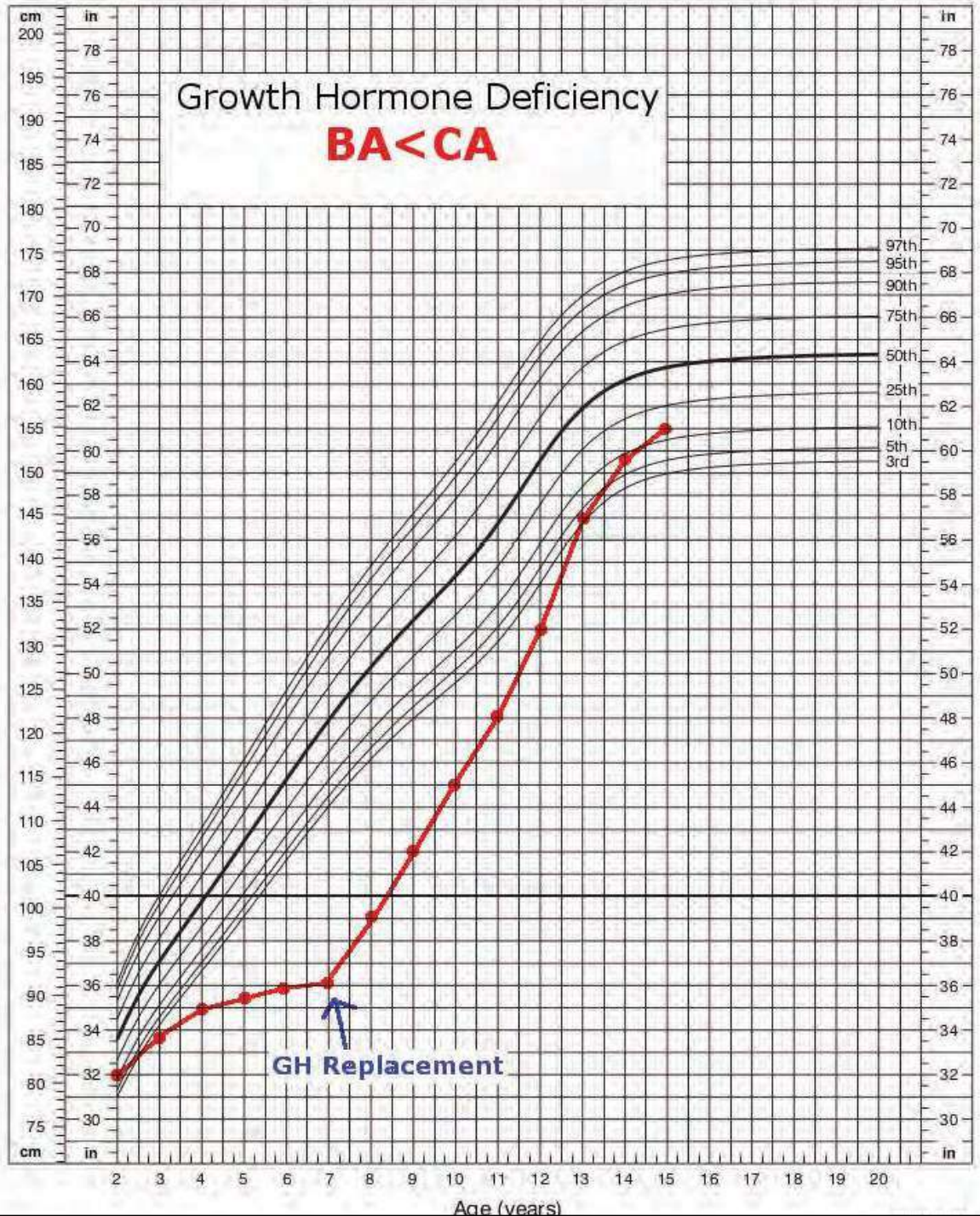

Growth
Charts

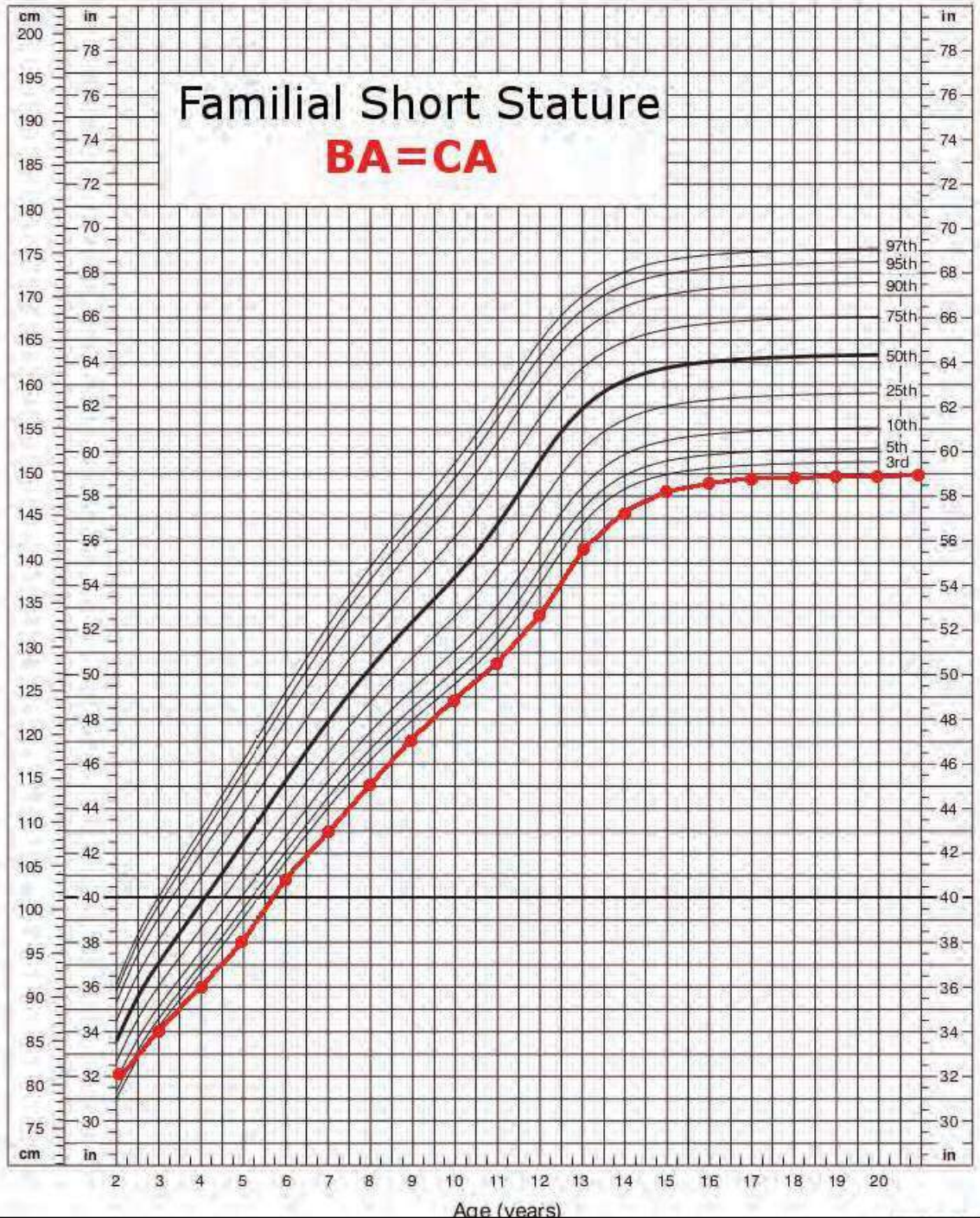
	Normal Parallel slope	Abnormal not parallel
Bone age = chronological age	Ideal Genetic (familial) **short stature**	• Genetic (turner) • Chromosomal
Bone age < chronological age	Constitutional delay	• Chronic systemic disease • Endocrine related (GH de
Bone age ≥ chronological age	Obesity (tall) Familial **tall stature**	• Precocious puberty • Congenital adrenal hyperplasia • Hyperthyroidism

delayed bone growth



n/known cause

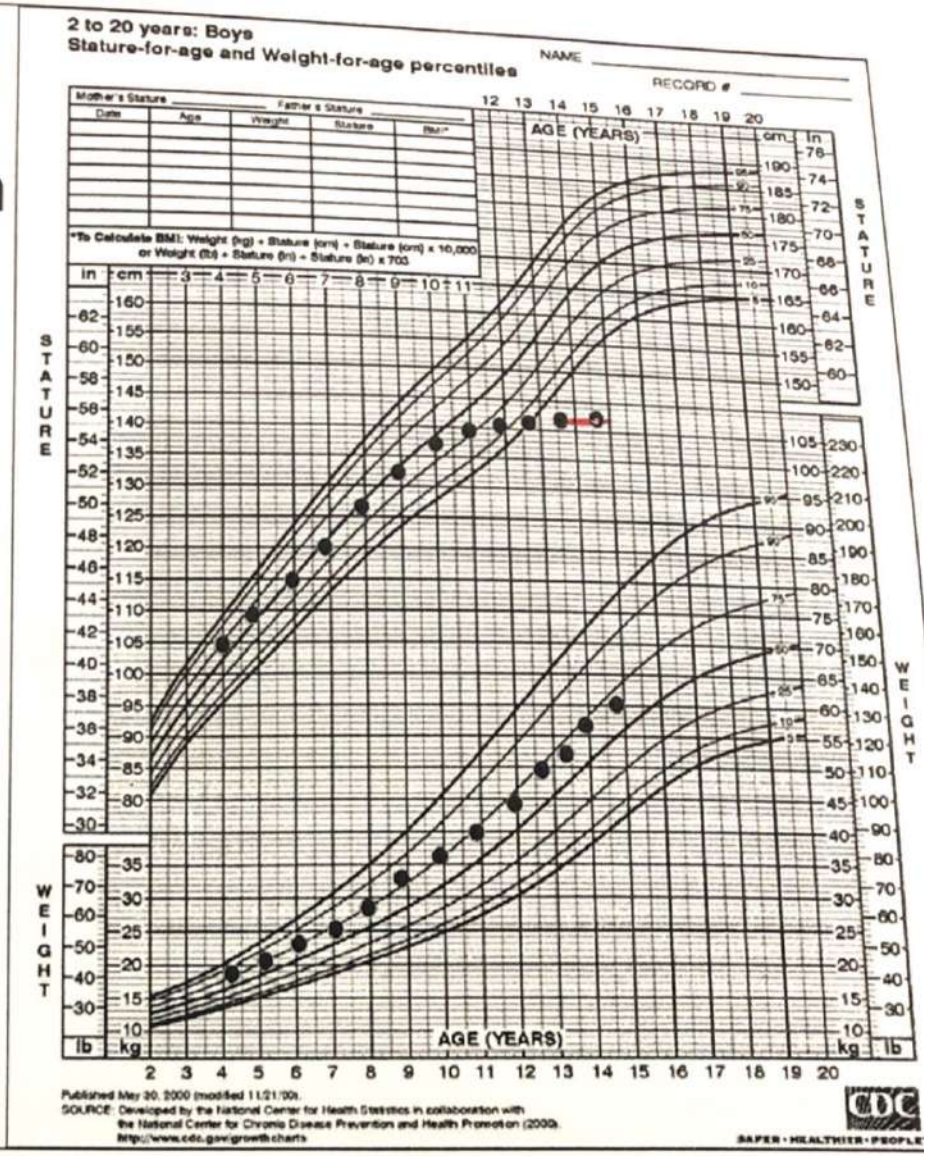

Growth Hormone Deficiency
BA<CA
GH Replacement
97th
95th
90th
75th
50th
25th
10th
5th
3rd
cm
in
Age (years)


Familial Short Stature
BA=CA
cm
in
97th
95th
90th
75th
50th
25th
10th
5th
3rd
Age (years)

Question 20

What is the main finding that you can see in this growth chart ?

Short Stature.



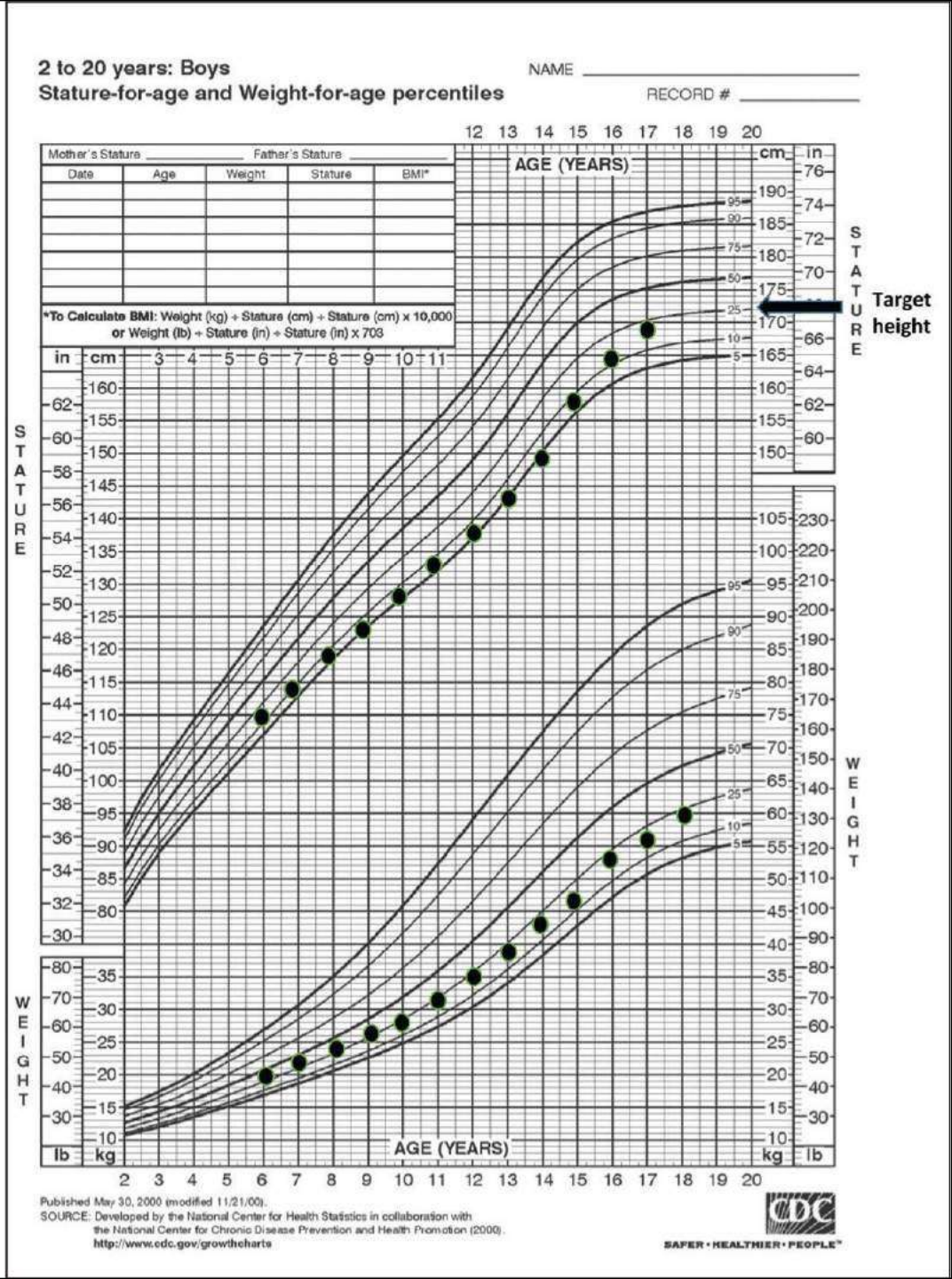
Q: According to this growth chart:

1. What is your Dx?

Constitutional delay of growth

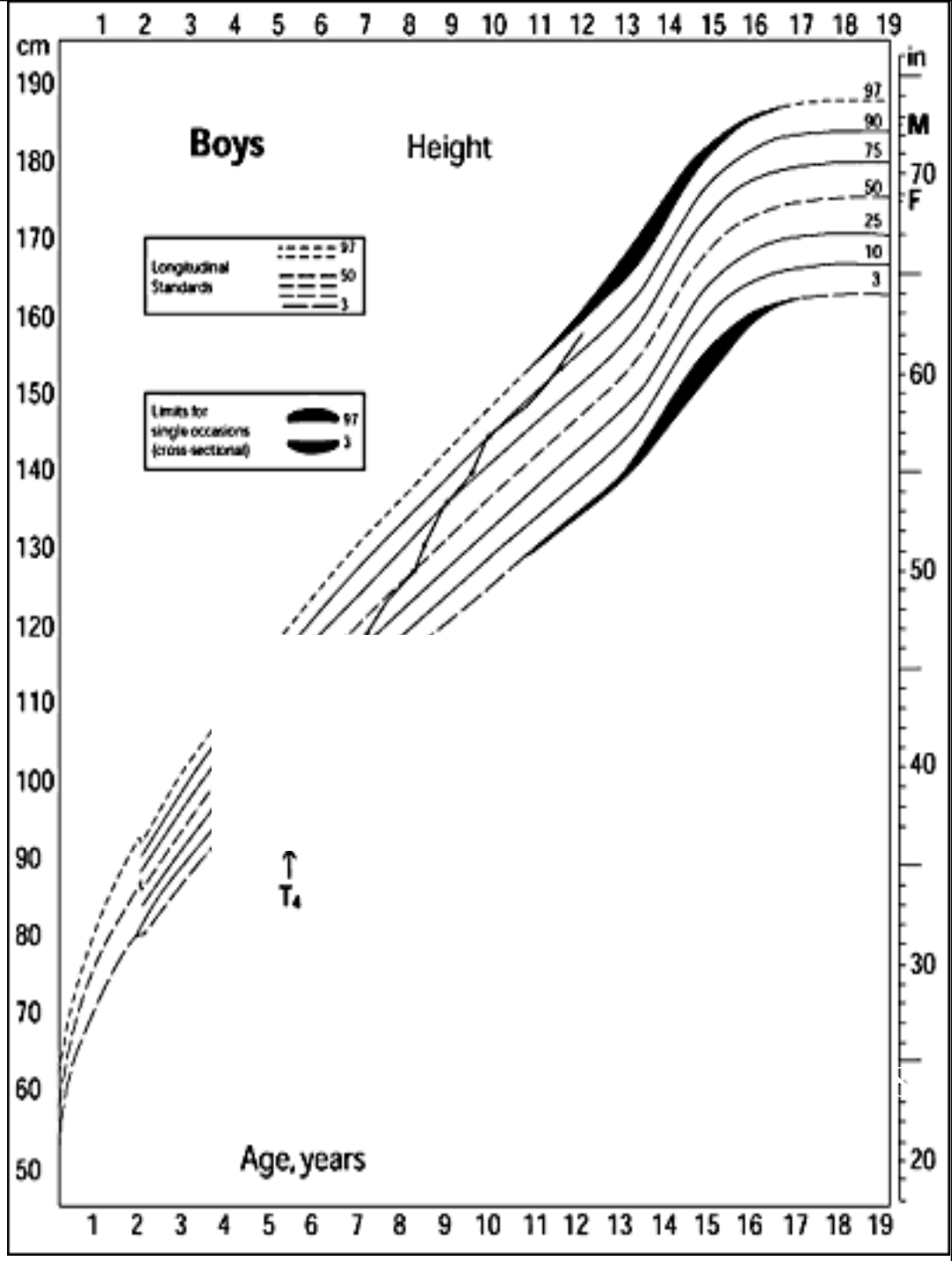
2.What do you think about the bone age (normal/delayed)?

delayed



Q: What is the cause of the change in the growth of this child at the age of 8:

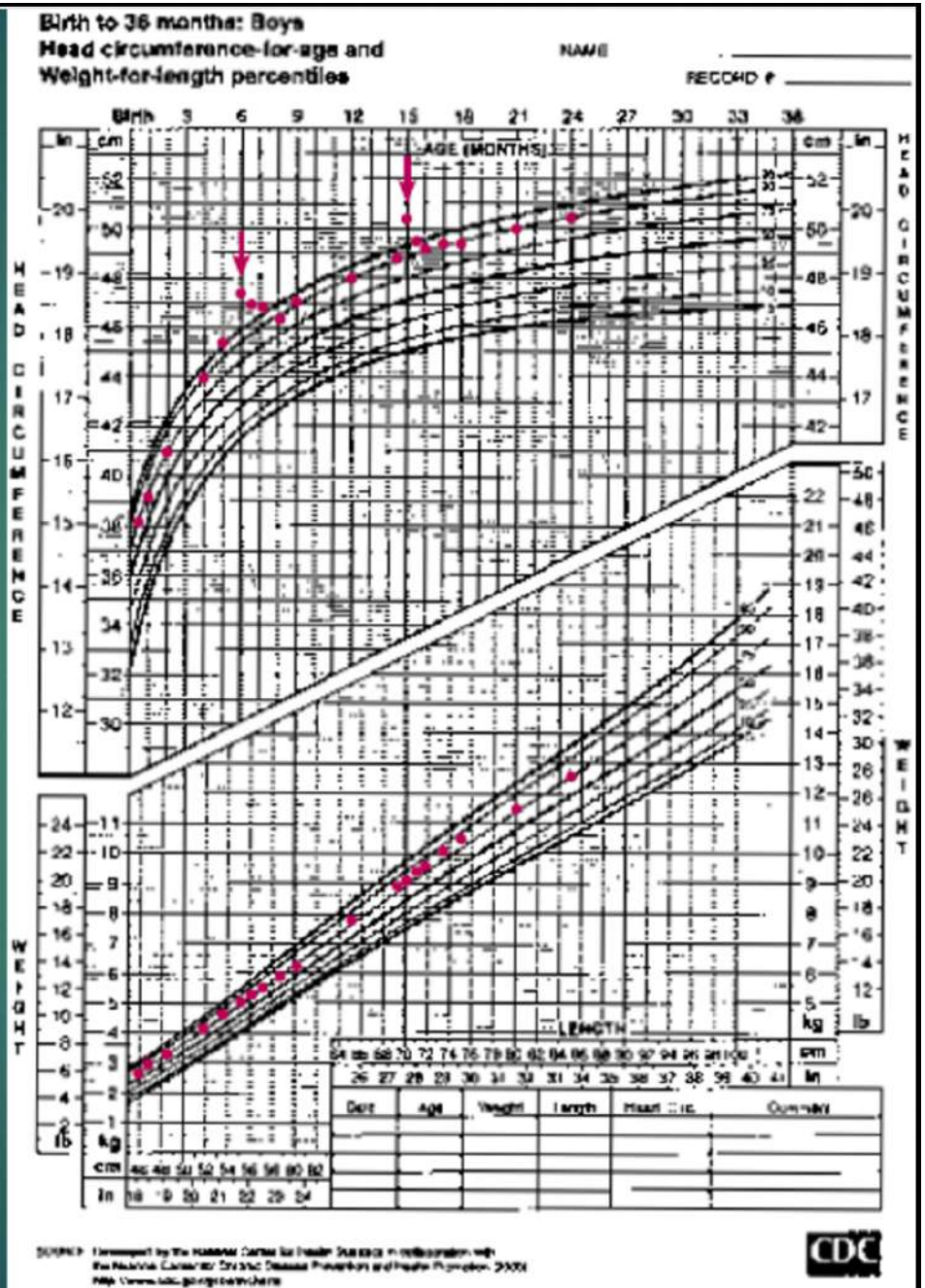
Receiving Growth Hormone



Hydrocephalus

A ventriculo-peritoneal shunt was placed at 6 mo of age.

It became nonfunctional at 15 mo and was revised.

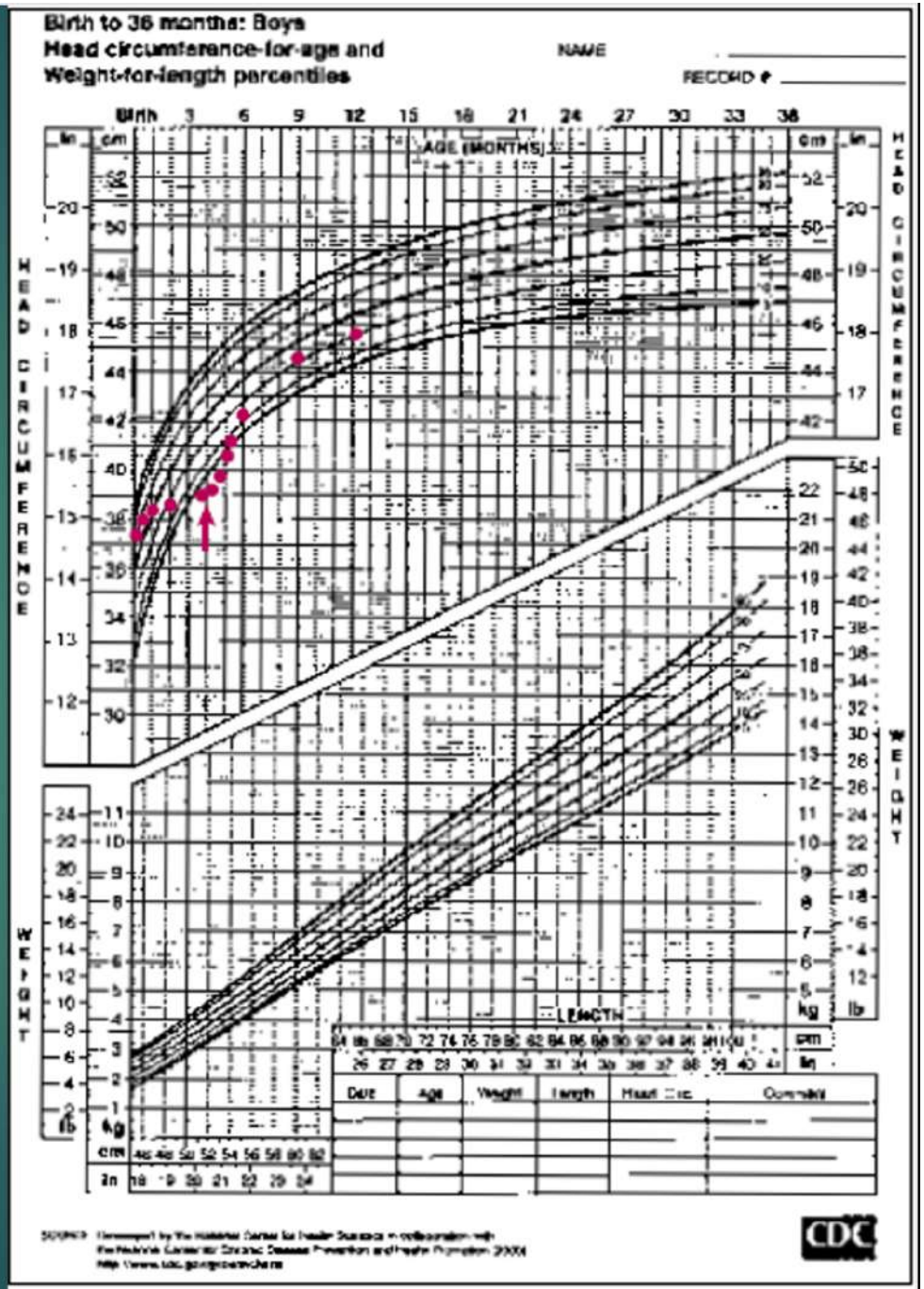


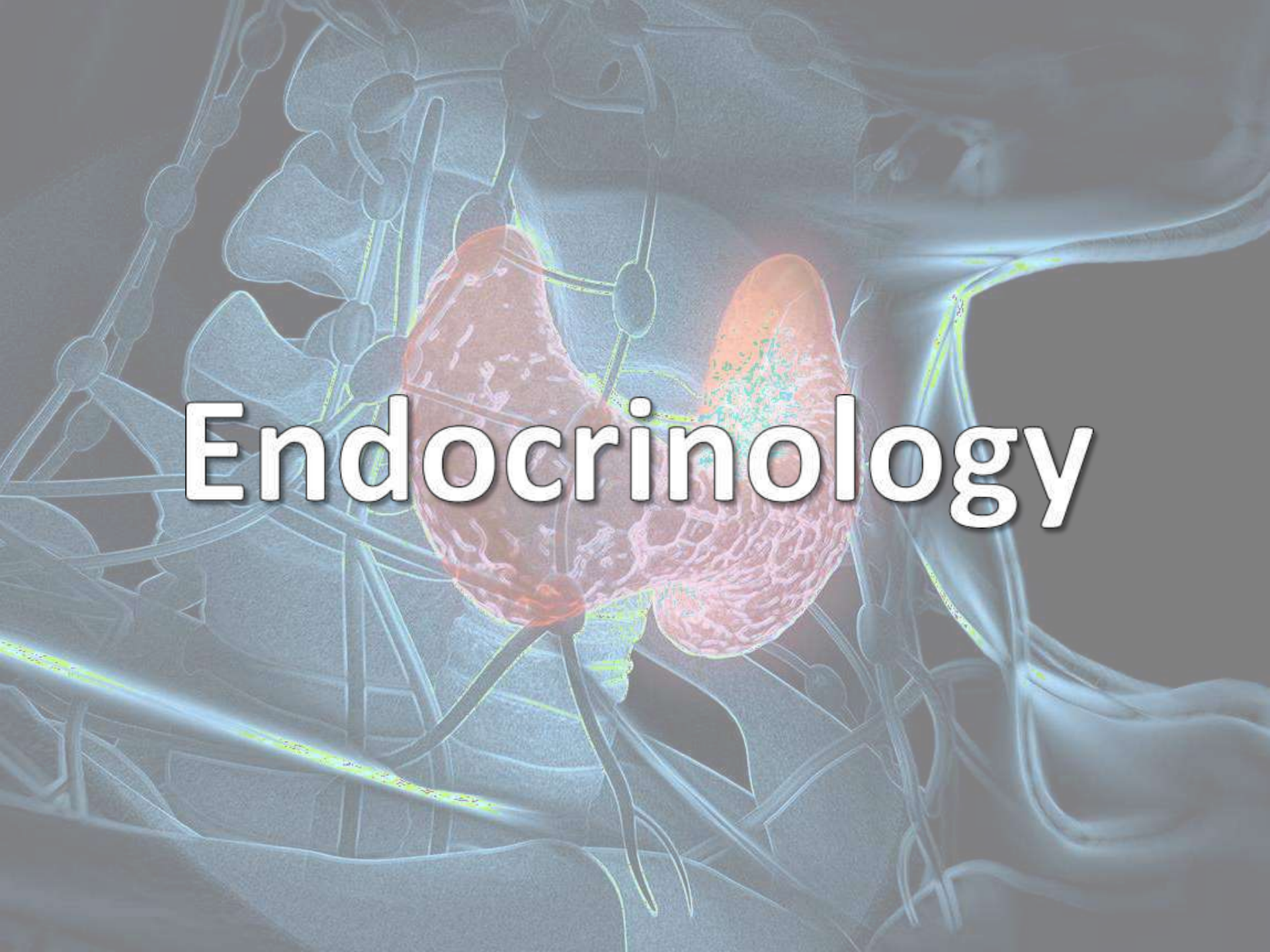
Craniosynostosis

Premature closure of one or more sutures

Causes microcephaly, deceleration of head growth, and abnormal head shape.

Surgical repair occurred at 4 mos in this child.




Endocrinology

Congenital hypothyroidism

Birth weight and length are normal, but head size may be slightly increased. **Clinical manifestations**	• Initially normal at birth • Symptoms develop after maternal T_4 wanes: ◦ Lethargy apathy, weakness,sluggish movement ◦ Enlarged fontanelle poor brain development ◦ Protruding tongue difficult breathing ◦ Umbilical hernia with abdominal bloating ◦ Poor feeding ◦ Constipation ◦ Dry skin hypothermia+hypotonia ◦ Jaundice and refractory macrocytic anemia
Diagnosis	• ↑ TSH & ↓ free T_4 levels TSH>100 IU • Newborn screening Serum level of prolactin are elevated
Treatment	• Levothyroxine Delay in osseous development (distal femoral epiphysis absence) ---epiphysial dysgenesis

hypotonia(frog),hernia,fontanelle,tounge

Carotenemia: yellow skin white sclera

Q: 1 month old infant presented with a hx of weak cry and hypoactivity since birth (Cretinism):

Q1: What is your diagnosis?

Congenital hypothyroidism

Q2: Write three signs?

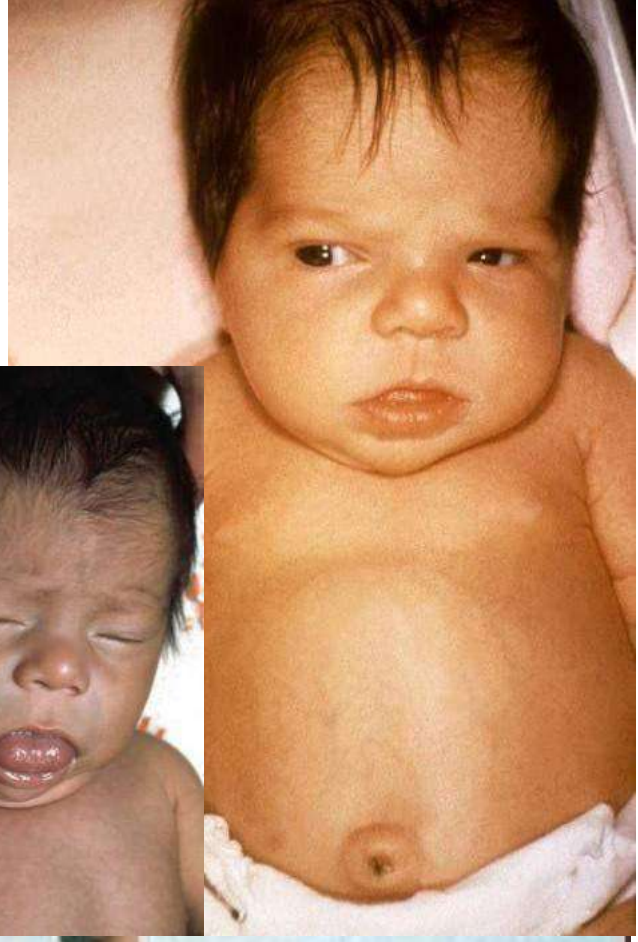
- Macroglossia
- Umbilical Hernia
- Painless oral ulcer
- Hypotonia

Q3: What is the lab test you want to do?

(serum T 3,T4, TSH)

Q4: What is the lab result?

- TSH and low T3 & T4 .



Neonatal thyrotoxicosis	
Pathophysiology	• Transplacental passage of maternal anti-TSH receptor antibodies during the 3rd trimes • Antibodies bind to infant's TSH receptors & cause excessive thyroid hormone release
Clinical features	• Warm, moist skin, hydrops, growth restrictior • Tachycardia maternal history of Graves' dise • Poor feeding, irritability, poor weight gain • Low birth weight or preterm birth
Diagnosis	• Maternal anti-TSH receptor antibodies ≥500% normal Neonates born to women with
Treatment	• Self-resolves within 3 months (disappearance of maternal antibody) • Methimazole PLUS β blocker as neonatal hy developmental

Q: picture of 12 y/o female with heart rate 130/min

Q1: What is the Dx?

- Graves disease

Q2: Give 2 findings:

1) Neck mass,
2) Exophalmus/ptosis
3) Moist skin

Q: a baby of female with hyperthyroidism , he had tachycardia, heat intolerance and decrease in weight with good appetite. What do you expect the TSH and T4 values ?

Increase T3, T4 / Low TSH

Q: Mother with graves disease , give a child , he was lethargic and so and so , if hyperthyroidism was suspected, what's your comment on TSH , T4 ???

Very low TSH, Very high T4

Enzyme deficiency	Hormonal abnormalities	Symptoms
21-hydroxylase	• ↓ Cortisol & aldosterone • ↑ Testosterone • ↑ 17-hydroxyprogesterone	• Ambiguous genitalia in girls • Salt wasting (vomiting, hypotension, ↓Na^+, ↑K^+)
11β-hydroxylase	• ↓ Cortisol & aldosterone • ↑ Testosterone • ↑ 11-deoxycorticosterone (weak mineralocorticoid) & 11- deoxycortisol	• Ambiguous genitalia in girls • Fluid & salt retention, hypertension
17α-hydroxylase	• ↓ Cortisol & testosterone • ↑ Mineralocorticoids • ↑ Corticosterone (weak glucocorticoid)	• All patients phenotypically female • Fluid & salt retention, hypertension

CAH due to 21-OH deficiency

	Classic salt wasting		Classic simple virilizing		Nonclassic	
	Males	Females	Males	Females	Males	Females
Age at dx	Birth-6mo	Birth-1mo	2-4 yr	Birth-2yr	Child to adult	
External genitalia	Normal	Ambiguous	Normal	Ambiguous	Normal	Usually normal; may have clitoromegaly
Aldosterone	Low		Normal		Normal	
Cortisol	Low		Low		Normal	
17-OHP	Basal>20,000 ng/dL		Basal> 10,000 – 20,000 ng/dL		ACTH stimulated 1,500 – 10,000 ng/dL	
% of normal 21-OH activity	0		1-2		20-50	

Q: infant with recurrent vomiting.

Q1: What is the Dx? congenital adrenal hyperplasia.

Q2: Mention 2 signs rather than signs of dehydration?

Dark scrotum, ambiguous genitalia

Q3: Mention one diagnostic test.

17-OH progesterone before and after an IV bolus of ACTH.

ADH-related causes of polyuria & polydipsia

	Primary polydipsia	Central DI	Nephrogenic DI
Defect	ADH independent ↑ Water intake	↓ ADH release from pituitary	ADH resistance in kidney
Etiology	(dry mouth) • Antipsychotics • Anxious, middle-age women psychiatric or CNS disorders. azine	• Idiopathic • Trauma • Pituitary surgery • Ischemic encephalopathy	• Chronic lithium use • Hypercalcemia \ hypo K+ • Hereditary (*AVPR2* mutations)
Clinical features	Low serum Na	High serum Na	Normal serum Na
	a very dilute urine (osmolality <100 mOsm/kg)		
Results of water deprivation	• High urine osmolality	• Low urine osmolality	• Low urine osmolality
Response to desmopressin	• No change	• Increased urine osmolality	• No change

Q: A case of a baby who underwent brain resection 2 days ago. This is the lab result

Na = 155,

Cl = 110,

K = 4,

Urine spec gravity = 1.003 .

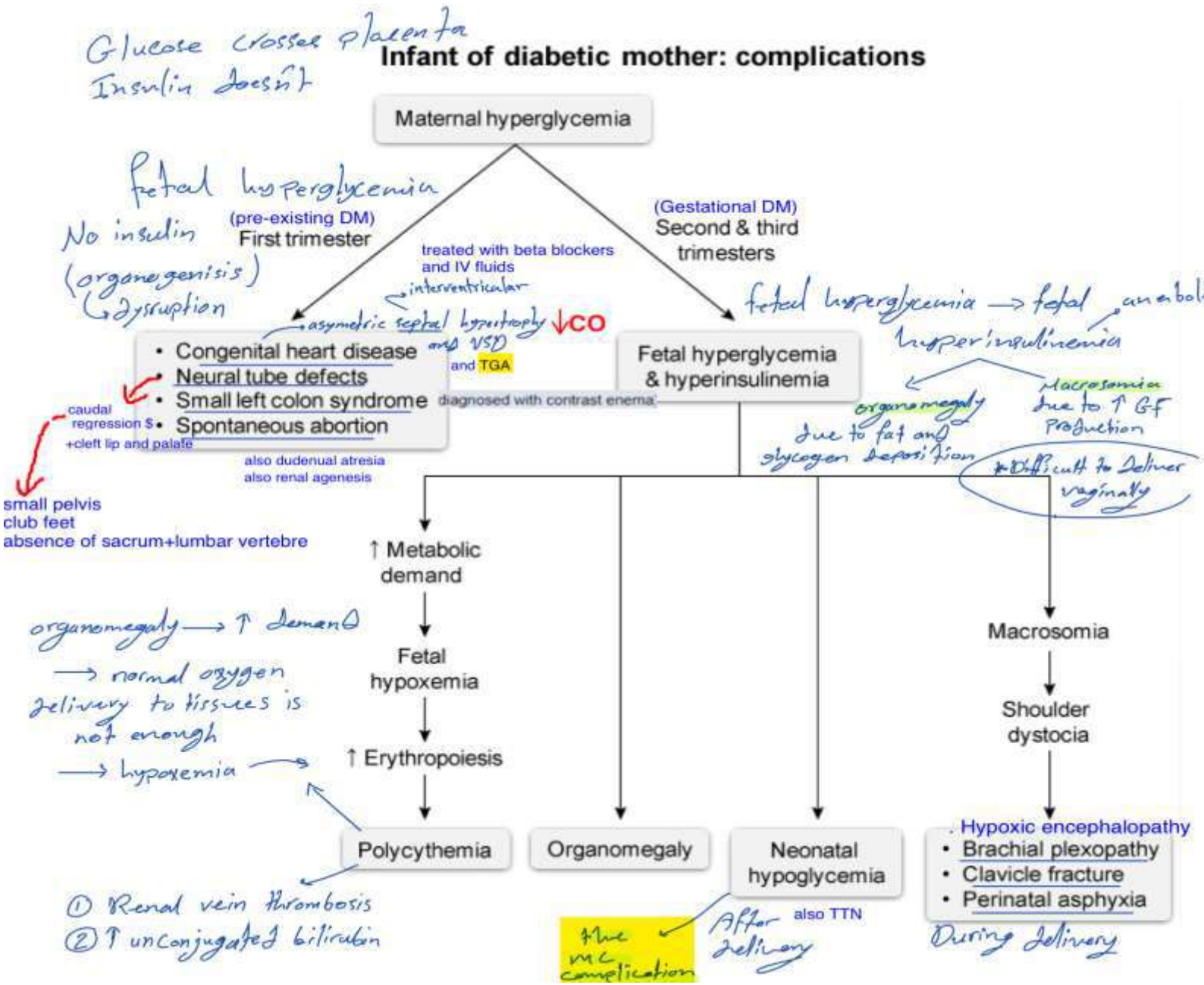
Q1: What is the Dx? Diabetes Insipidus

Q2: What is the Mx? Desmopressin

Q: Hx of a boy who had RTA, and he underwent craniotomy and hemispherectomy! His urine output increased to 6 L / day. Urinalysis and electrolytes results were given showing low specific gravity, low osmolarity and hypernatremia.

Q1: What's your Dx? Diabetes Insipidus

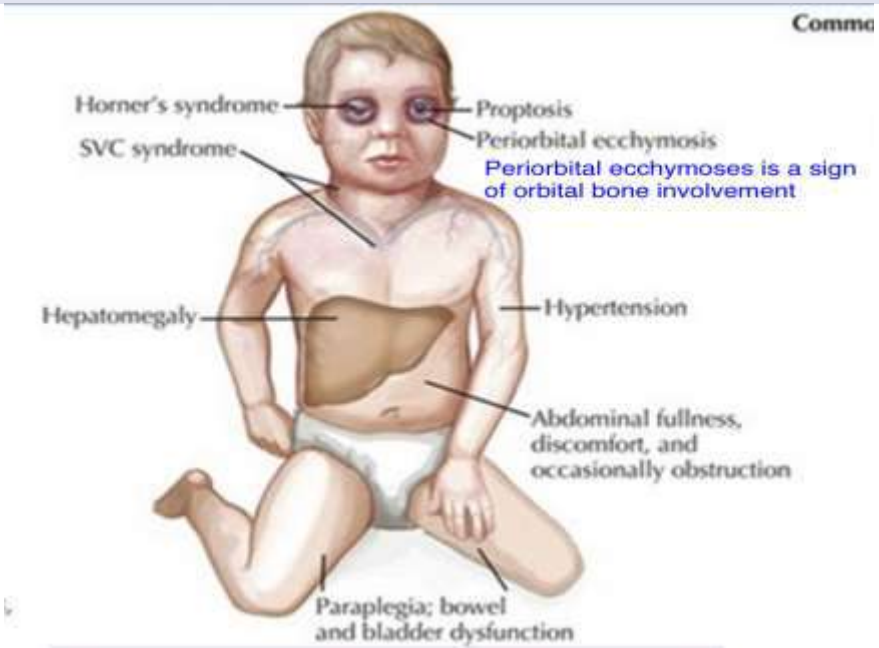
Q2: What's the treatment of choice? Desmopressin


Glucose crosses placenta
Insulin doesn't
Infant of diabetic mother: complications
Maternal hyperglycemia
fetal hyperglycemia
No insulin
(organogenesis)
↳ dysruption
(pre-existing DM)
First trimester
(Gestational DM)
Second & third trimesters
treated with beta blockers and IV fluids
interventricular
asymmetric septal hypertrophy ↓CO
and VSD
and TGA
fetal hyperglycemia → fetal hyperinsulinemia
anabolic
• Congenital heart disease
• Neural tube defects
• Small left colon syndrome
• Spontaneous abortion
diagnosed with contrast enema
caudal regression $
+cleft lip and palate
also dudenual atresia
also renal agenesis
small pelvis
club feet
absence of sacrum+lumbar vertebre
Fetal hyperglycemia & hyperinsulinemia
organomegaly due to fat and glycogen deposition
Macrosomia due to ↑ GF production
Difficult to deliver vaginally
↑ Metabolic demand
organomegaly → ↑ demand → normal oxygen delivery to tissues is not enough → hypoxemia
Fetal hypoxemia
↑ Erythropoiesis
Macrosomia
Shoulder dystocia
Polycythemia
Organomegaly
Neonatal hypoglycemia
Hypoxic encephalopathy
• Brachial plexopathy
• Clavicle fracture
• Perinatal asphyxia
① Renal vein thrombosis
② ↑ unconjugated bilirubin
the MC complication
After delivery
also TTN
During delivery

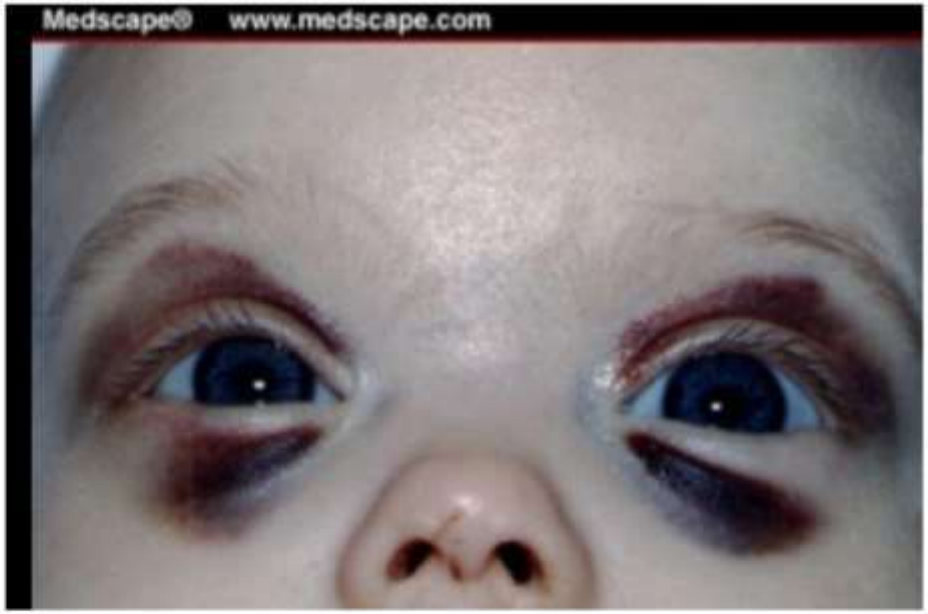
Q: Mother had Gestational DM: Mention 2 fetal complications?

- Hypoglycemia
- Polycythemia
- Jaundice
- Sacral Agenesis

Neuroblastoma	
Pathogenesis	• Neural crest origin • Involves adrenal medulla, sympathetic chain
Clinical features	• Median age <2 • Abdominal mass • Periorbital ecchymoses (orbital metastases) • Spinal cord compression from epidural invasion ("dumbbell tumor") • Opsoclonus-myoclonus syndrome
Diagnostic findings	• Elevated catecholamine metabolites • Small, round blue cells on histology • *N-myc* gene amplification



PT with kidney tumer …
Mention 2 caticolamines Used to diagnose it:



Features of Cushing syndrome	
Clinical manifestations	• **Central obesity** **Hirsutism** • Skin atrophy & wide, purplish **striae** • Proximal muscle weakness • Hypertension • **Glucose intolerance** • Skin hyperpigmentation (if due to ACTH excess) • Depression, anxiety
Diagnosis	• 24-hour urinary cortisol excretion • Late-night salivary cortisol assay **Two of these** and/or overnight Low-dose dexamethasone suppression test

Q1: Whats the most likely Dx?

Congenital Cushing syndrome.

Q2: Mention 2 abnormal vital signs in this baby?

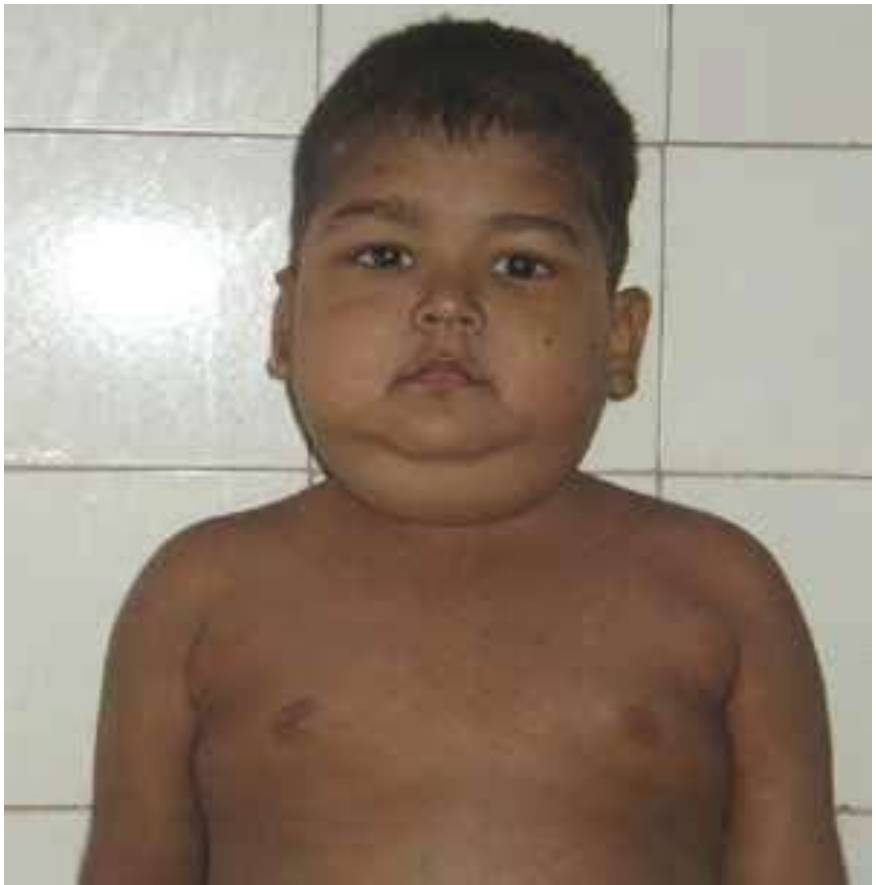
high body temperature, high BP, high HR

Q1: What is the medication has he been taking?

Corticosteroids

Q2: What is the vital sign you want to monitor?

Blood Pressure



Q: a case of seizure with lab values has hypocalcemia

Q1: What is the Dx?

- Hypoparathyroidism

Q2: next step lab test u want to do?

- Parathyroid hormone level

► Fluid replacement = maintenance fluid + replacement therapy

1. **Maintenance Fluid :**
   100 ml/kg : for the 1st 10 kg
   50 ml/kg : for the 2nd 10 kg
   20 ml : for each kg > 20 kg

2. **Maintenance of sodium (Na) :**
   2-4 mEq Na / kg ----→ you can say 3 as avg.

3. **Fluid deficit :**
   Fluid deficit = (kg) * (% of fluid loss) * (1000)
   ↳► to convert kg to g

4. **Na deficit :**
   If hyponatremic : 8-12 mEq Na /kg → an avg of 10
   If Isonatremic : 6-8 mEq Na /kg
   If hypernatremic : 4-6 mEq Na / kg

Q: The case was about dehydrated child his weight is 10 kg,he was hypotensive for 10 days.

1. What is the sign?

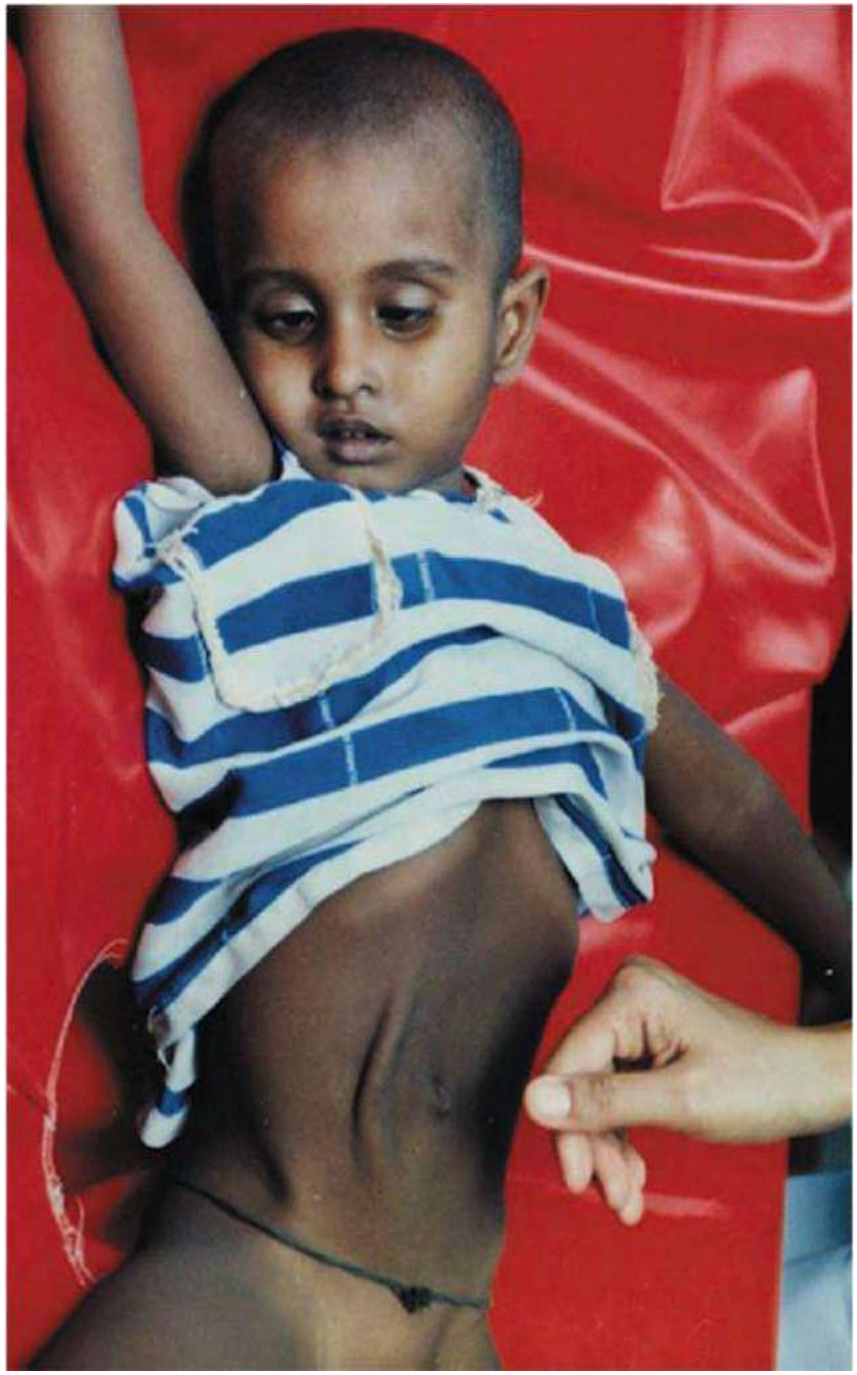
Skin retraction.

2. What is the initial fluid to give?

Normal saline.

3. What is the amount ?

20-30 ml\kg.



Q: Case of Dehydration and Hypotension, weight = 10 Kg

1. Degree of dehydration?

Severe Dehydration

2. Type of fluid to give?

Normal Saline

3. Amount of fluid must be given at time of reaching hospital?

20-30 ml/kg = 200-300 ml

Q: 11 month old who weight 10 kgs presents with moderate hyponatremia dehydration signs, his Na+ is 125

1. Calculate the sodium maintenance?

Maintenance = 2-4 mEq/kg, so nearly 30 mEq

2. Calculate sodium deficient?

Deficit – 8-12 mEq/kg, so nearly 100 mEq

Q: 3KG baby, expect his weight on:

4 days → 2.7 kg

10 days → 3kg

5 months → 6kg

1 year → 9kg

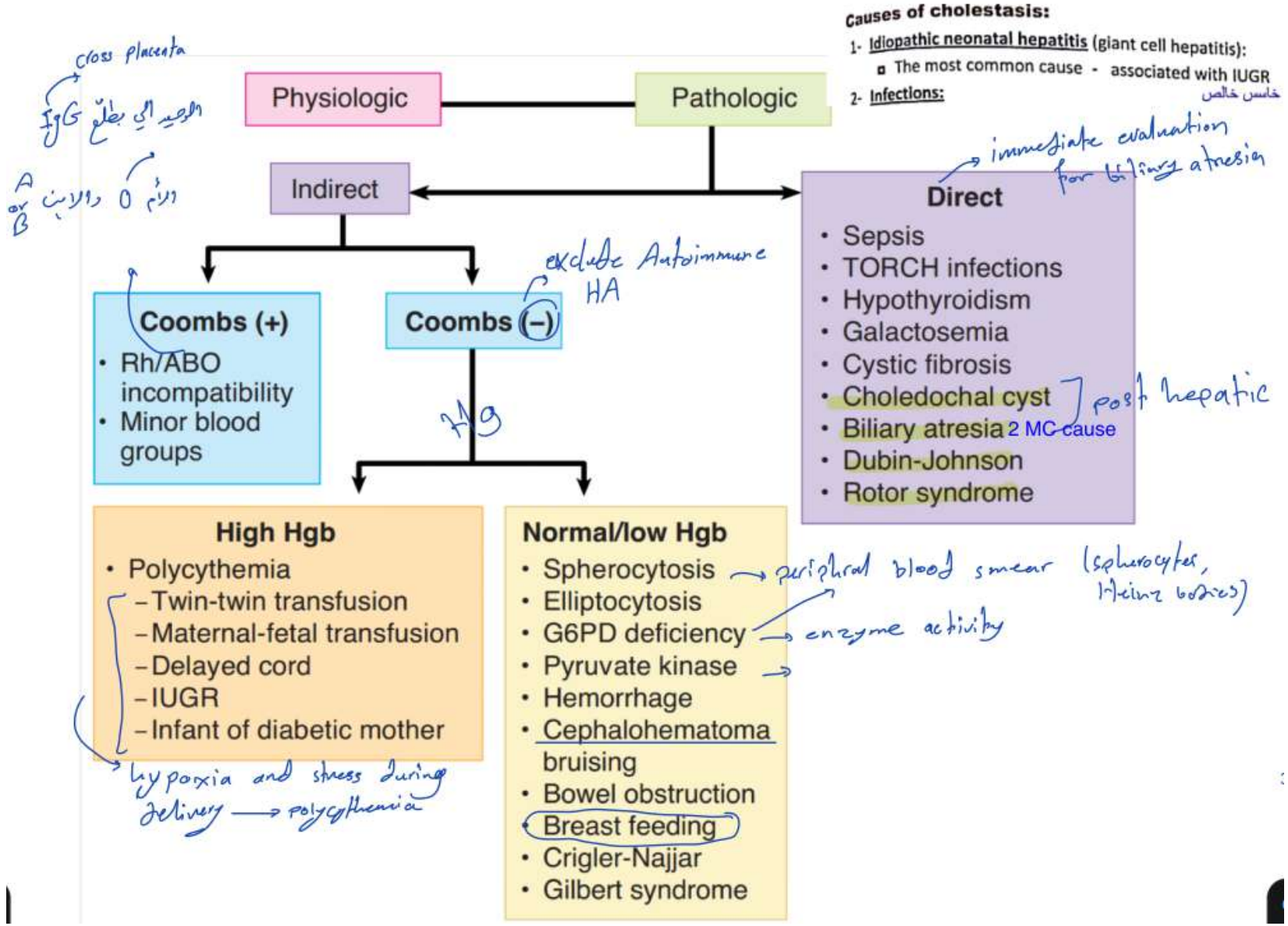
** first 3 months weight must increase 20-30 gm/day

** in first 4 days he will loss 10% of his birth weight because of losing the extra fluid and in the next 4 days (day 8) he will get this 10% back (weight at birth again), so in the first 8-10 days his birth weight will not change.

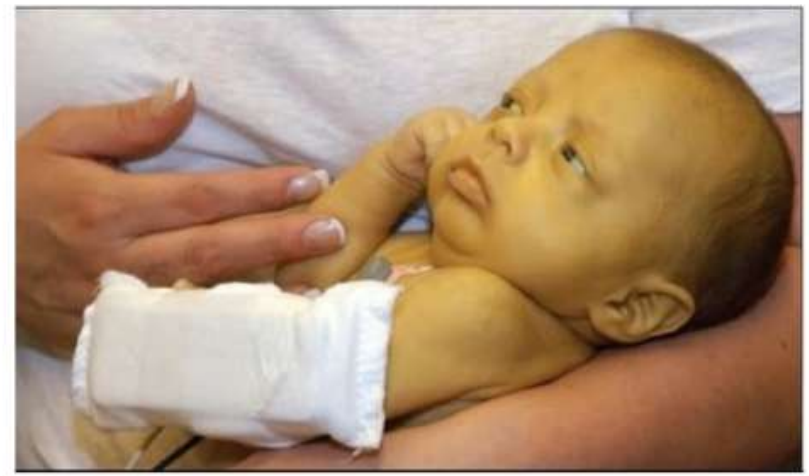
** Double at 5 months. Triple at 1 year,

4x at 2 years, 5x at 3 years, x6 at 5 years


Gastrointestinal


Physiologic
Pathologic
Indirect
Direct
Coombs (+)
Rh/ABO incompatibility
Minor blood groups
Coombs (–)
Hg
High Hgb
Polycythemia
Twin-twin transfusion
Maternal-fetal transfusion
Delayed cord
IUGR
Infant of diabetic mother
Normal/low Hgb
Spherocytosis
Elliptocytosis
G6PD deficiency
Pyruvate kinase
Hemorrhage
Cephalohematoma
bruising
Bowel obstruction
Breast feeding
Crigler-Najjar
Gilbert syndrome
Sepsis
TORCH infections
Hypothyroidism
Galactosemia
Cystic fibrosis
Choledochal cyst
Biliary atresia
Dubin-Johnson
Rotor syndrome
Causes of cholestasis:
1- Idiopathic neonatal hepatitis (giant cell hepatitis):
The most common cause - associated with IUGR
2- Infections:
خلص خالص
cross placenta
الوحيد اللي بطلع IgG
A or B
دم O
exclude Autoimmune HA
immediate evaluation for biliary atresia
post hepatic
2 MC cause
peripheral blood smear (spherocytes, Heinz bodies)
enzyme activity
hypoxia and stress during delivery → polycythemia

1-Jaundiced 4 week old child with coagulopathy and urine showed reducing substances, what is your diagnosis?



Biliary atresia	
Pathogenesis	• Extrahepatic bile duct fibrosis

Clinical findings	• Asymptomatic at birth
	• Infants age 2-8 weeks:
	  ◦ Jaundice, acholic stools, dark urine
	  ◦ Hepatomegaly

Diagnostic evaluation	• Direct hyperbilirubinemia
	• Ultrasound:
	  ◦ Absent/abnormal gallbladder &/or CBD
	• Liver biopsy:
	  ◦ Intrahepatic bile duct proliferation
	  ◦ Portal tract edema
	  ◦ Fibrosis
	• Intraoperative cholangiography (gold standard):
	  ◦ Biliary obstruction

Treatment	• Surgical hepatoportoenterostomy (Kasai procedure) • Liver transplant

Q1: Name the Dx? Biliary Atresia

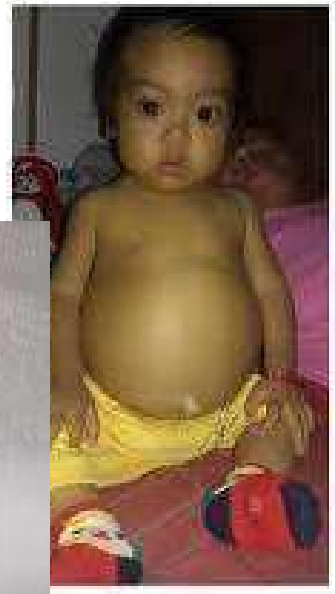
(mc indication for liver transplant in children)

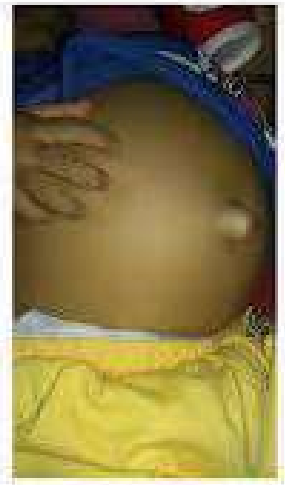
Q2: How to Dx?

- Abdominal US: gallbladder absent or irregular
- Hepatobiliary scintigraphy: failure of tracer excretion
- Liver biopsy

Q3: Mx?

- Kasai procedure (hepatoportoenterostomy)



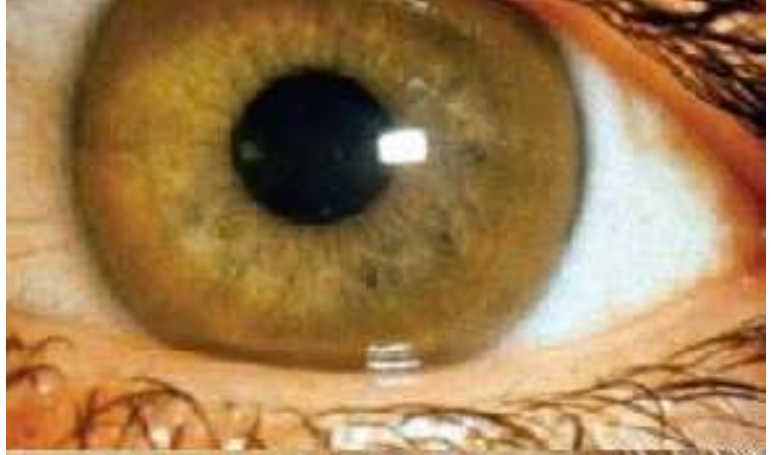


Q1: Name the Dx? Wilson Disease

Q2: Name the sign? Kayser-Fleischer ring

Q3: Mode of inheritance: AR

Q4: What is the initial CNS sign: Dystonia



Q5: How to Dx?

- low serum ceruloplasmin
- Elevated serum copper
- High 24 hr urine copper

- Quantitative copper in liver biopsy is the definitive diagnostic test

Q6: Mx?

- Chelating agent: Penicillamine or trientine
- Zinc therapy
- Dietary restriction for Cu
- Liver transplant (if failure occur)
- Screen the siblings

Case 1:
7 years old with jaundice .....ect
- Dx: Hepatitis A
-Test: serology
-Ttt: supportive
-Do you admitt, why ? Yes , due to vomiting,
other indications for admition: 1 hepatic encephalopathy, 2 coagulopathy
-
Type of isolation: food and bathroom separated ?
-if his Brother immunocompromised what u advise mother ? Avoid contact and give vaccine

HBsAg ← infected or not (1)
HBCAb ← acute or chronic (2)
HBeAg (high) ← high or low viral load (?)

Serology of HBV

- Positive HBsAb only...Immunization by vaccine
- Positive HBsAb &HBcAb IgG..Immunization from Heb B viral infx
- Positive HBsAg >6 mo & normal liver enzymes and negative HBV DNA & negative HBeAg.....Carrier state (Chronic)
- Positive HBsAg >6 mo & elevated liver enzymes and positive HBV DNA and +/- HBeAg.....Chronic..active hep
- ~~liver enzymes and positive HBV DNA and +/- HBeAg..~~
- liver enzymes normal and DNA +ve → immunotolerant

Q1: What's the Dx?Neonatal Jaundice

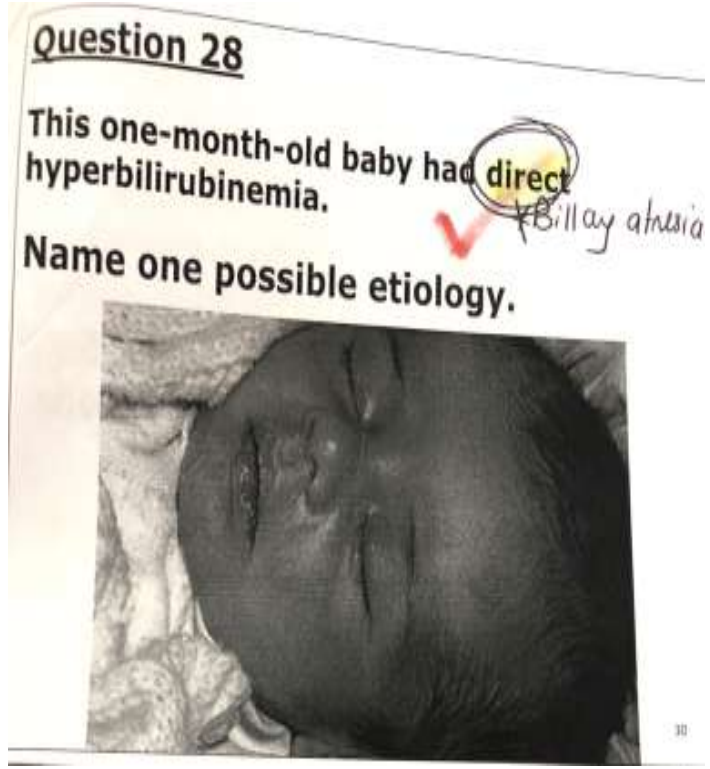
Q2: When it's seen? When bilirubin levels >5mg/dl

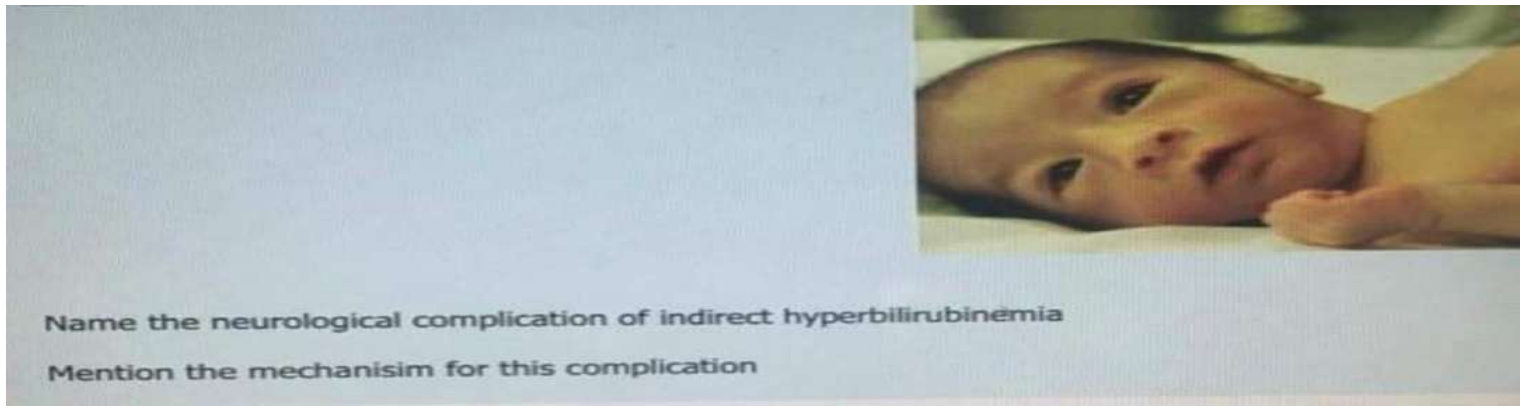
Q: A baby on phototherapy, and with elevated indirect bilirubin levels, give 3 causes:

a. Hemolytic causes: G6PD, spherocytosis, sickle cell
b. Conjugation disorders: Crigler najjar type I
c. Hematoma

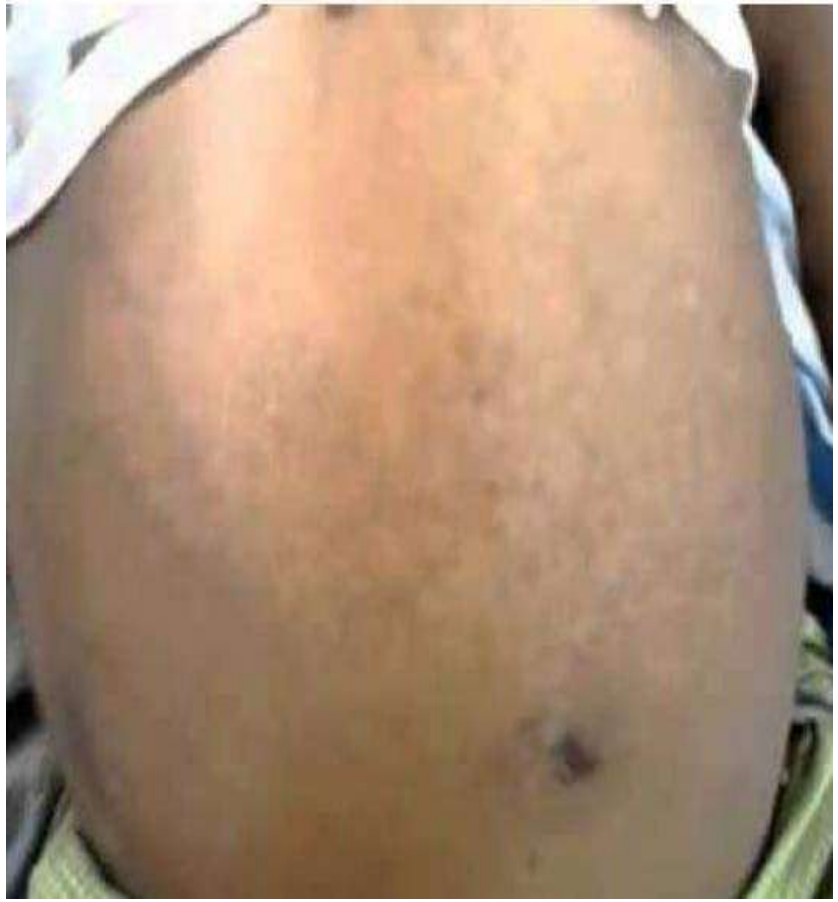
Q2)indirect hyperbilirubinemia was treated with the following technique

- A)Mention the mechanism of action?
- converts unconjugated bilirubin into water soluble isomers
- B)Mention other tretment if there is a refractory case?
- Blood exchange transfusion





Q: Yellow distended abdomen with visible dilated veins, and liver disease



1. **Cause of this condition?**
   Portal Hypertension

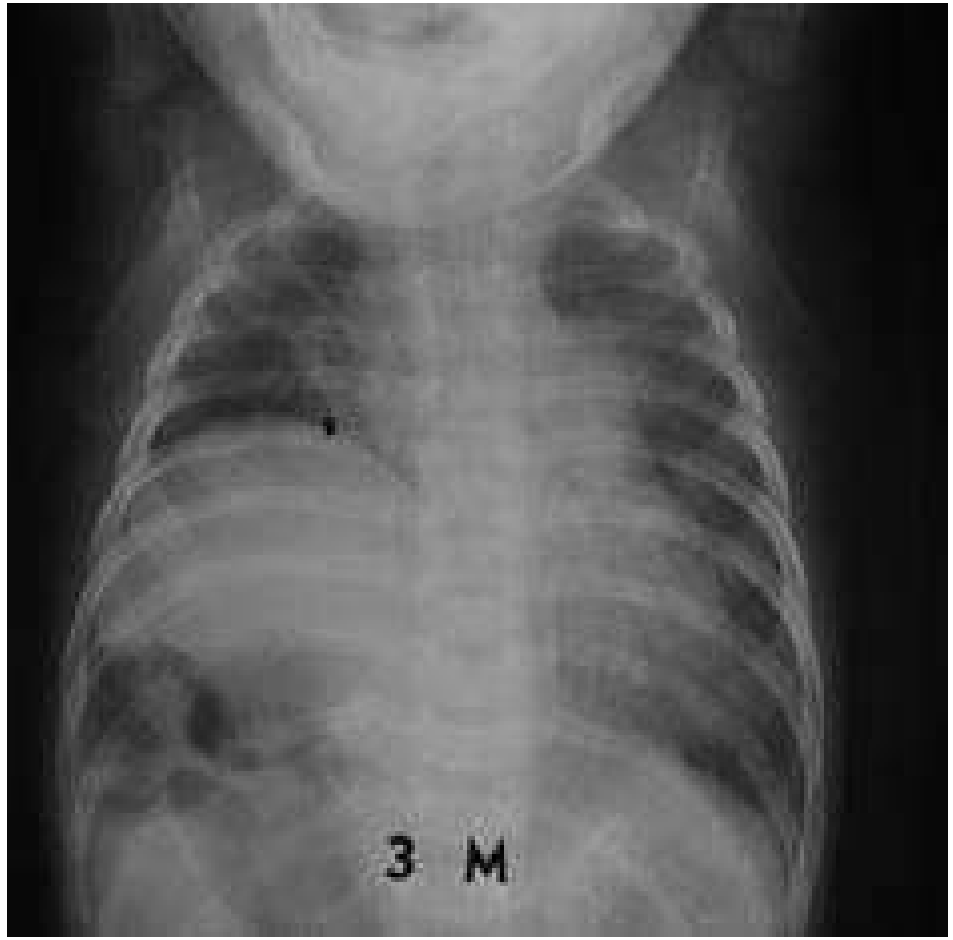
2. **Mention one cause?** Any cause of chronic liver disease (Cirrhosis, Hepatitis B), any cause of conjugated

Q1 : Identify the condition ?

Hepatomegally
(upward disposition of the right hemidiaphragm)

Q2: Mention 2 causes?

1) Infection (Hepatitis)
2) CHF
3) Metabolic
4) Veno-occlusive diseases
5) Sickle cell crises



Q: A 1 month old with persistent nonbilious vomiting:

Q1: What is your Dx?

Pyloric Stenosis

Q2: How to Diagnose it?

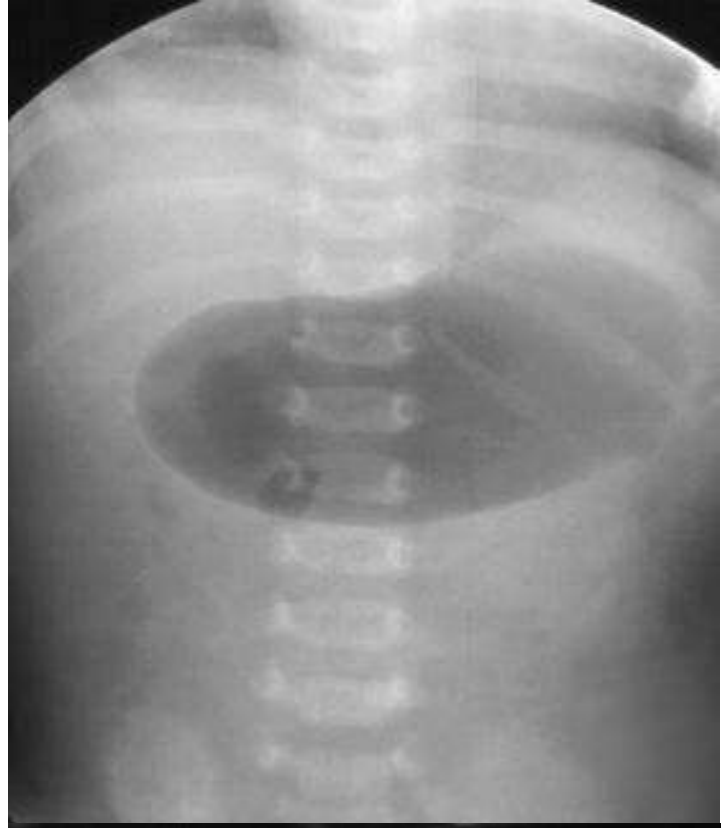
Ultrasound

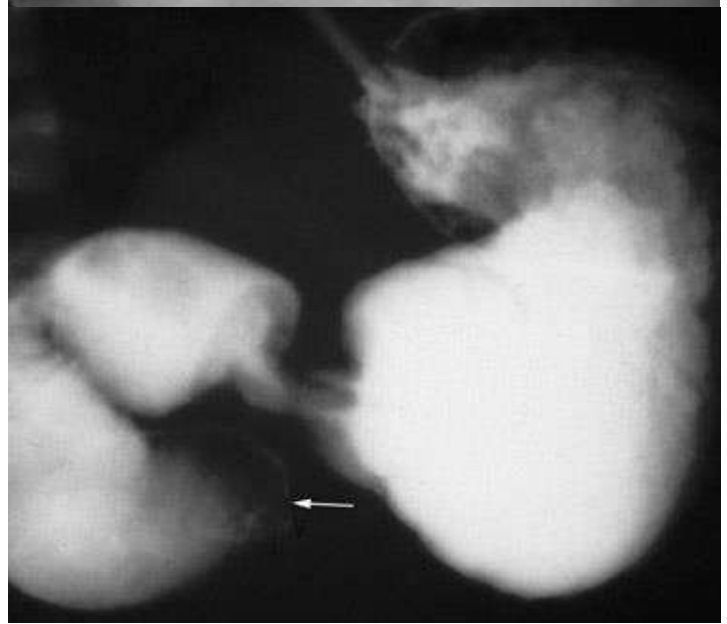
Q3: What is the xray sign?

Shoulder sign

Q4: What is the definitive Mx?

Surgical Mx (Pyloromyotomy)





Question 19

This is a one-month-old boy.

The picture shows the way he vomits.

His venous blood gases revealed metabolic alkalosis.

Hypokalmic

Hypoch

What is the most likely diagnosis?

- PS
- should sign US
  x-Ray: single Bubble
* Non-Billous
- Pylonmy

Q1: Name the sign? Double bubble sign **Q2: Name the Dx?** Duodenal Atresia **Q3: Name other S/Sx?**

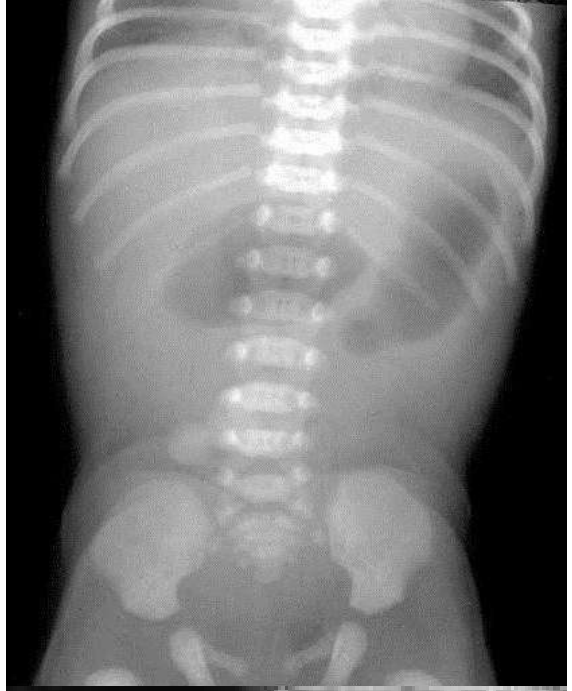
- Abdominal distension
- Delayed meconium ileus
- Vomiting

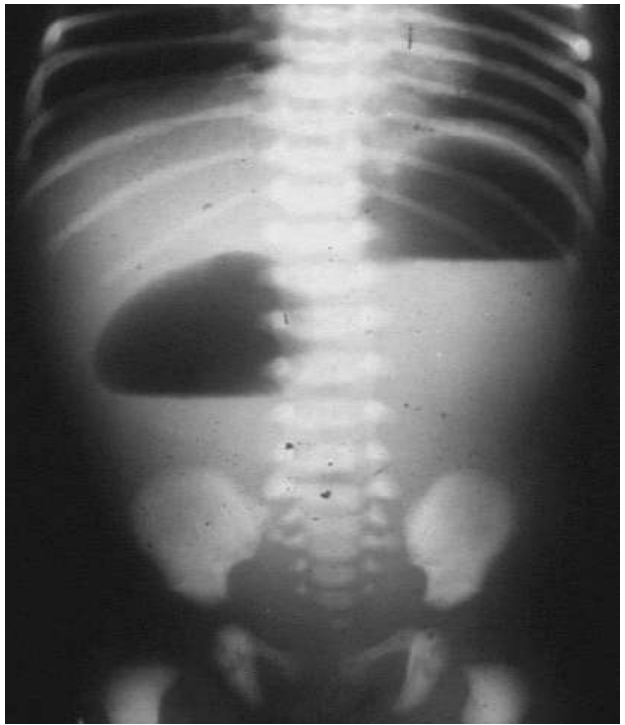
Q4: What would be the typical presentation?

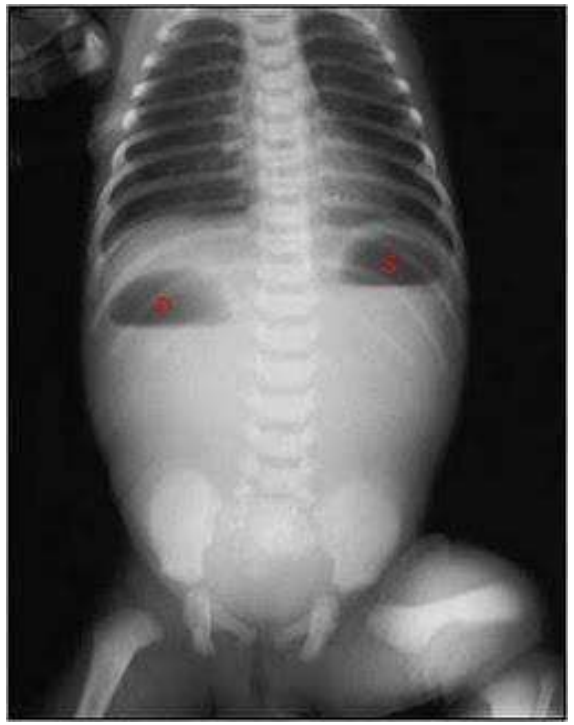
- Bilious vomiting after first feed

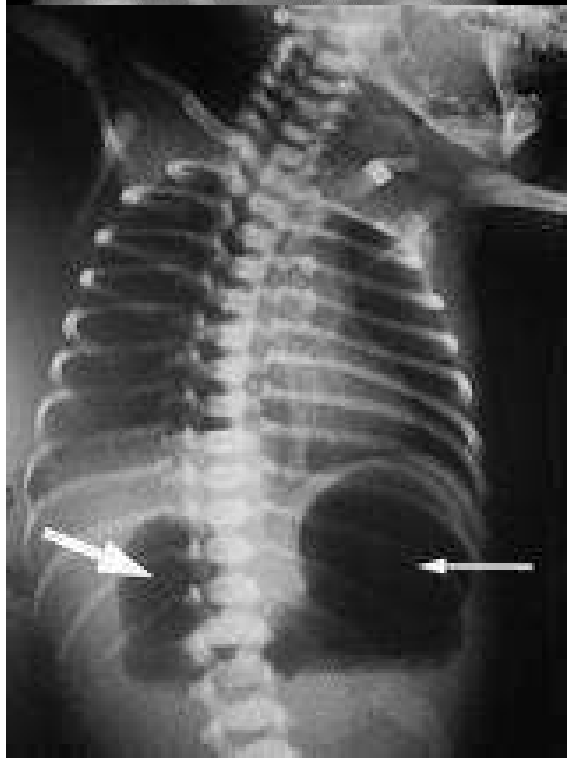
Q5: What does this X-Ray sign indicate?

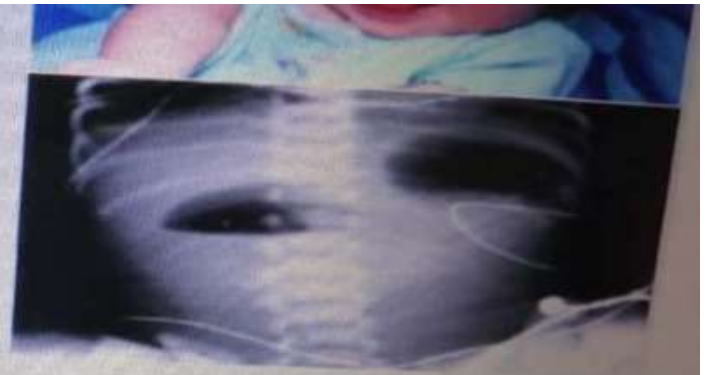
- Intestinal Obstruction











This is a baby with Trisomy 21

Mention one possible diagnosis in this patient with this x ray finding ? *
(1 Point)

duodenal atresia

Q1: Name the finding?

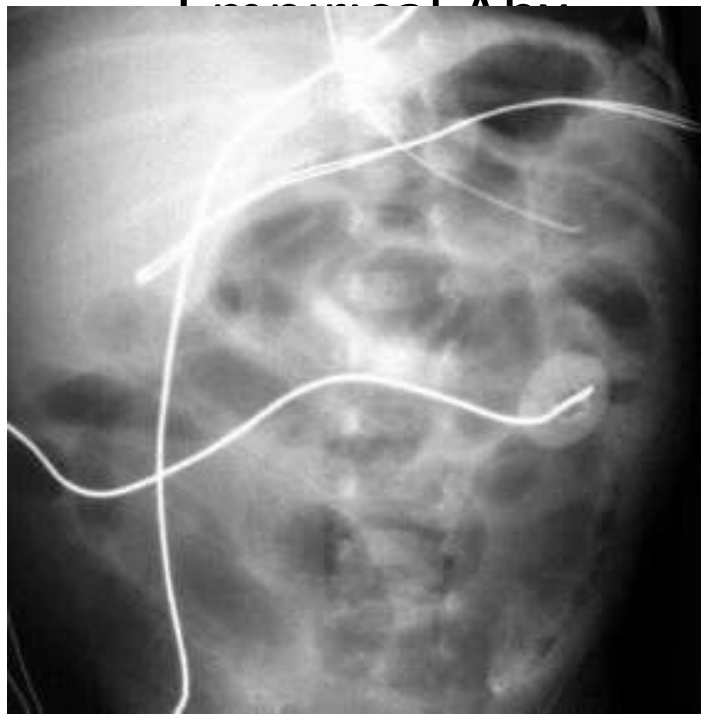
- Pneumatosis Intestinalis

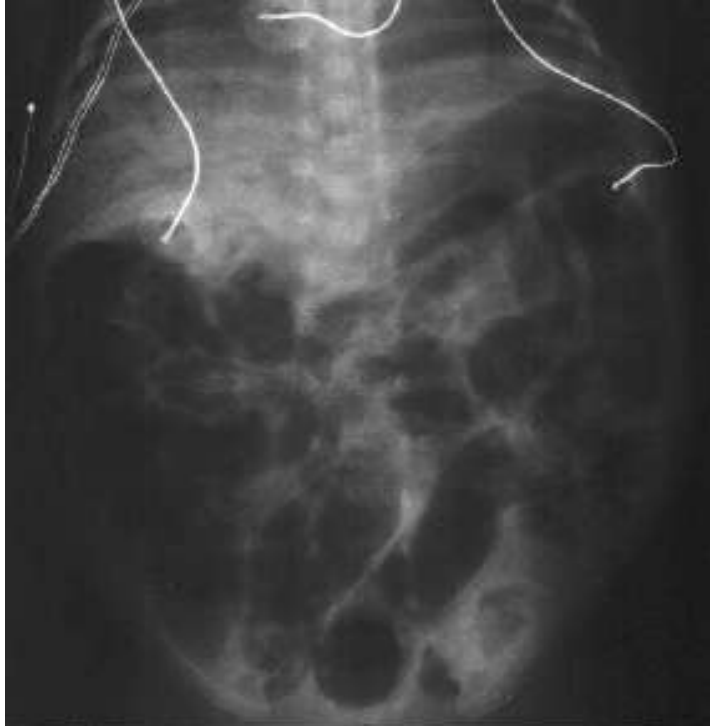
Q2: What is the Dx?

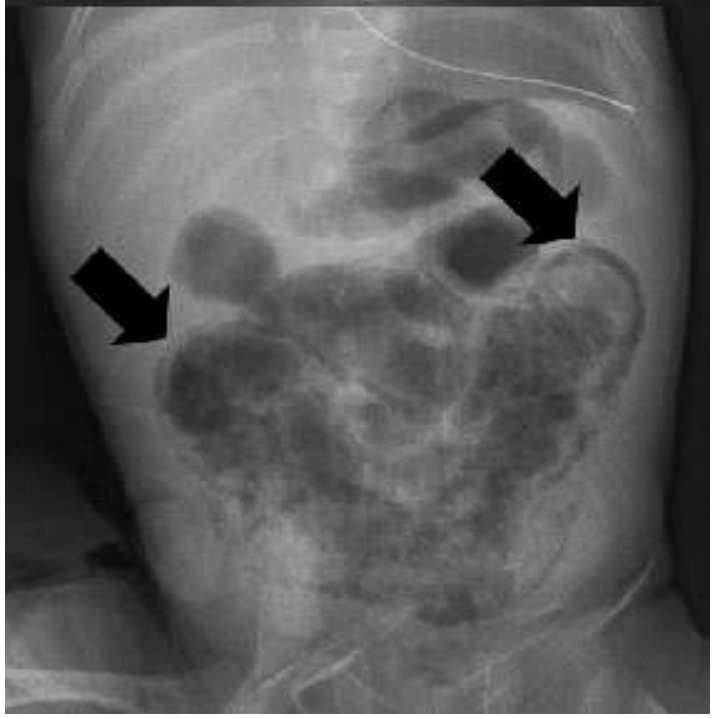
Necrotizing Enterocolitis

Q3: First line of Mx?

- NPO
- NGT for decompression
- Empirical Abx







9- A 30 wks old premature baby presented with bloody stool, Warm erythematous abdominal wall and abdominal distention, What is the diagnosis?

Necrotising entercolitis NEC

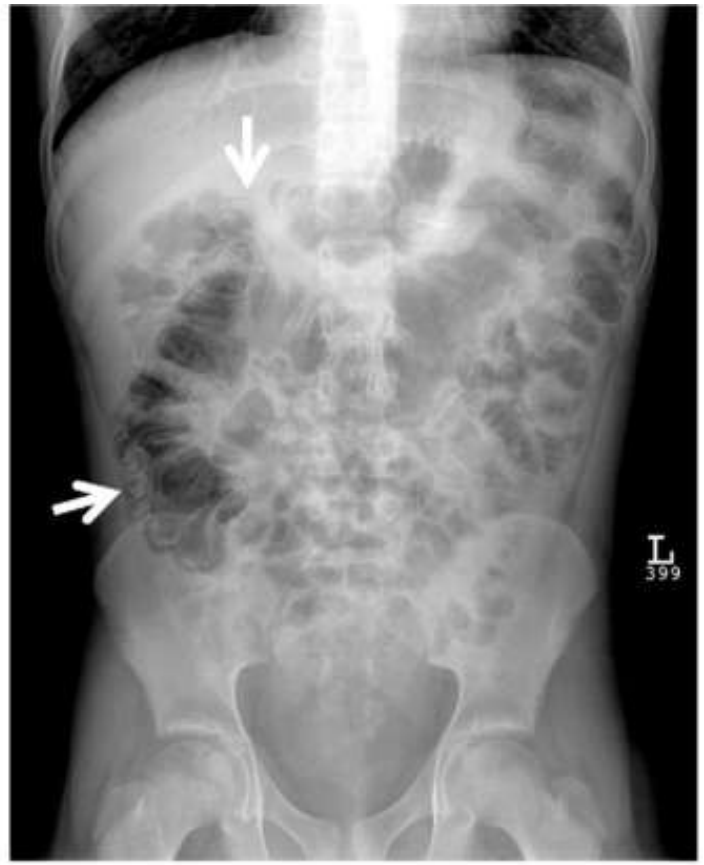


Figure 1. Anteroposterior abdominal x-ray demonstrated

Q: Neonate in respiratory distress & cyanosis: **Q1: Mention the 3 findings?**

1) Bowel loops in the chest
2) Shifted mediastinum
3) Abdomen relatively devoid of gas

Q2: What is the Dx?

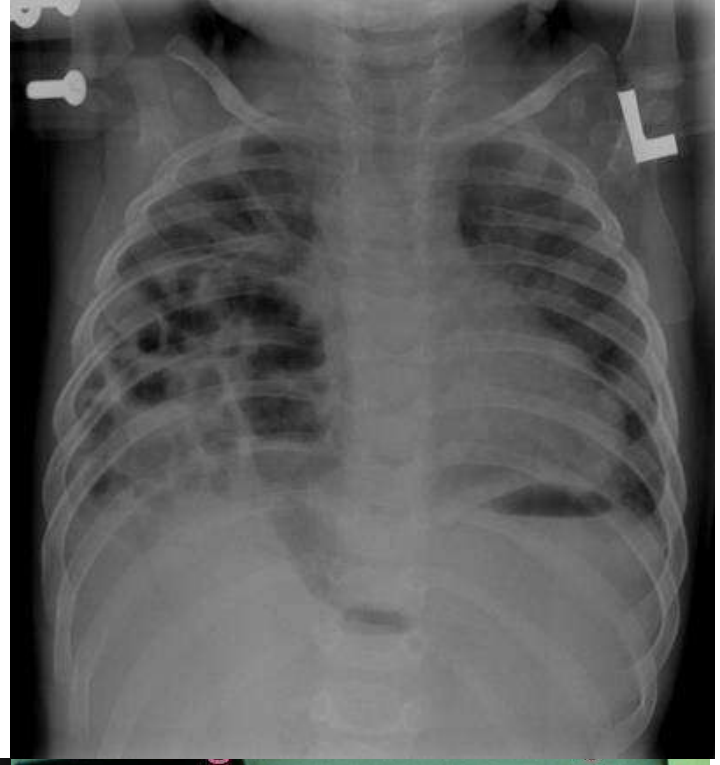
- Congenital Diaphragmatic hernia

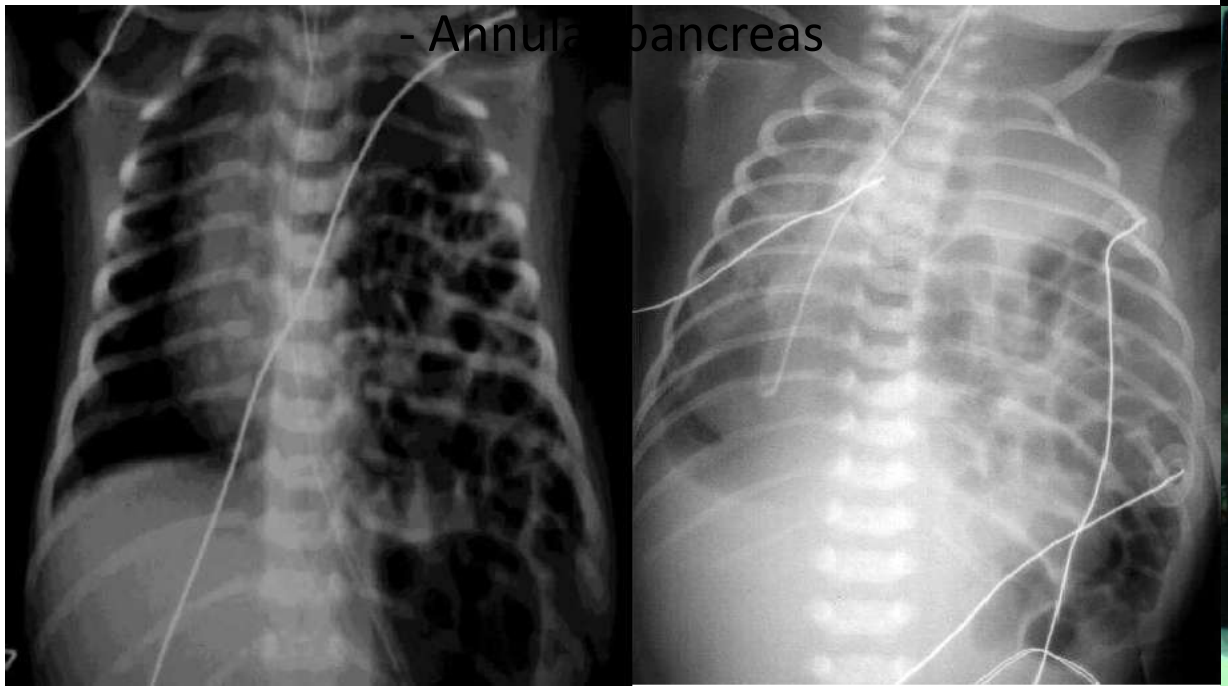
Q3: Name 2 ways to manage?

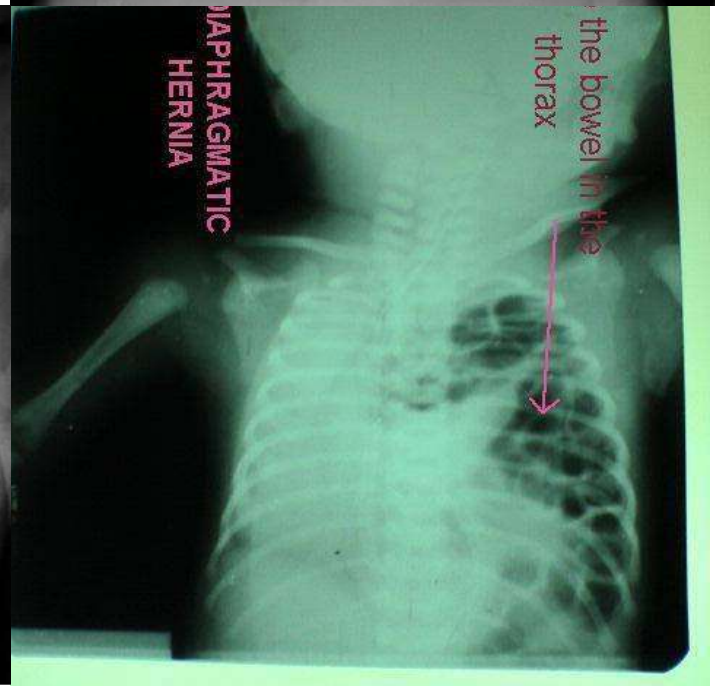
1) Intubation 2) Decompression

Q4: Give another GI cause of this sign?

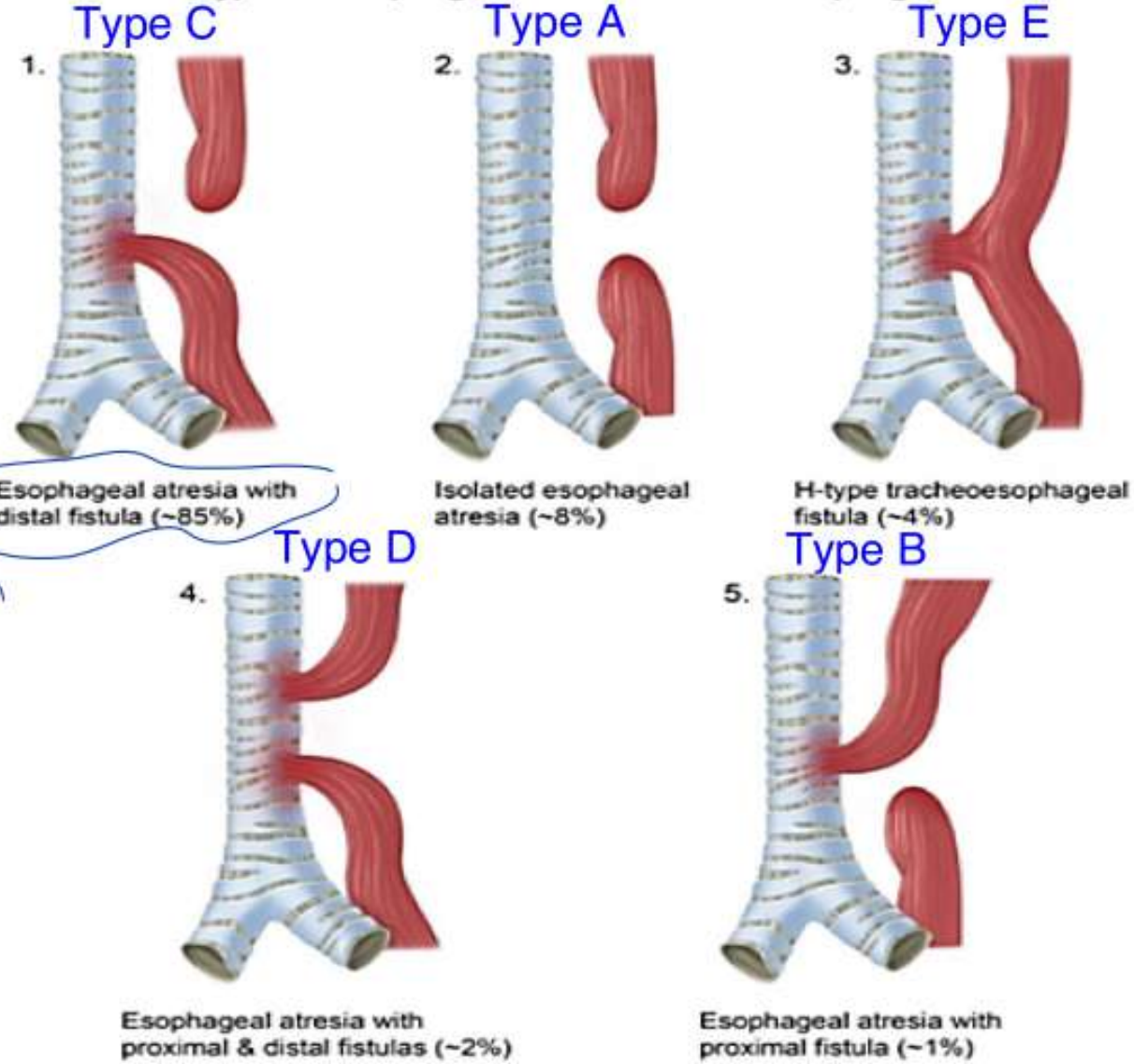
- Annular pancreas







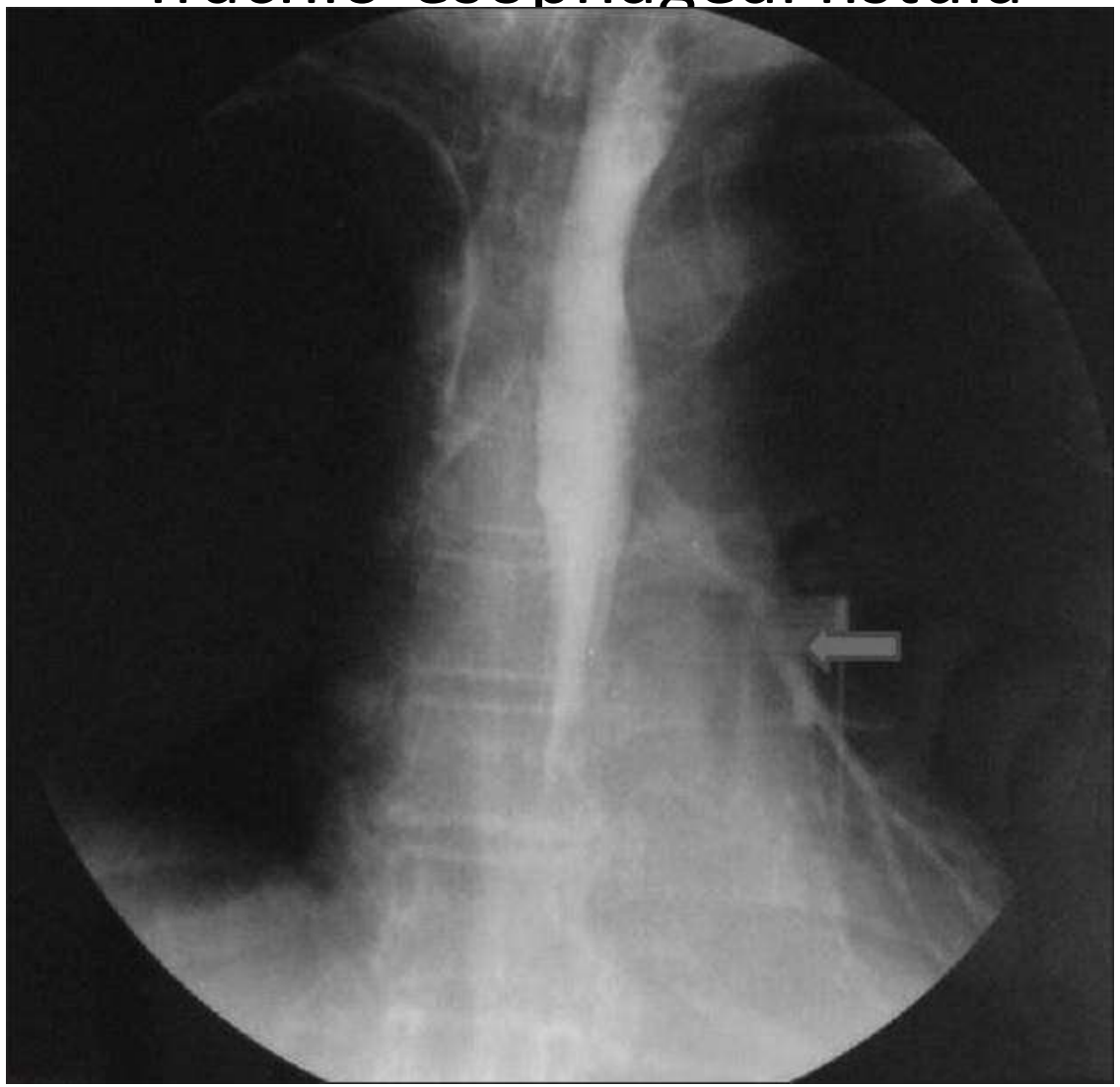
Various types of esophageal atresia & tracheoesophageal fistula



reflux gastric contents → aspiration

Q: This is a x-ray of barium swallow, What is the Dx?

- Trachio-esophageal fistula



Q: A patient with progressive dysphagia:

Q1: What is the sign?

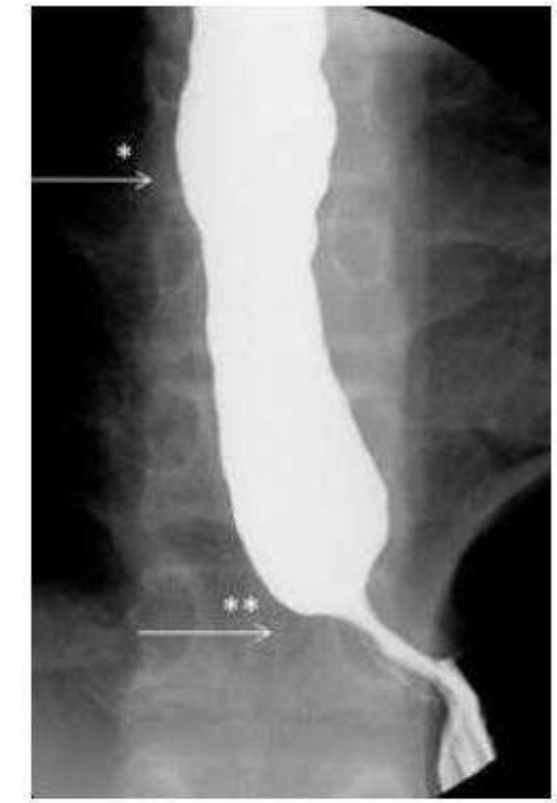
- Bird beak sign / Rat tail sign

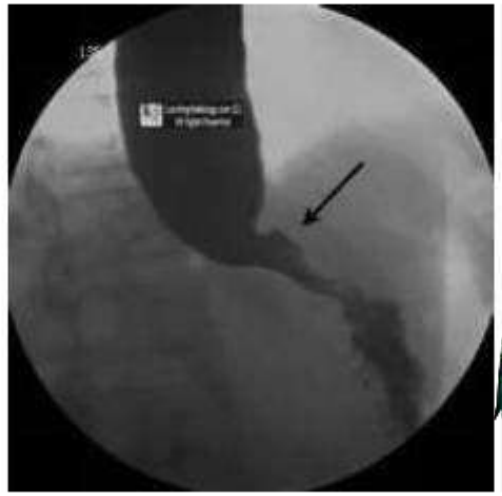
Q2: What is your Dx?

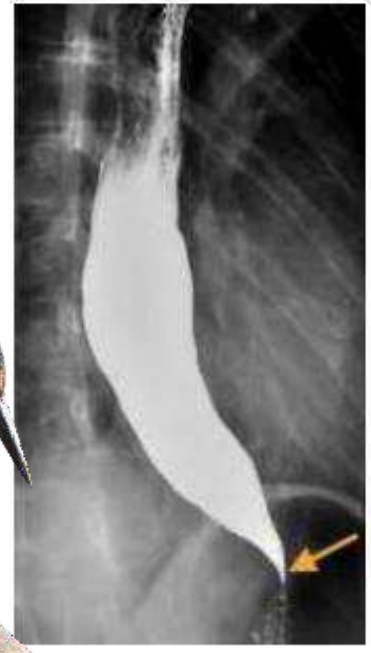
- Achalasia

Q3: Definitive diagnosis modality?

- Manometry

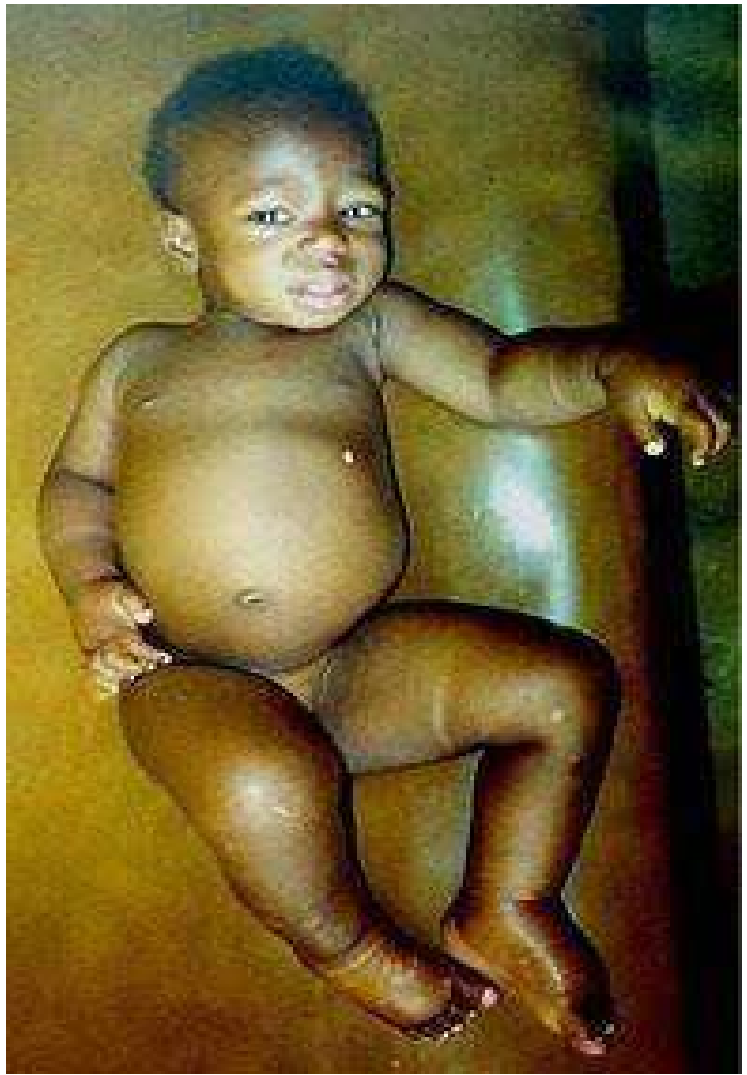






Q: What's your Dx?
- Kwashiorkor

Kwashiorkor is a form of severe protein malnutrition (lack of protein) characterized by edema, and an enlarged liver with fatty infiltrates



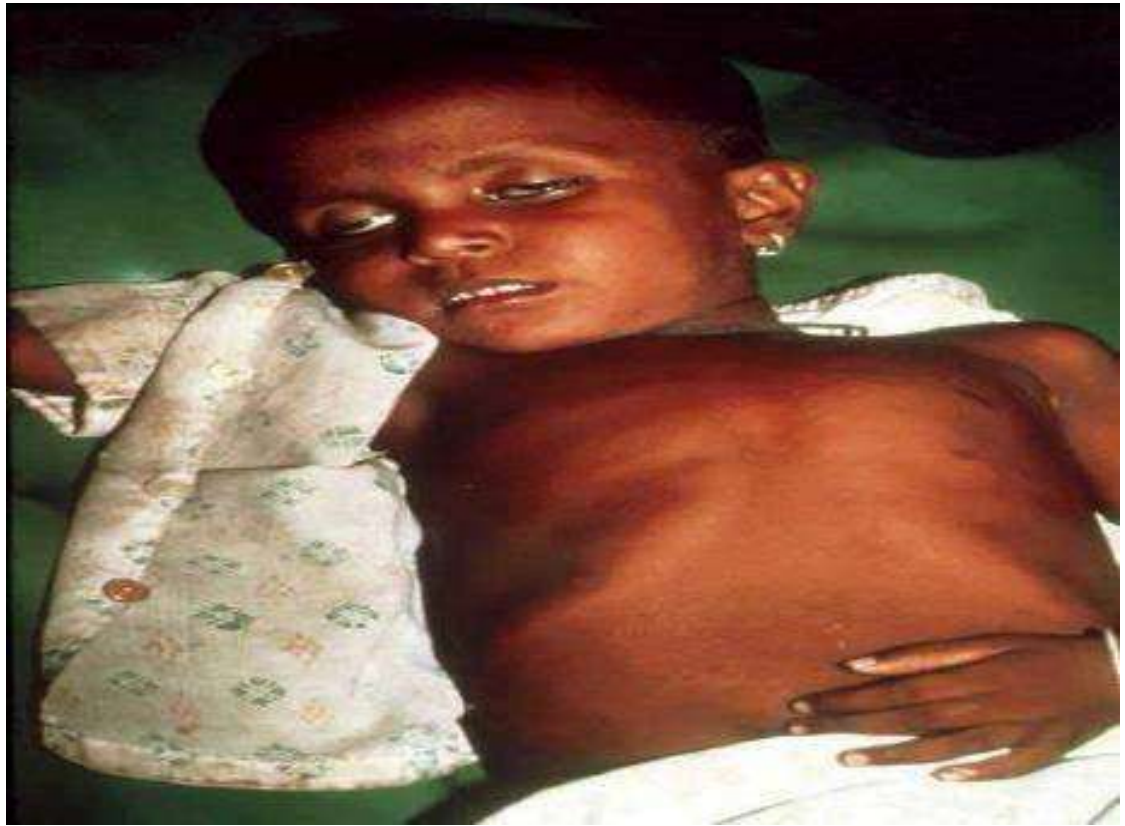
Q: This is a child who has severe GE: **Q1:**

What is the most important sign seen?

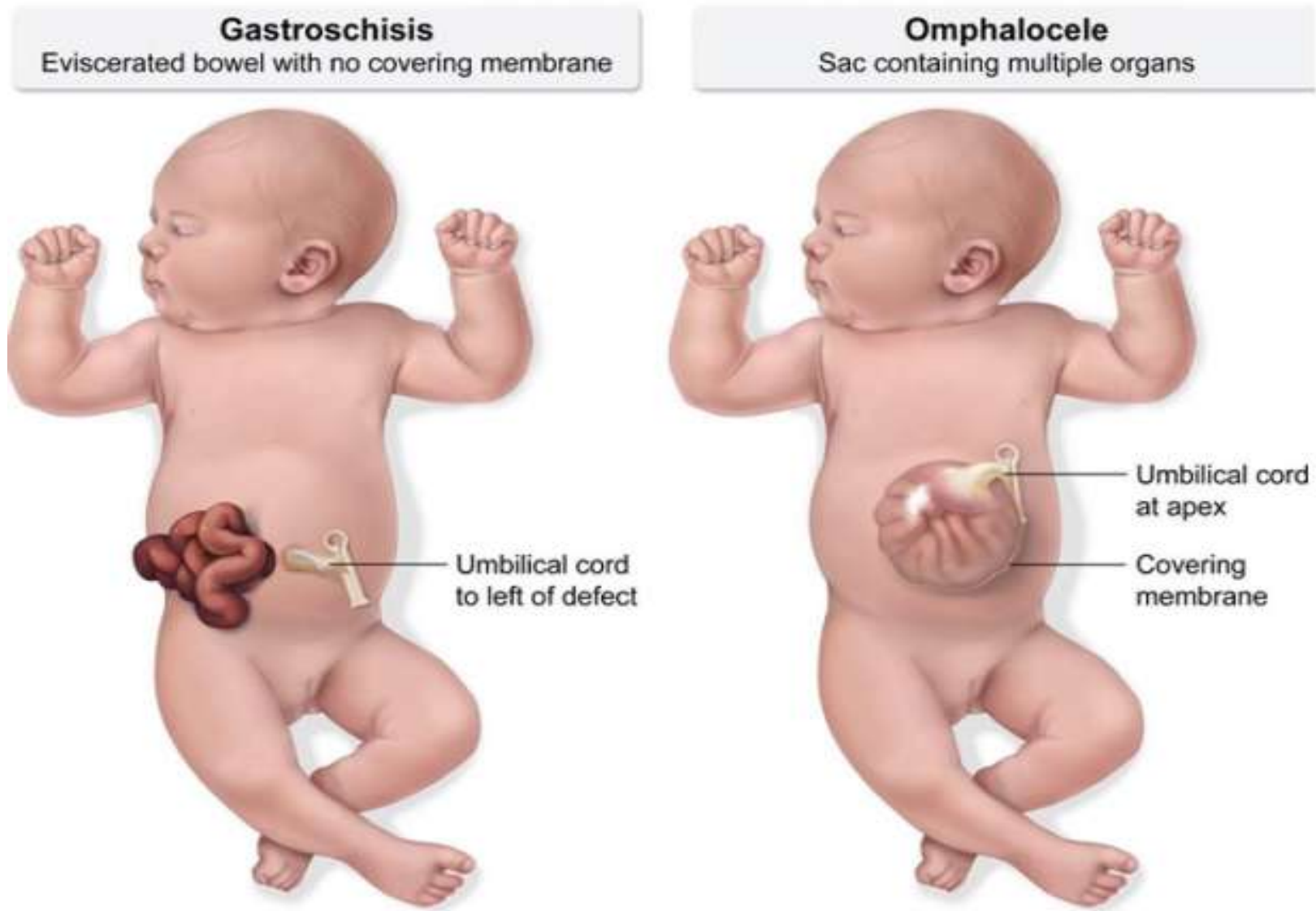
Sunken eyes

Q2: Name other signs of dehydration:

- dry mucus membrane, skin turgor, capillary



Gastroschisis vs. omphalocele



Q1: What is the Dx?

- Omphalocele

Q2: What other finding could be found in this patient?

- - Beckwith Cardiac defects wiedemann syndrome (features)
- Intestinal complications

Q1: What is the Dx? Gastroschisis

Q2: Importance of this condition?

- it' s associated with intestinal necrosis

Q3: What is the pre-op Mx?

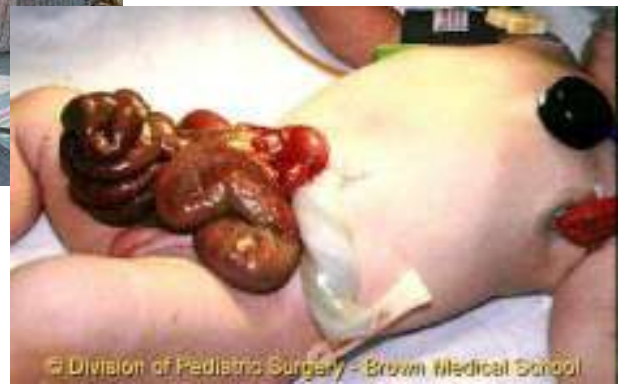
- Silo bag covering

Q4: The prognosis depend on?

- The bowel status

Q5: Indication of this procedure?

- Prevent dehydration, hypothermia, contamination



Q: Abdominal distension and diarrhea, on histology there is villous atrophy and hyperplastic crypts

1. What is the Dx? Celiac disease

Q2. What is the Mx? Gluten free diet + Vitamin replacement

Q3. Name 3 histological findings?

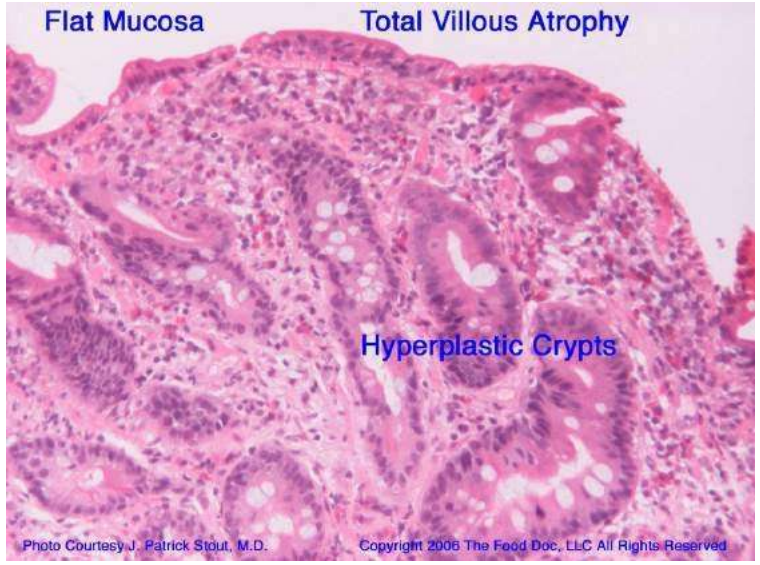
- lymphocyte infiltrate - Flattening of the villi
- Villus to crypts ratio less than 3:1

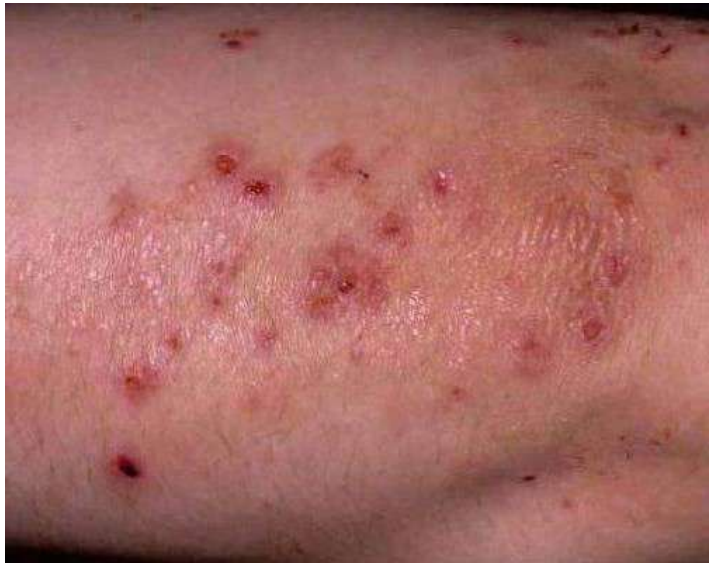
Q4: Definitive Dx is done by? Endoscopy with biopsy

Q5: Mention 2 confirmatory blood tests?

- Anti-tissue glutaminase Ab, Anti-endomysial Ab

Q6: Dermatological finding in this disease? Dermatitis Herpetiformis





Q: See the Growth chart of 3 year old boy:

Q1: what is the 3 abnormalities in this Growth chart?

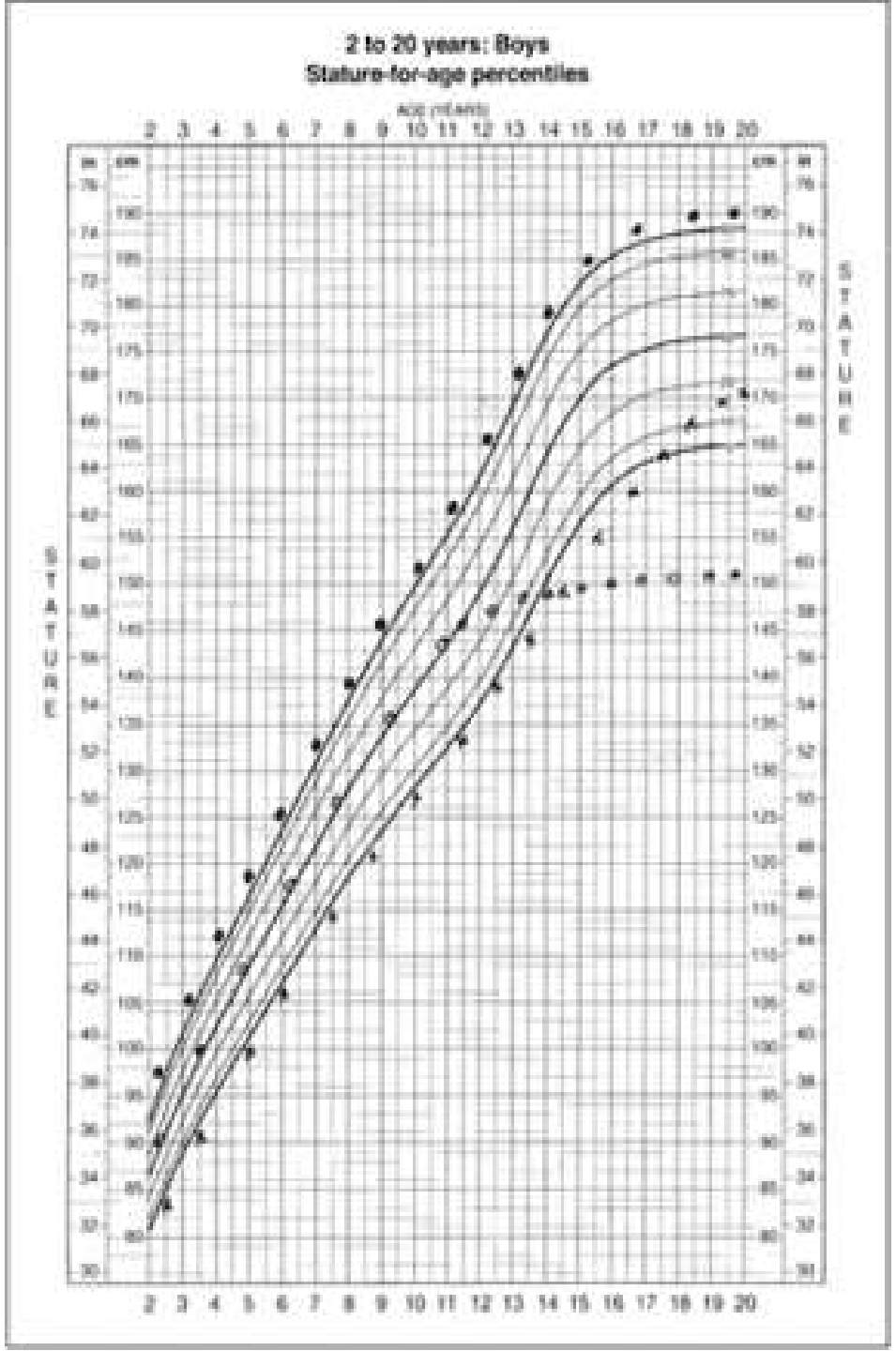
1)

2)

3)

Q2: What is the most appropriate diagnosis?

Celiac disease



Patient presented with chronic diarrhea , known case of celiac disease:

1) mention 2 tests to confirm diagnosis:

Anti ttg and total IGA level , upper endoscopy and biopsy

2) Mention the way for screening of the first degree relative for this patient:

ttg , IgA

3) Mention 3 syndromes can present with celiac disease:

Down syndrome, Williams syndrome, turner syndrome

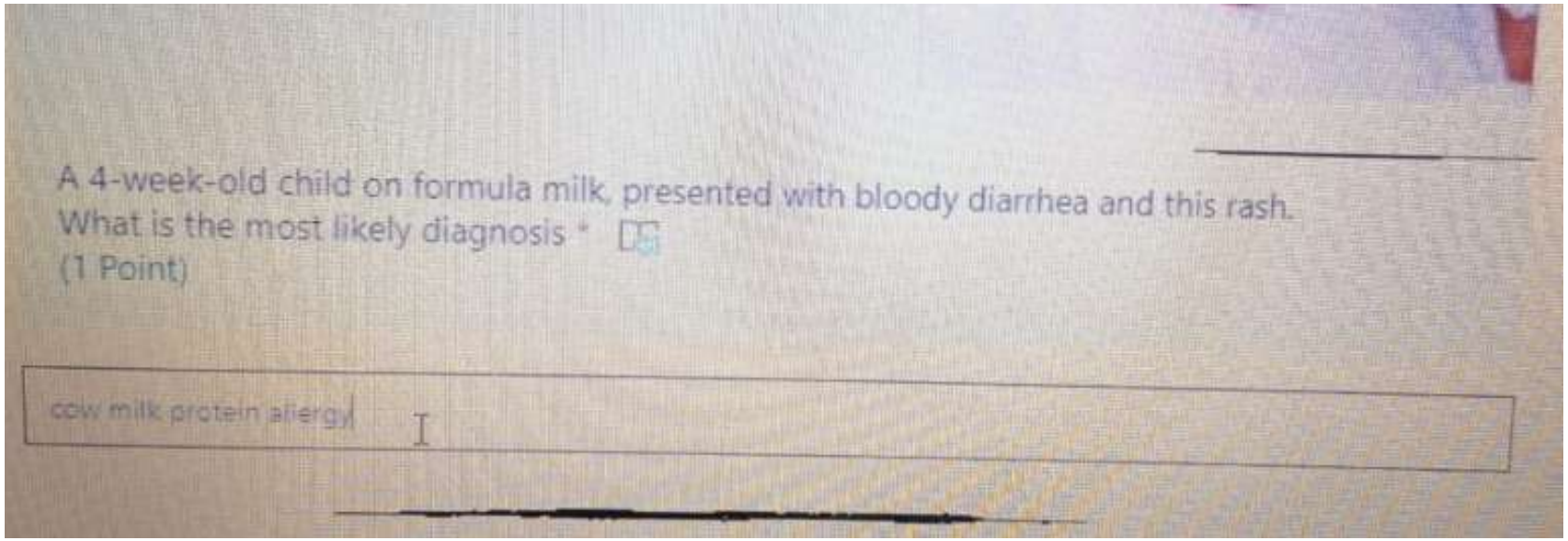
1) Malabsorption of fat soluble vitamins manifests as:

-Vitamin A manifests as night blindness , keratomalacia , immunosupression, xerosis cutis

-Vitamin K manifests as coagulopathy

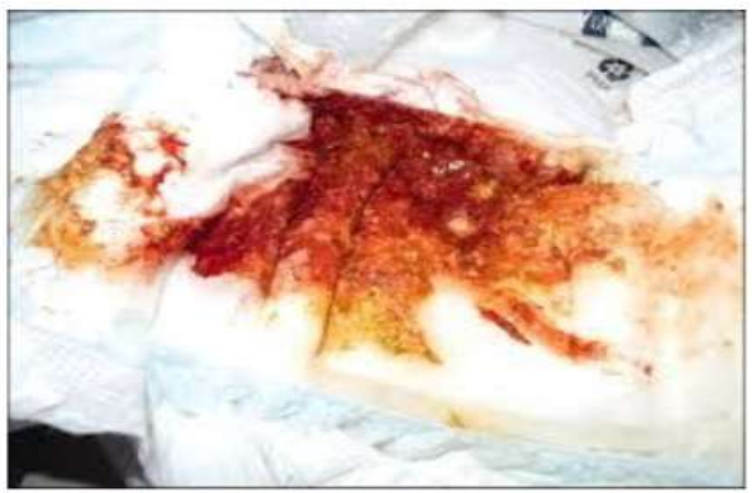
-Vitamin D: rickets, osteomalasia , hypocalcemic tetany

-Vitamin E: neurological manifestations(demylination of posterior colmun) , hemolytic anemia , ms weakness .



5-this pt has Bloody diarrhea, seizures. What's the most likely diagnosis?

Shigella

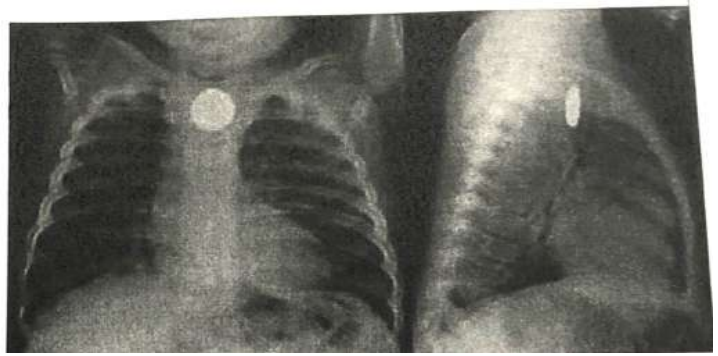


Question 2

One-year-old child ingested the object shown.

What is the first line of management?

Upper GI Endoscopy



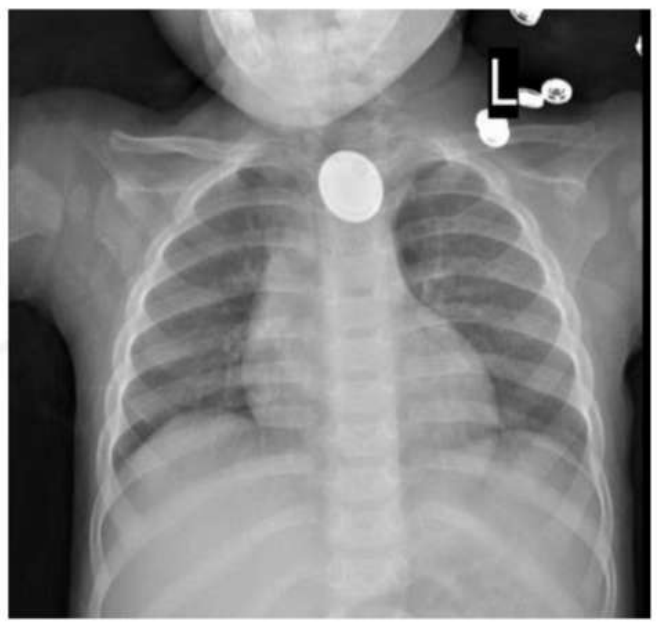
6)

a) What is the type of this injury?

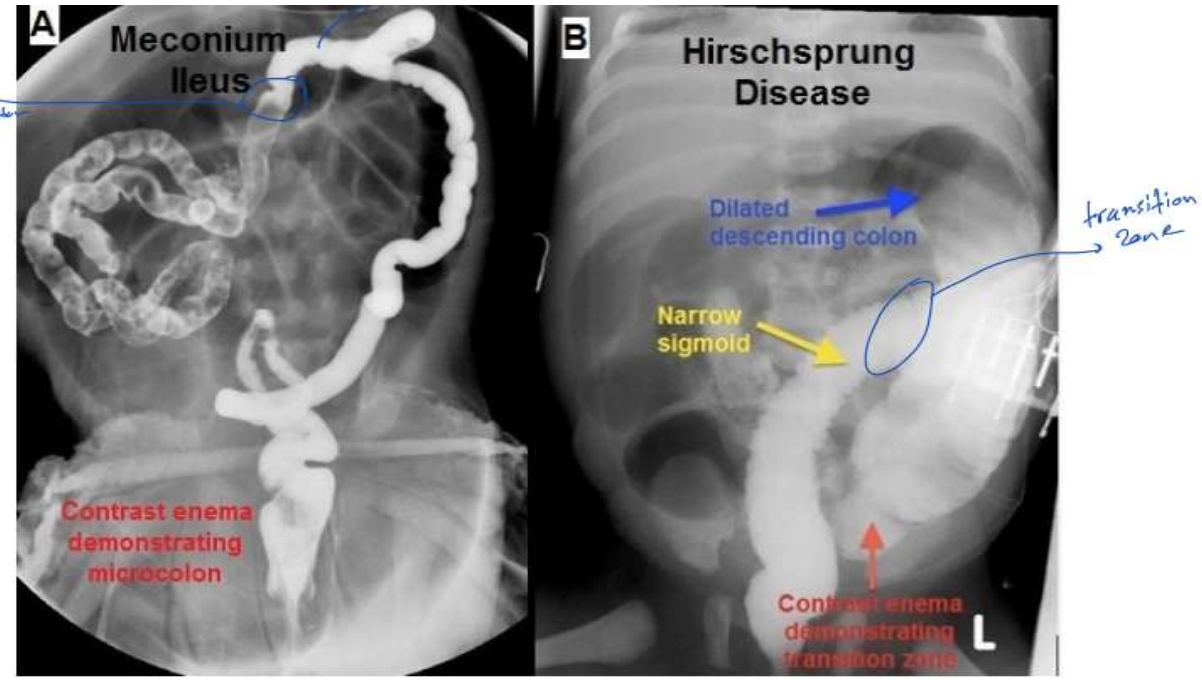
Battery in the esophagus

b) What is your management?

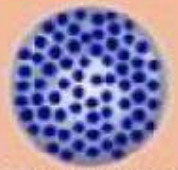
removing it by endoscopy



Differentiating features of Hirschsprung disease and meconium ileus		
	Hirschsprung disease	**Meconium ileus**
Associated disorder	Down syndrome	Cystic fibrosis
Typical level of obstruction	Rectosigmoid	Ileum
Meconium consistency	Normal	viscous Inspissated
"Squirt sign" rectal examination	Positive	Negative




Hematology
& Blood Disorders

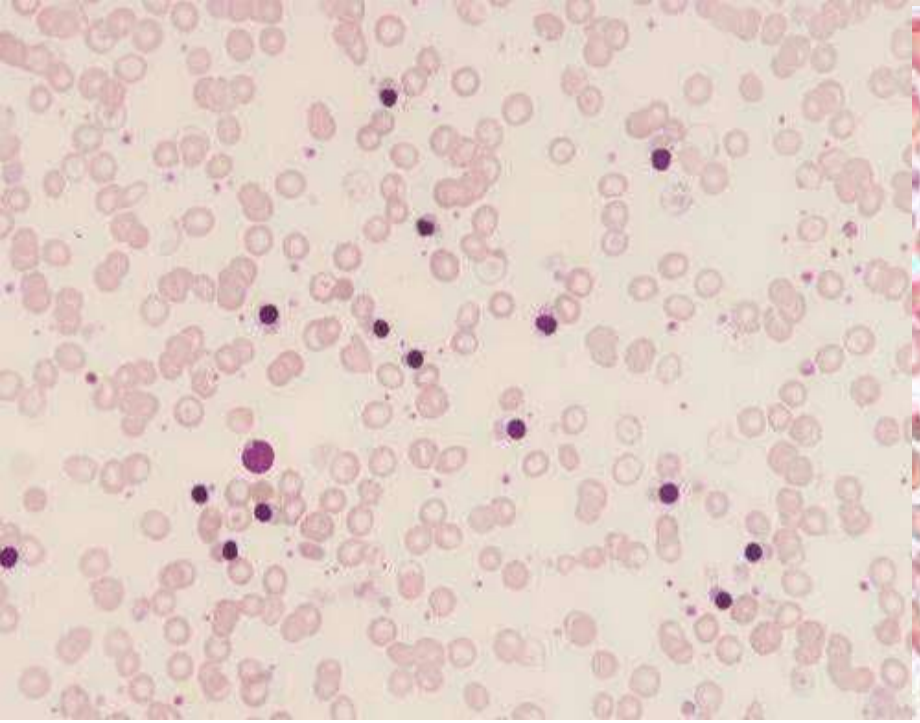
Common RBC Inclusions	Cartoon Image	Inclusion	May be associated with
Howell Jolly Bodies		DNA	Hyposplenism Asplenism Severe hemolytic anemia
Heinz Bodies	 *Supravital stain*	Hemoglobin	G6PD deficiency Oxidant drugs Unstable hemoglobin
Pappenheimer Bodies		Iron deposits	Thalassemia Sideroblastic anemia Hemolytic anemia Post-splenectomy
Hemoglobin H Inclusion	 *Supravital stain*	Hemoglobin	Hemoglobin H disease
Basophilic Stippling		Ribosomes	Lead poisoning Thalassemia Sickle cell anemia MDS

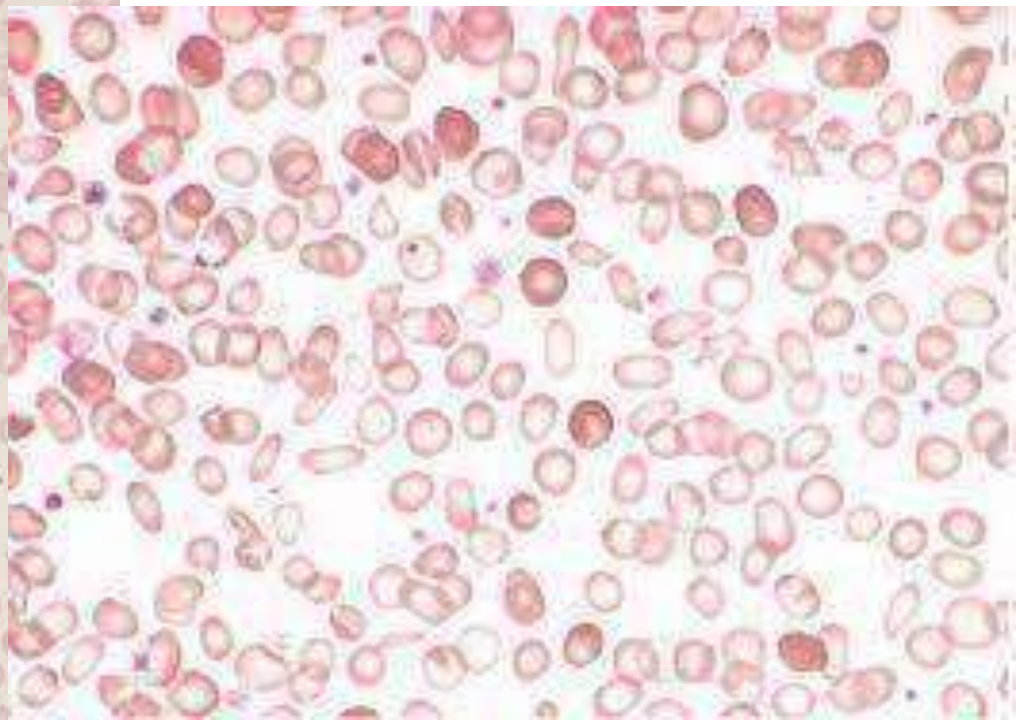
Q5.a 9 weeks old baby , previously preterm ,presented with paleness and otherwise normal , his hb =5, normal cbc and mcv is norma

1. What is your dx
    1. Physiological Anemia
2. What is your mx

nothing , it is self limited

Anemia of prematurity	
Etiology	• Impaired erythropoietin production • Short red blood cell life span • Iatrogenic blood sampling
Clinical manifestations	• Usually **asymptomatic** • Tachycardia, apnea, poor weight gain
Laboratory findings	• **Low** hemoglobin & hematocrit • **Low** reticulocyte count • Normocytic, normochromic red blood cells
Treatment	• Minimize blood draws • Iron supplementation • Transfusions





Q: Hx suggestive low MCV, low MCH, low retics, low platelets

1. What is the type of this anemia:

- Microcytic hypochromic anemia (iron deficiency anemia)

2. What 2 investigations you want to order:

- Hemoglobin electrophoresis, Ferritin level

Q: Breast fed one year infant with this CBC:

1. What is your Dx?

Iron Deficiency Anemia

2. Mention 2 further tests to confirm your diagnosis:

a. TIBG

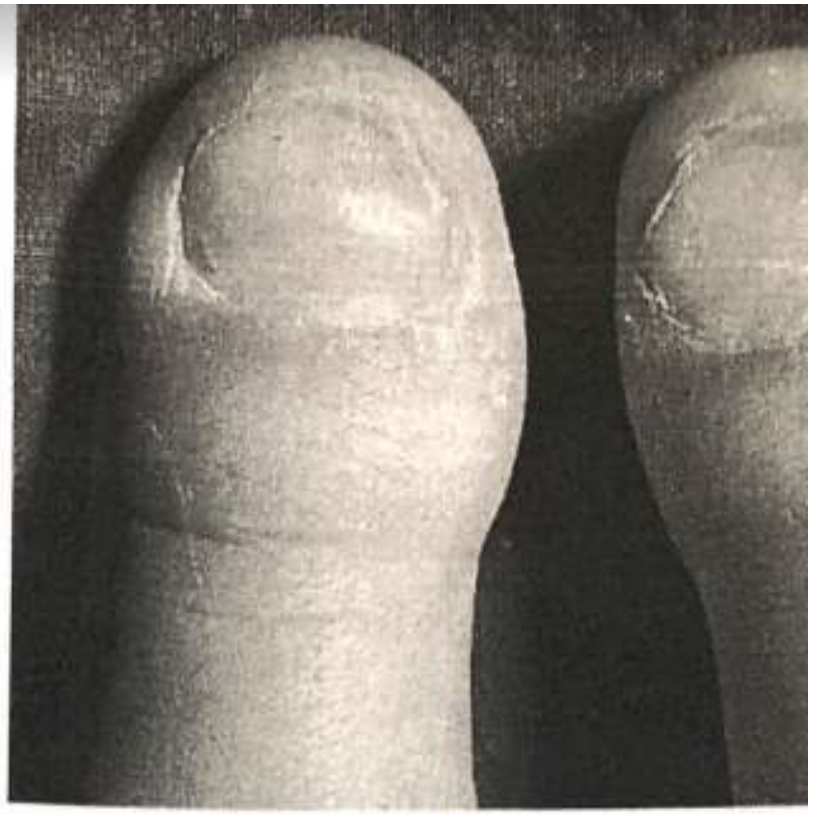
b. Serum ferritin level

c. Transferrin saturation ratio

WBC	5.5		
	%		#
NE	54.7		3.0
LY	34.1		1.9
MO	7.5		0.4
EO	3.0		0.2
BA	0.7		0.0
RBC	4.28	L	
HGB	9.7	L	
HCT	29.9	L	
MCV	69.7	L	
MCH	22.6	L	
MCHC	32.4	L	
RDW	18.4	H	
PLT	331		
MPV	8.8		

Question 10

Looking at the nails of this patient.



What is your diagnosis ?

Koliny chia ?

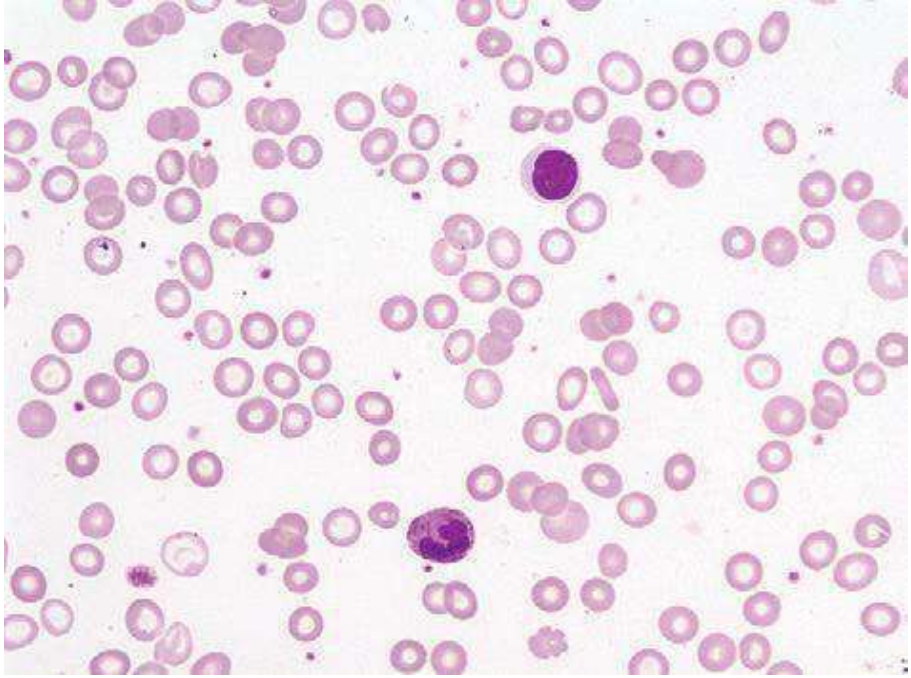
iron deficiency anemia

Serum iron-binding capacity	A:_____
Serum iron	Low
Red blood cell distribution width	high

Depending on serum findings in a patient with iron deficiency anemia, fill A with (low, normal, high) *
(1 Point)

high

Q: Blood film of an exclusively breast fed baby (upper picture is the patient, the lower one is normal):

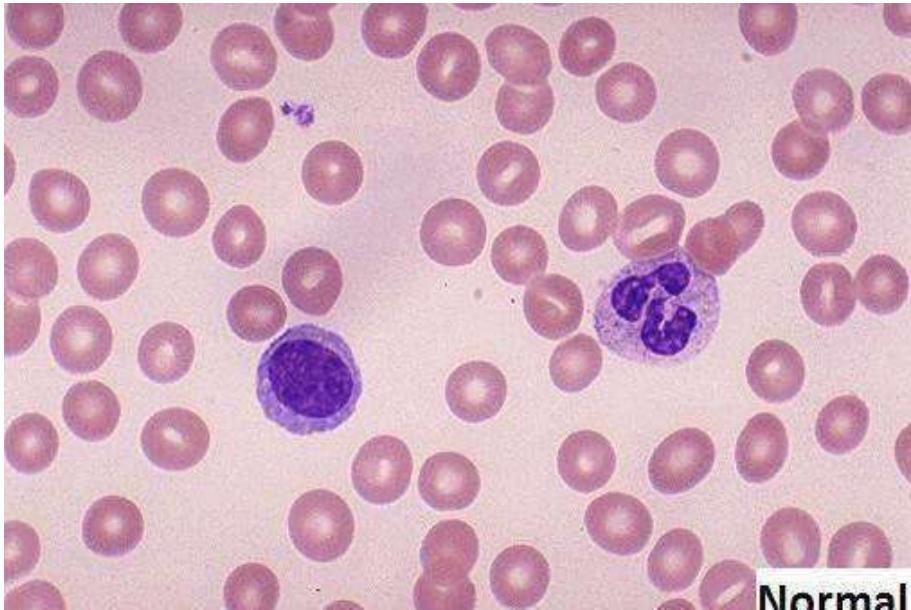


1. **What is your Dx?**

Iron Deficiency Anemia

2.What other nutritional deficiency cause this pic?

Vitamin D



Q36:

1. **What is your Dx?**

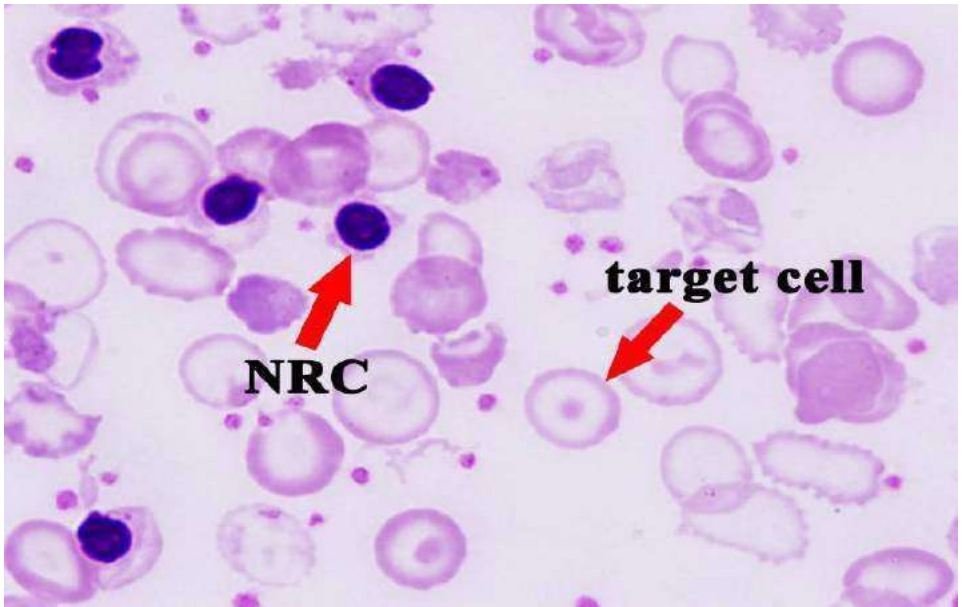
B-Thalassemia

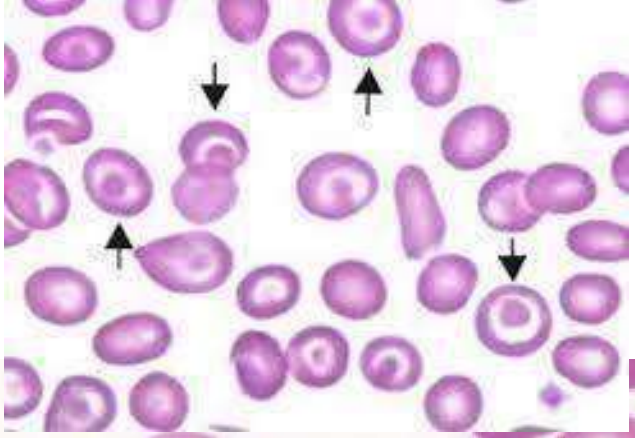
2. **Mode of inheritance:**

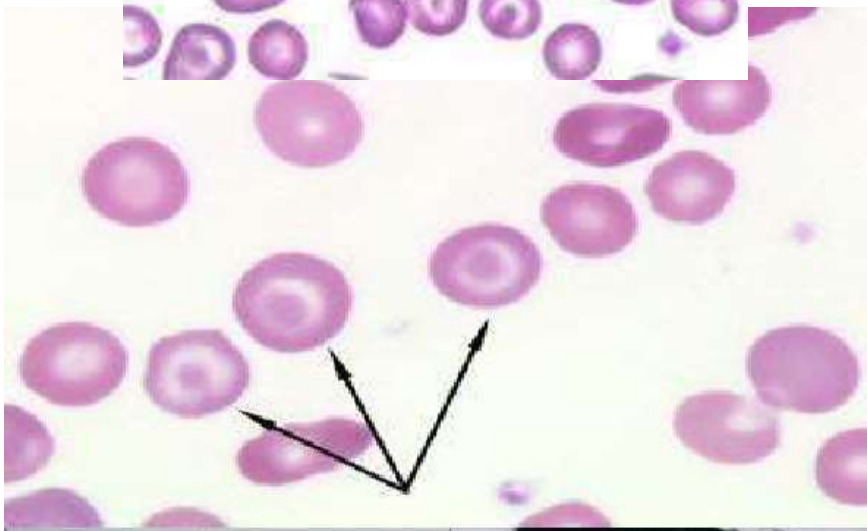
Autosomal Recessive

3. Give two Mx:

- Schedule blood transfusion + Defroxamine
- Splenectomy

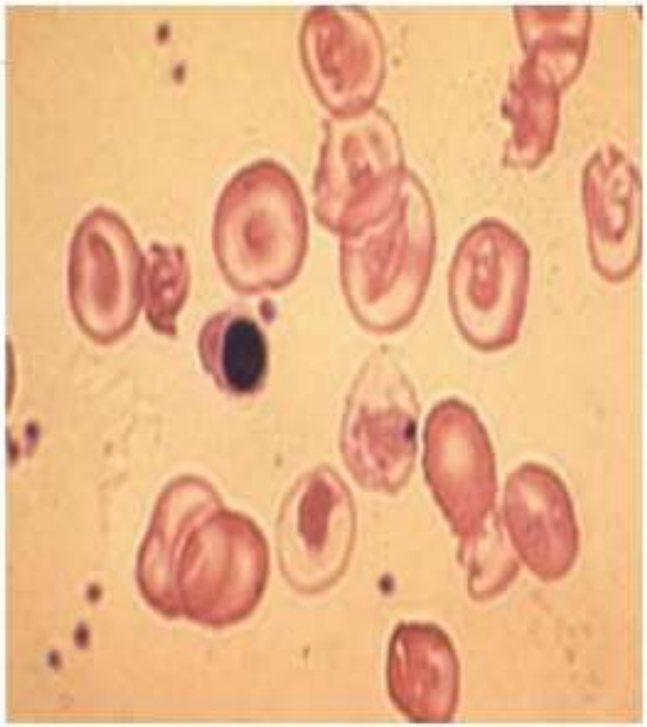






Q2. A4 yr old girl,known case of recurrent blood transfusion presented with hb=5 and mcv=55 and the following blood film

•



1. What is the dx
   - Beta thalassemia major
2. What is the test of choice to confirm the dx
   - Hemoglobin electrophoresis
3. Mention 3 findings in the blood film you see
   1. Nucleated RBC
   2. Target cells
   3. Microcytic hypochromic rbc
5. Give three findings you will see on physocal examination
   1. Frontal bossing and maxillary protrusion
   2. Shor stature and failure to thrive
   3. Pallor
6. Mention 3 complications
   1. Bone marrow abnormality
   2. Hypersplenism
   3. Iron deposition in multiple organs causing dm, cardiomyopathy ,etc

- Pic of electrophoresis … HBA 85, HBF 5.4 , HBA2 8.6

1-diagnosis?

2- the mode of inheritance

Q: this anemic child comes to you with splenomegaly:

1.What is the type of his anemia?

Thalassemia anemia

2.what is the diagnostic test in this case?

Hb-electrophoresis

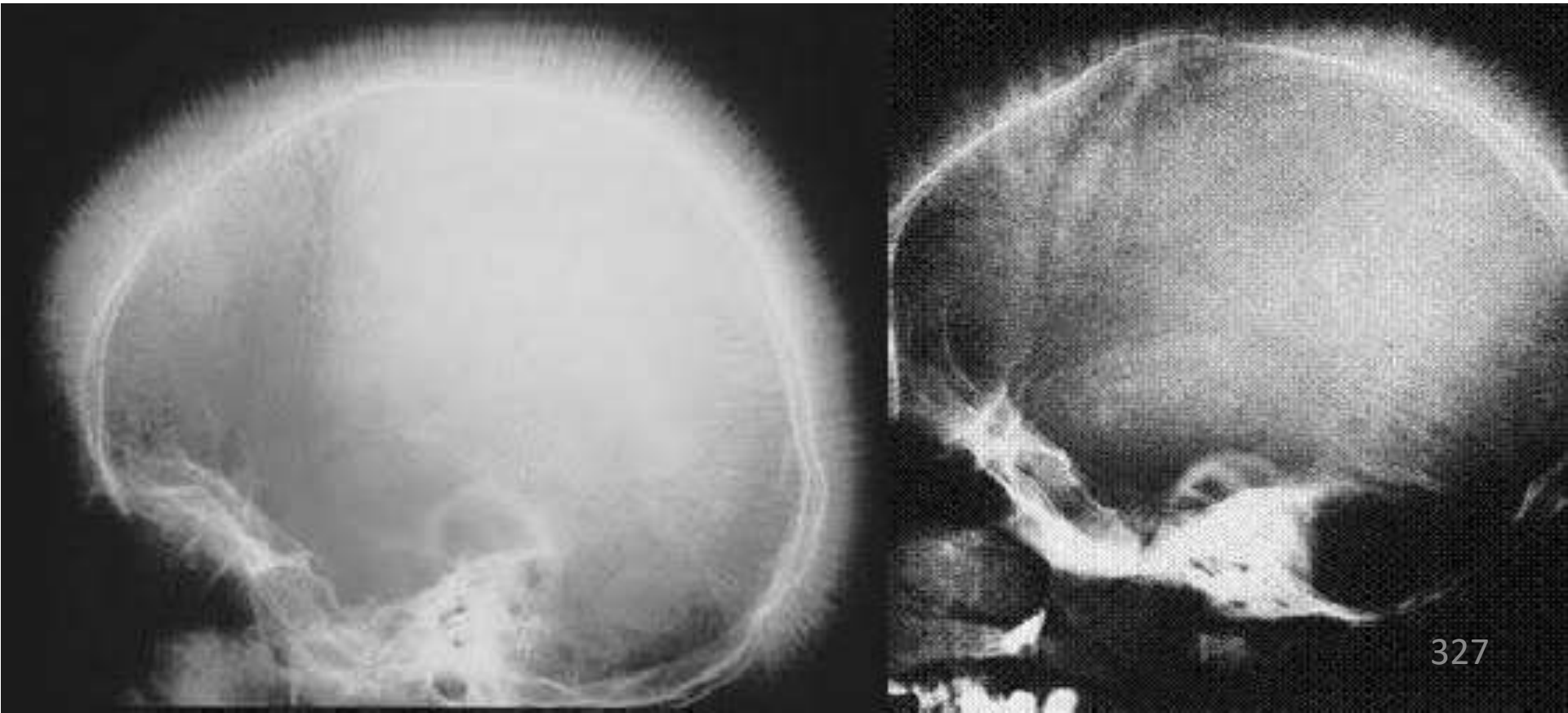
Q: This is skull x-ray of 10 y old male pt.

1. What is this x-ray sign? Hair on end – sun ray appearance

2. What other 2 findings in the face you look for ?

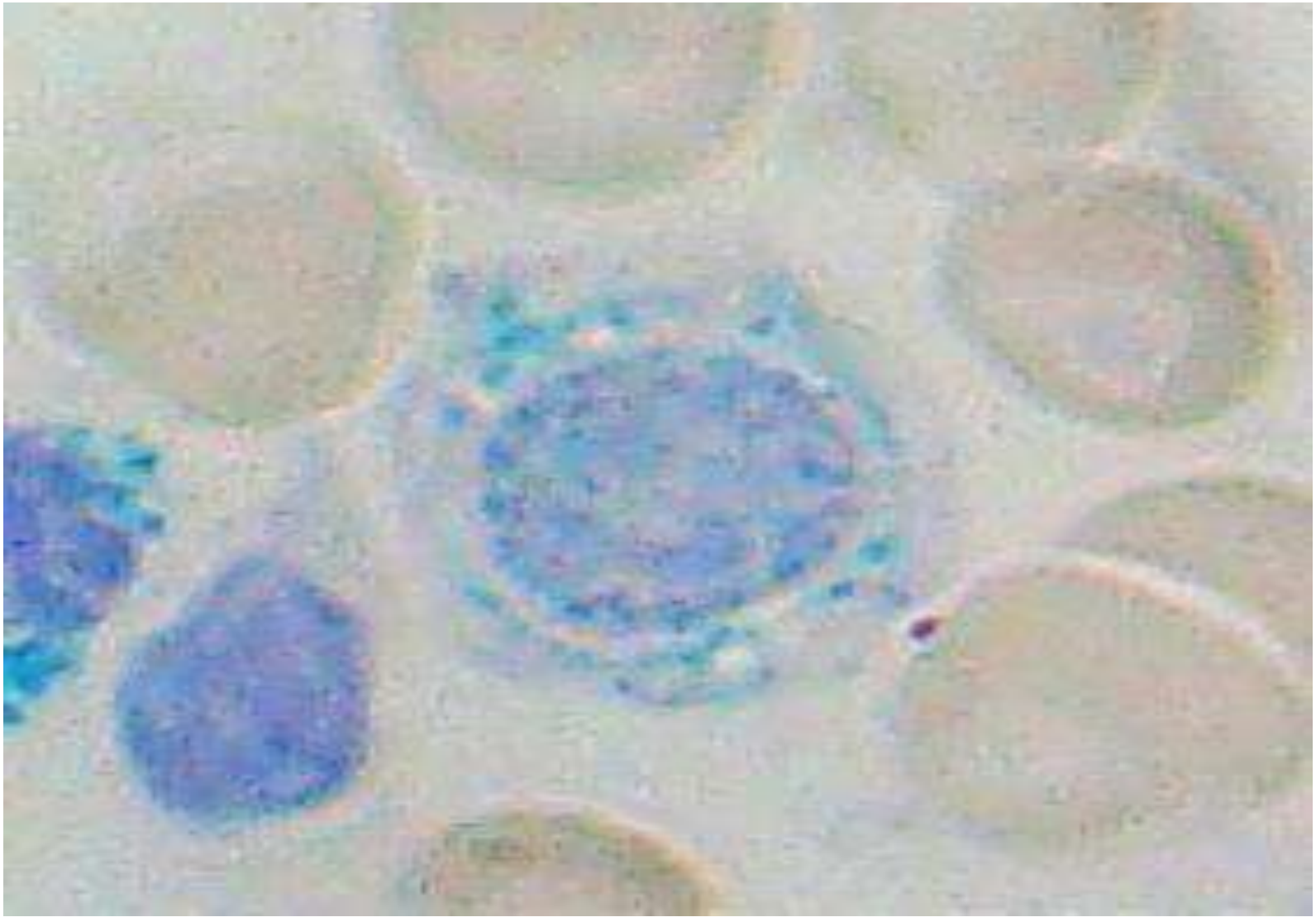
- Frontal posing, protruded maxilla

3. What is the Dx? Thalassemia



Q1: What is the finding? Ringed Sideroblast

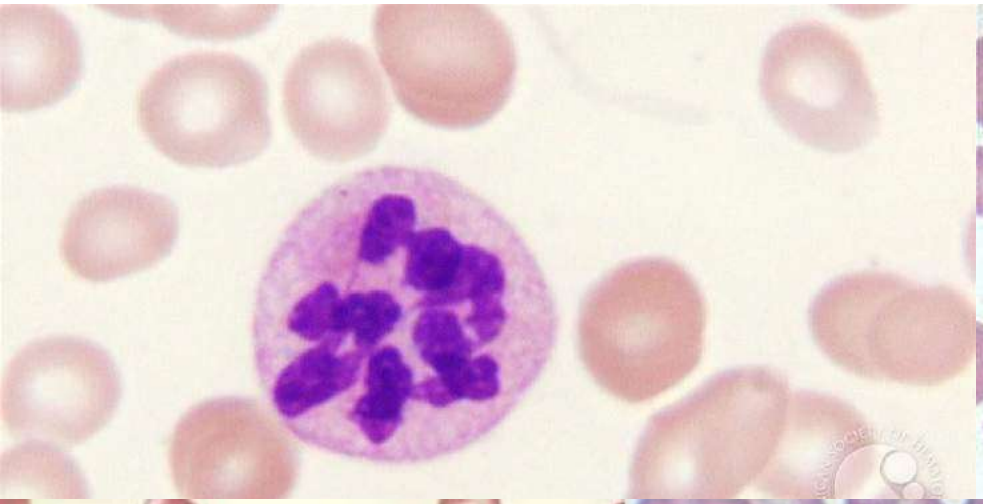
Q2: What is the Dx? Sideroblastic anemia

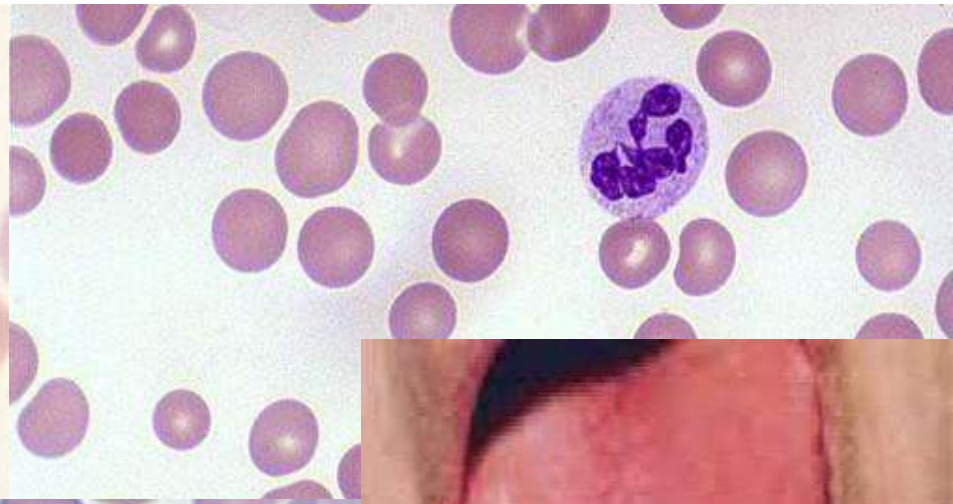


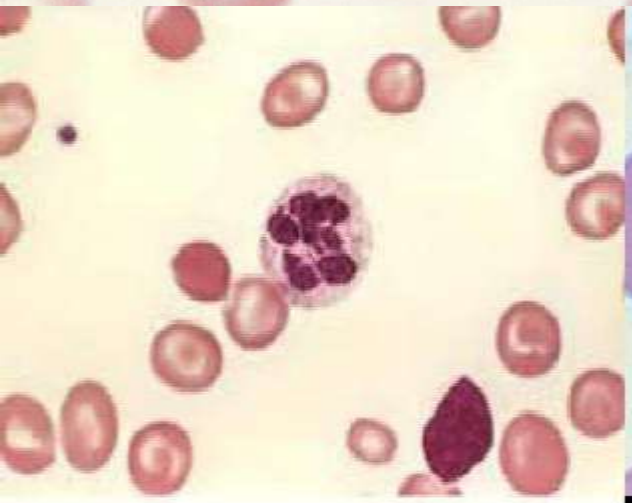
Q: Patient with Pallor, lower limb nubmness, vitiligo

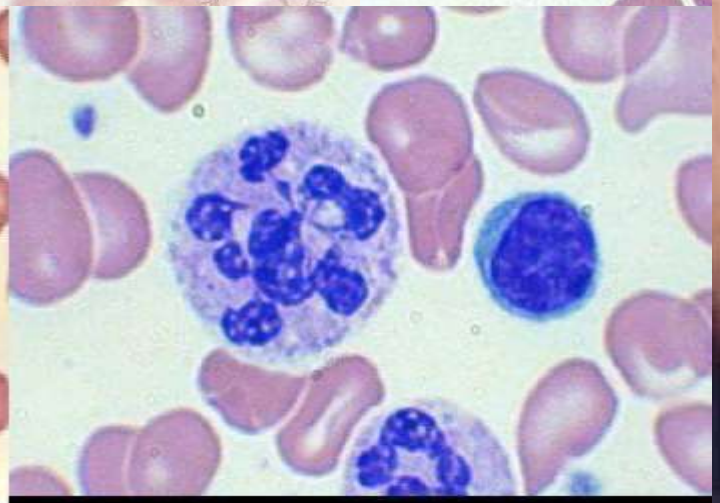
1. Describe what you see? Hyper-segmented neutrophil

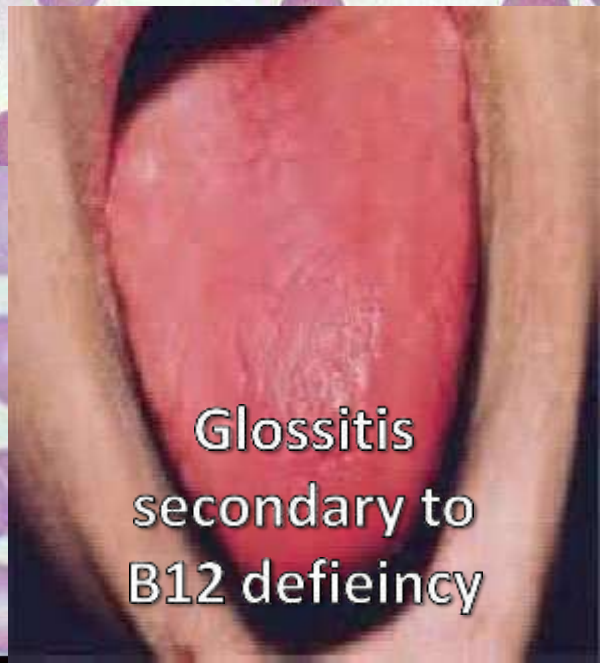
2. What is the Dx? Pernicious anemia (Vit. B12 deficiency)









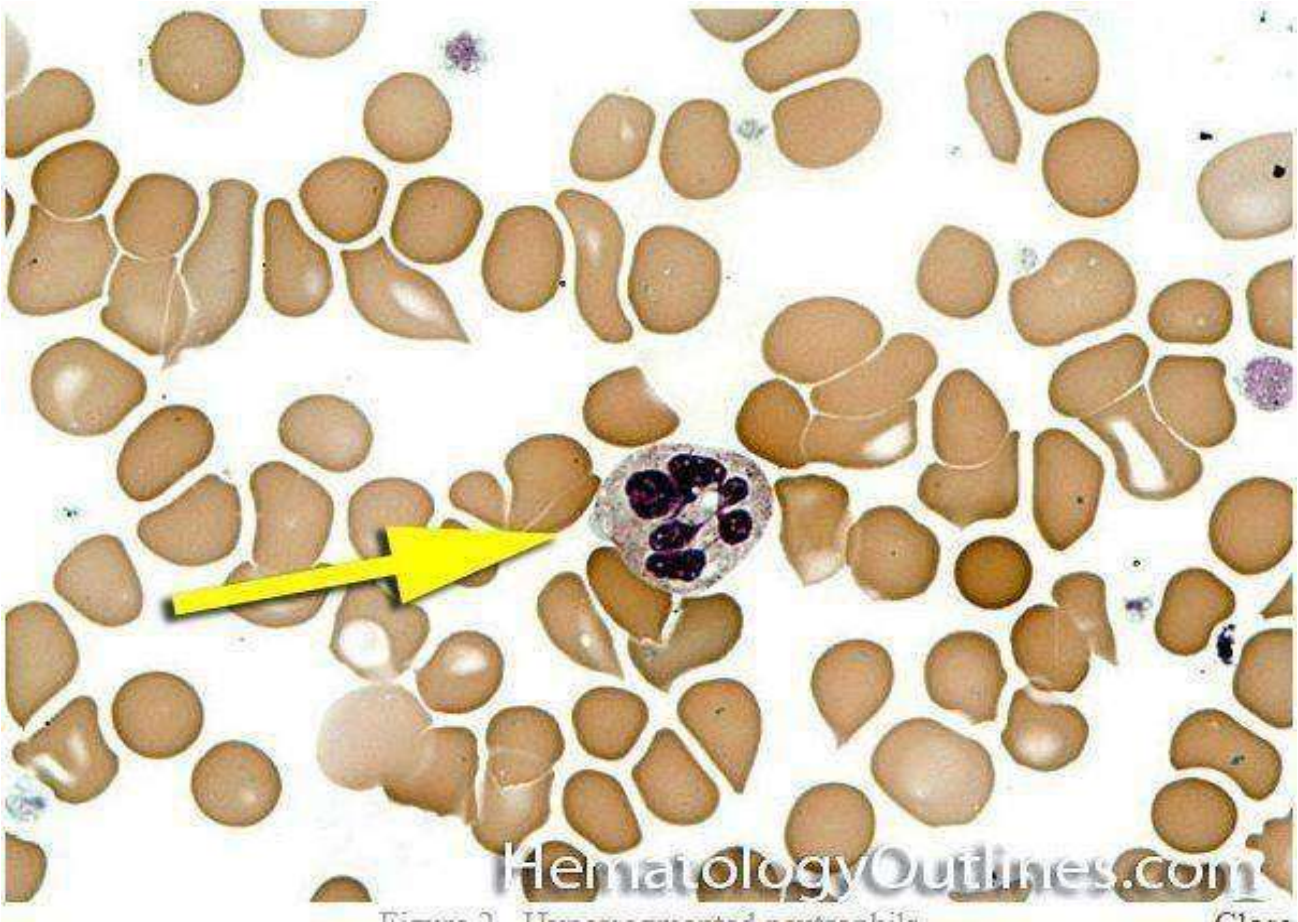


Hypersegmented Neutrophils

If without Hx: Megaloblastic Anemia

If with Neurological manifestations: B12 deficiency

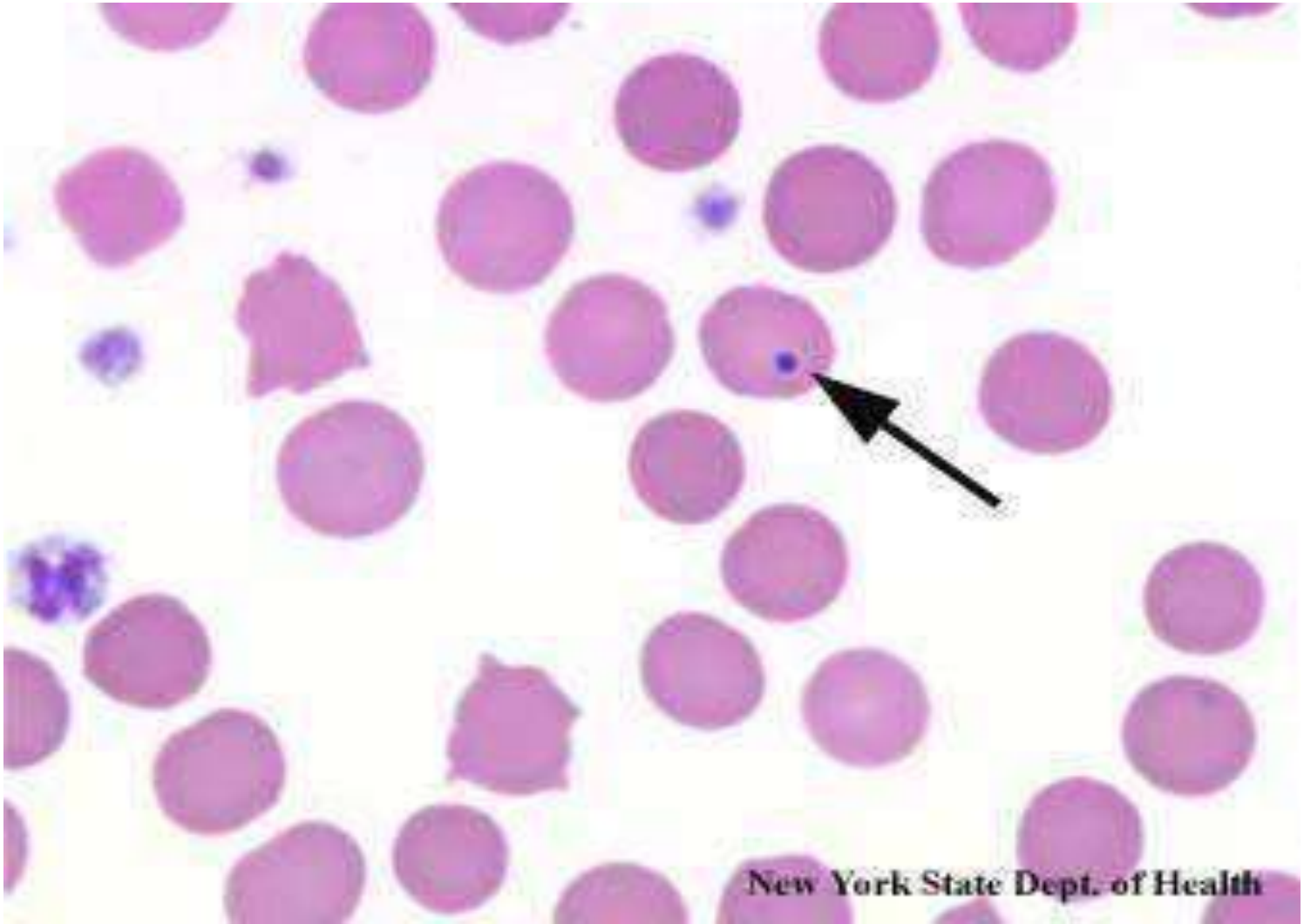
If with other autoimmune disease (Vitiligo..): Pernicious



Q: What does the arrow indicate to?

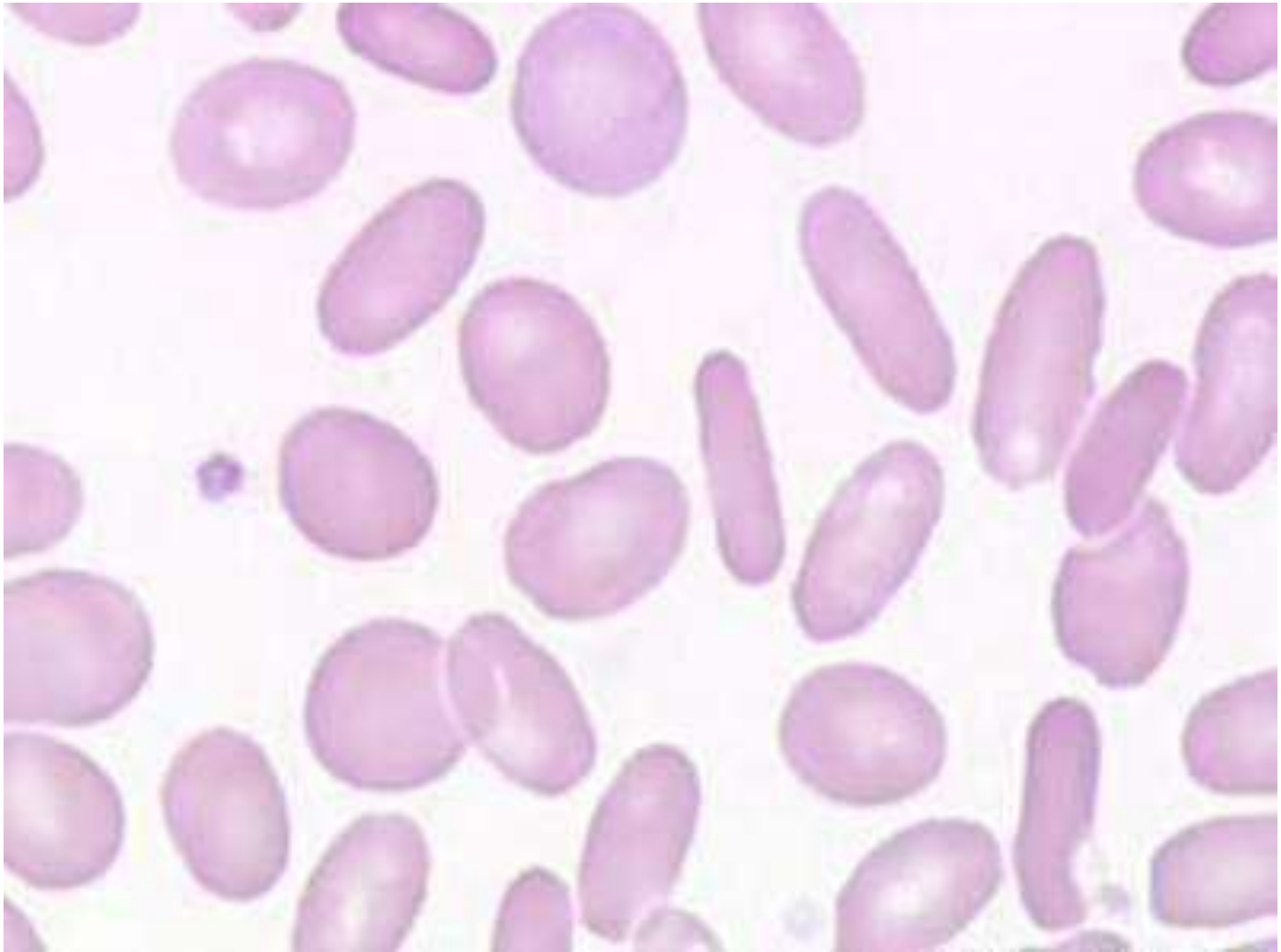
Howell jolly body

(seen in functional hyposplenia or asplenia)



Q1: What is the finding? Elliptocytes

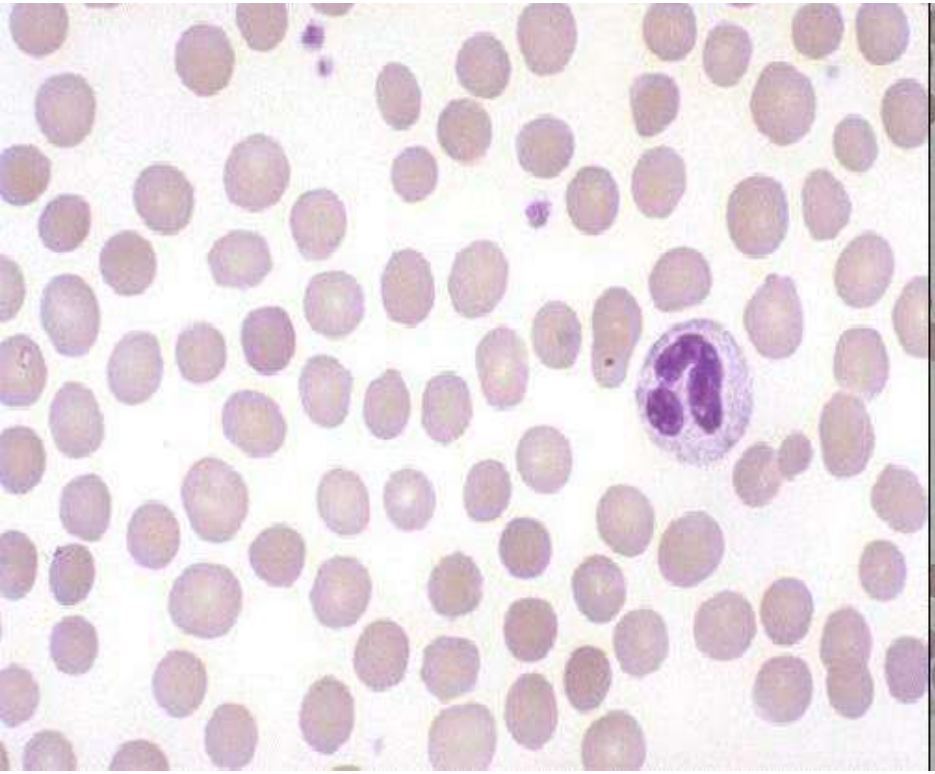
Q2: What is the Dx? Hereditary Elliptocytosis

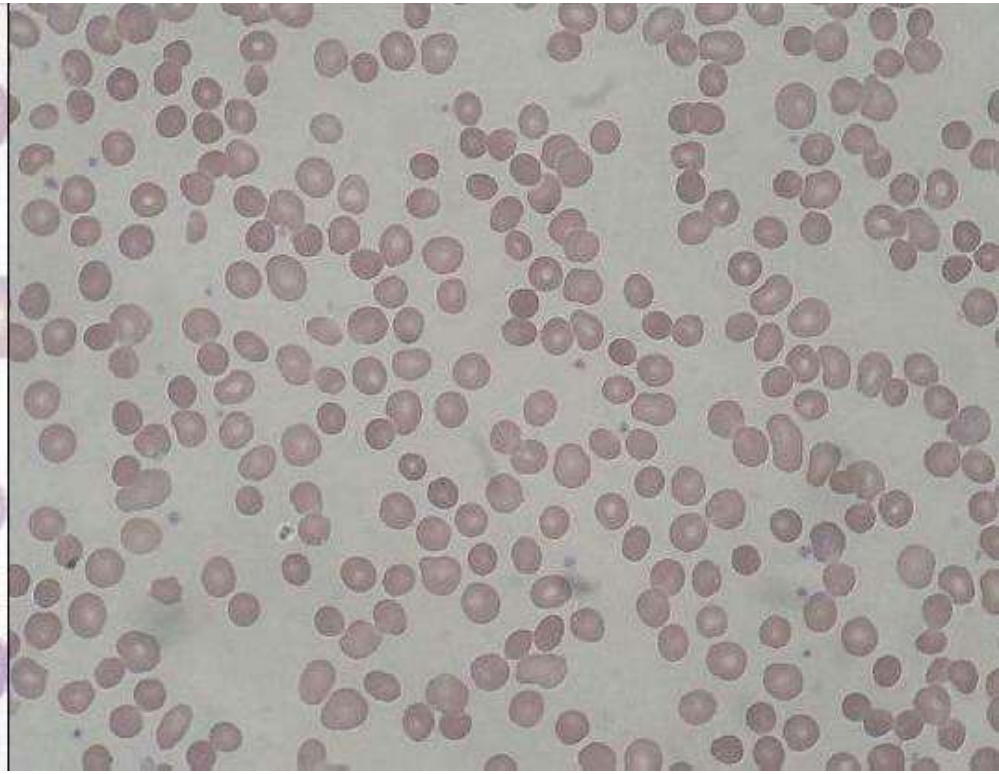


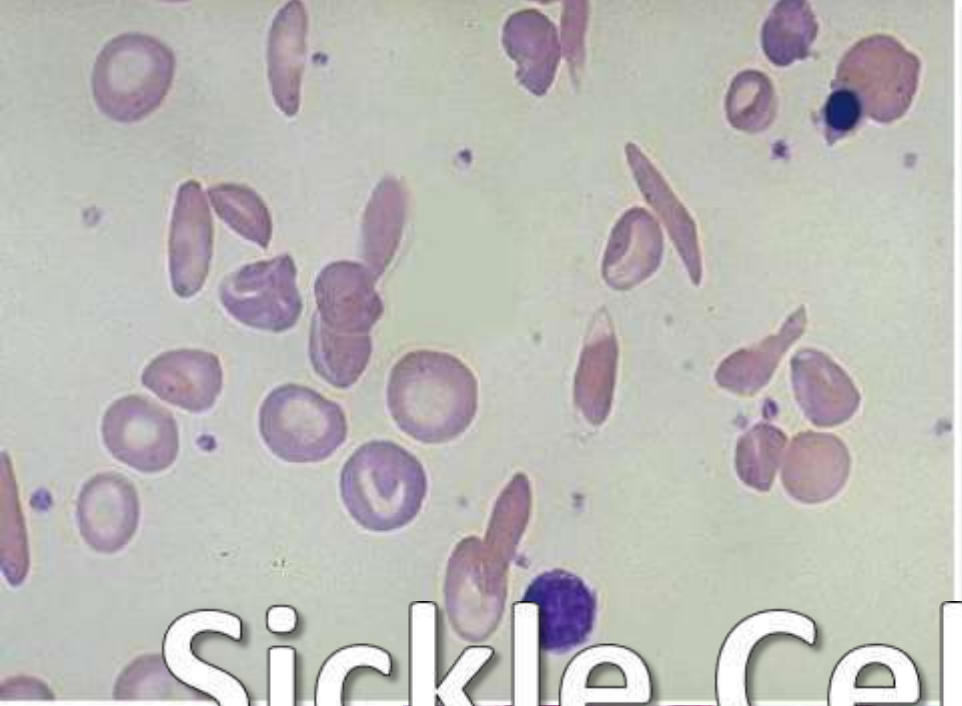
Q: Pt presented with anemia & splenomegaly with FHx of anemia:

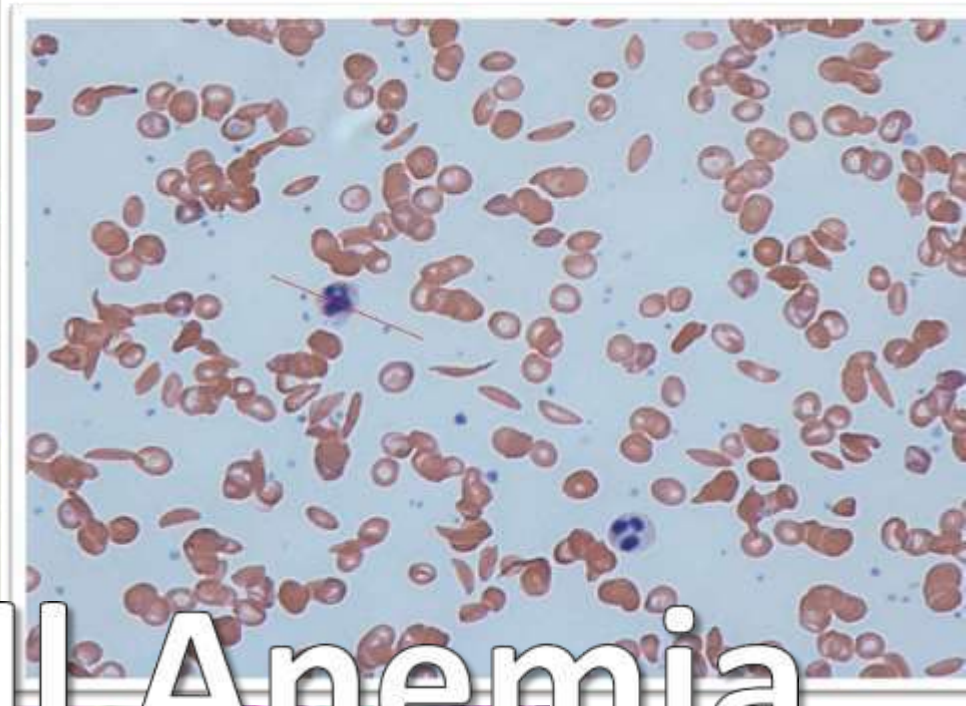
1. **What is your Dx?** Hereditary spherocytosis

2. **Give one diagnostic test?** Osmotic fragility test

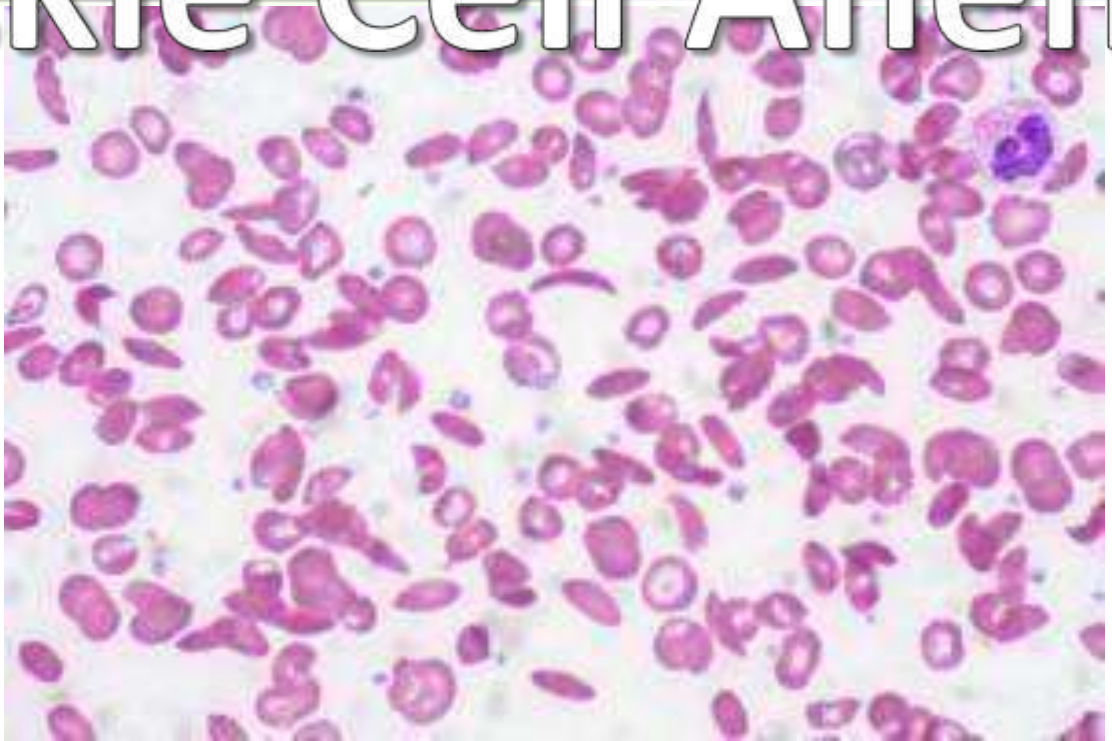








Sickle Cell Anemia



Q34:According to the blood film:

1. **What is your Dx?**

   Sickle cell anemia

2. **Next investigation?**

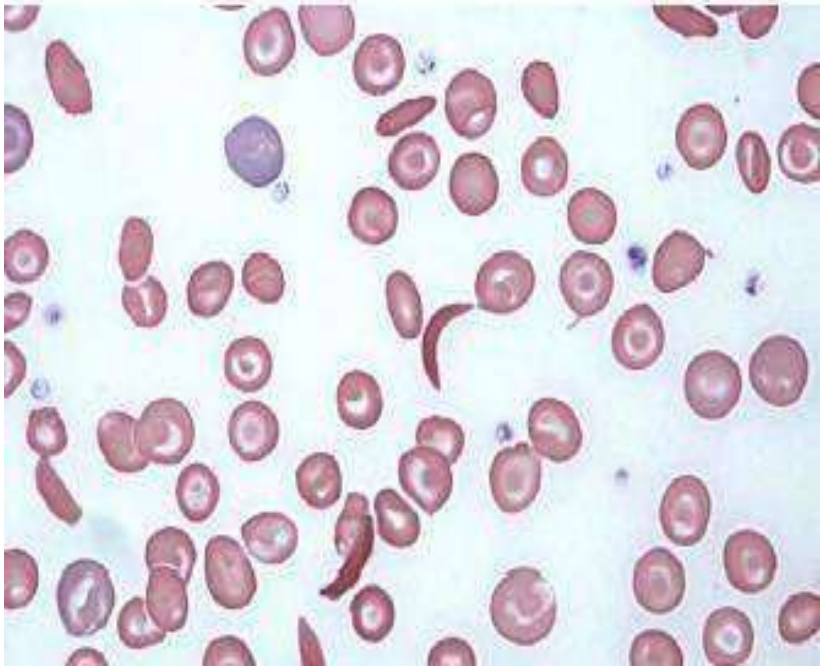
   Hb electrophoresis

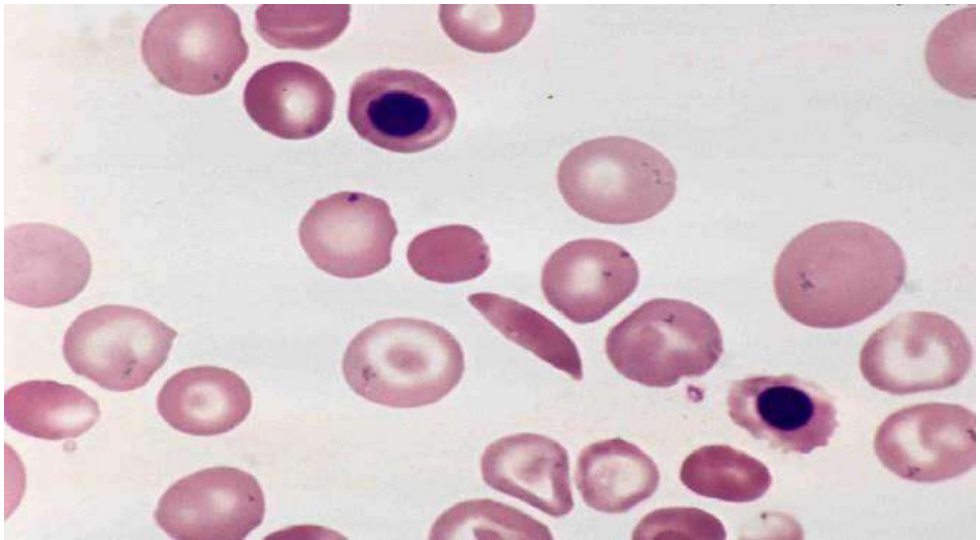
3. **Name one complication?**

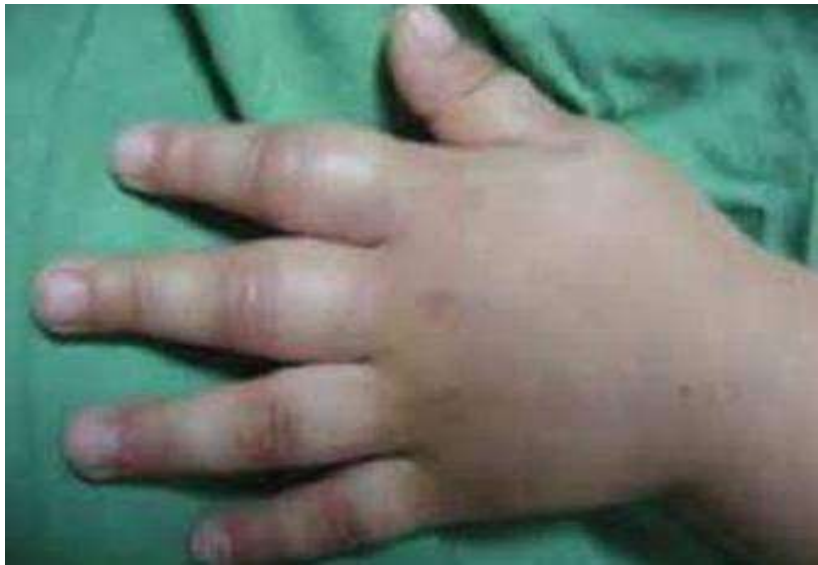
   Autosplenectomy

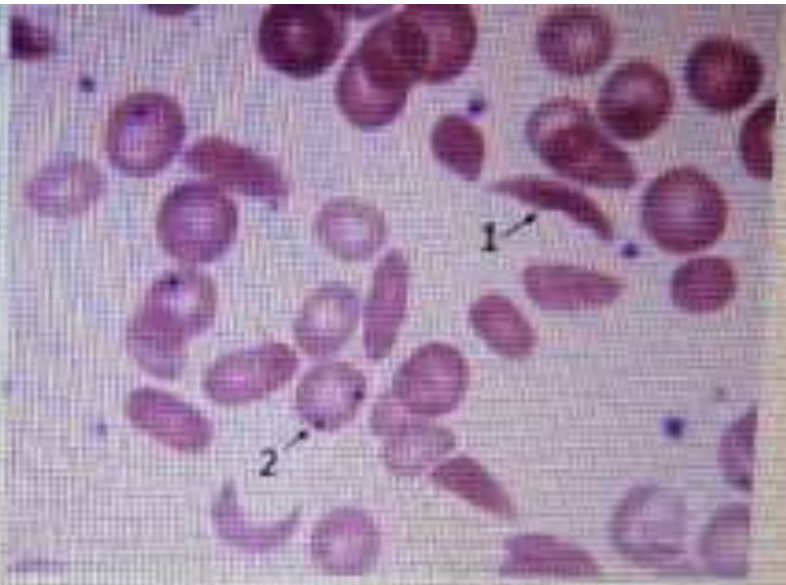
4. **inheritance type?**

   Autosomal recessive







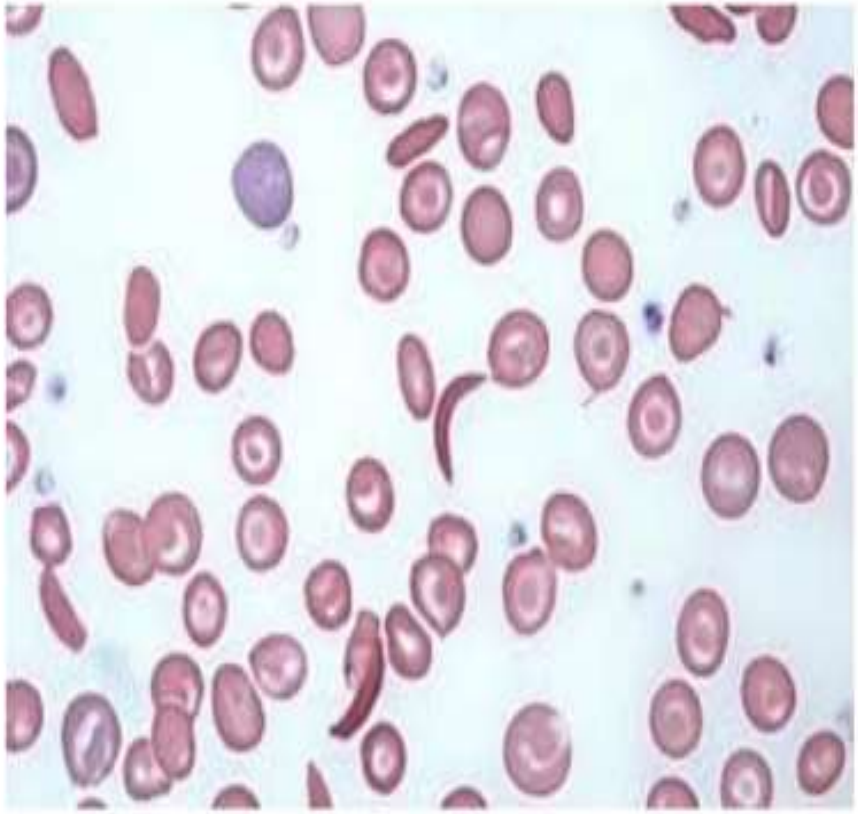


A 12 year old boy a known case of hemolytic anemia.
What is your diagnosis * [T]
(1 Point)

sickle cell anemia

3-Write two acute complications?

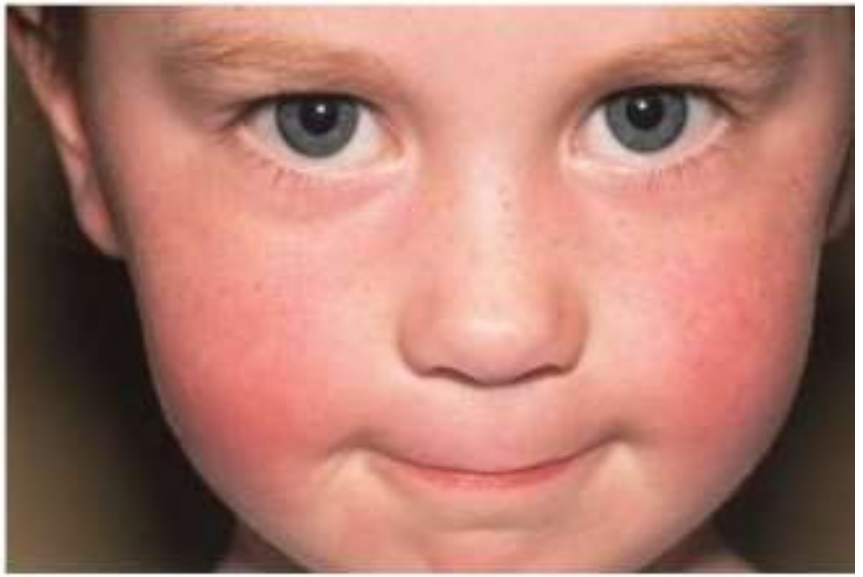
Acute chest syndrome, Splenic sequestration, dactylitis, priapism



4-Appearance of lacy rash and fever developed this sign on his face

- **What is your diagnosis?**

Fifth disease



- **Write a complication that might occur in a sickle cell patient?**

Aplastic crisis

Q: a patient came with pink urine and jaundice:

Q1: Name the findings in each picture?

A > Heinz bodies

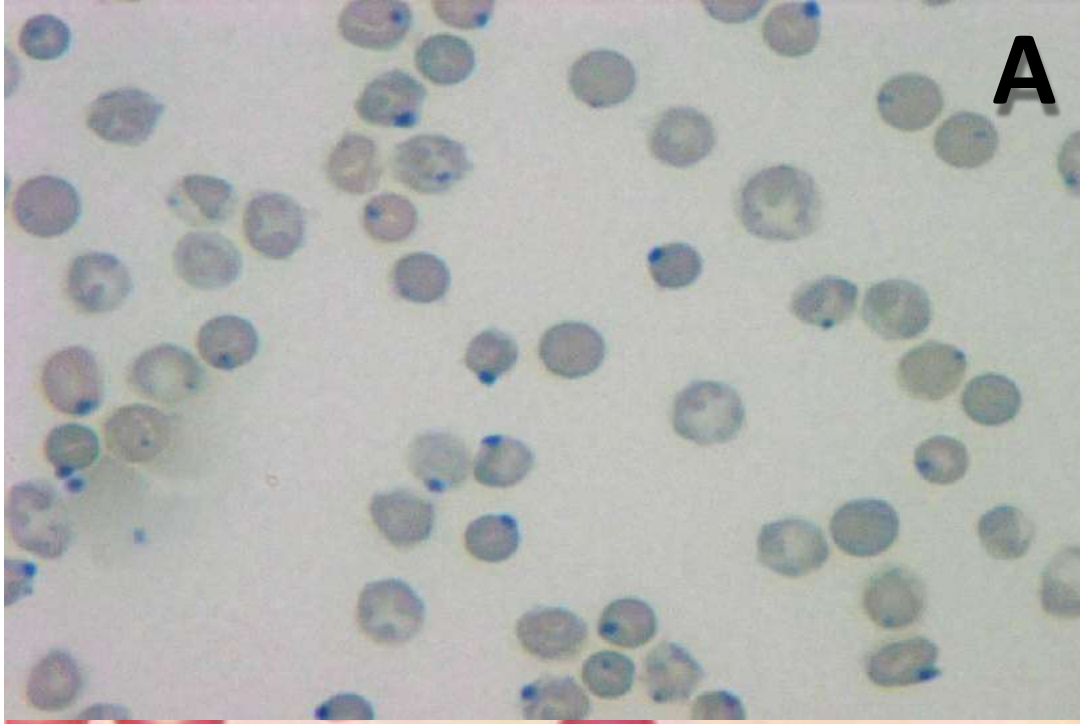
B > Bite cells

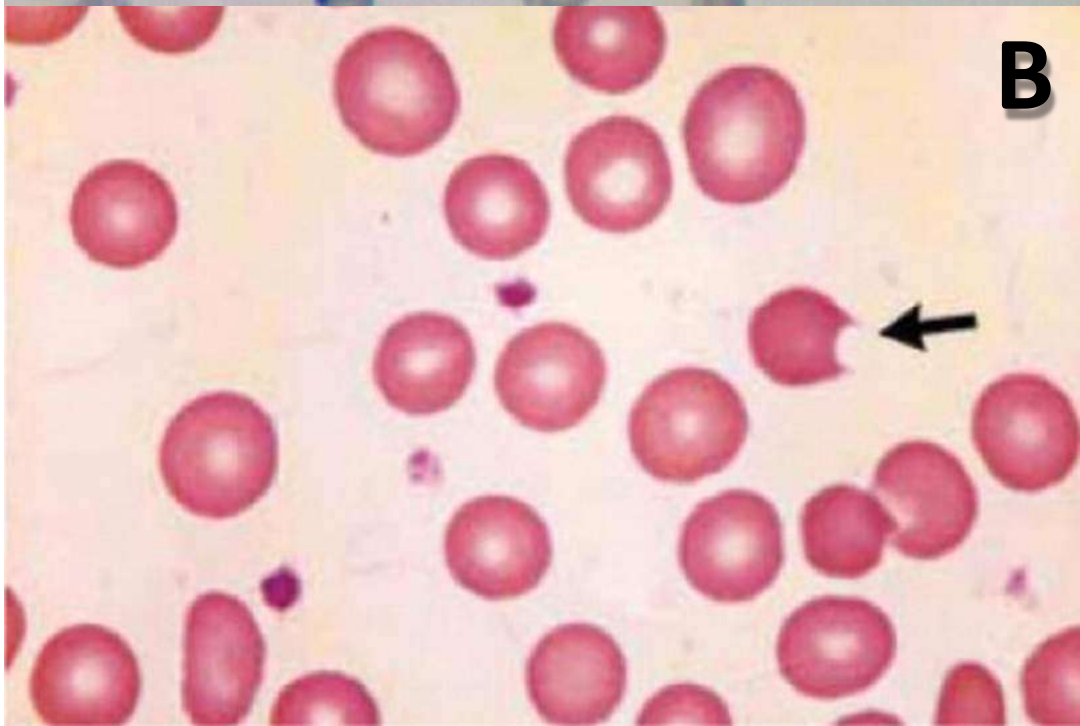
Q2: What is the Dx?

G6PD

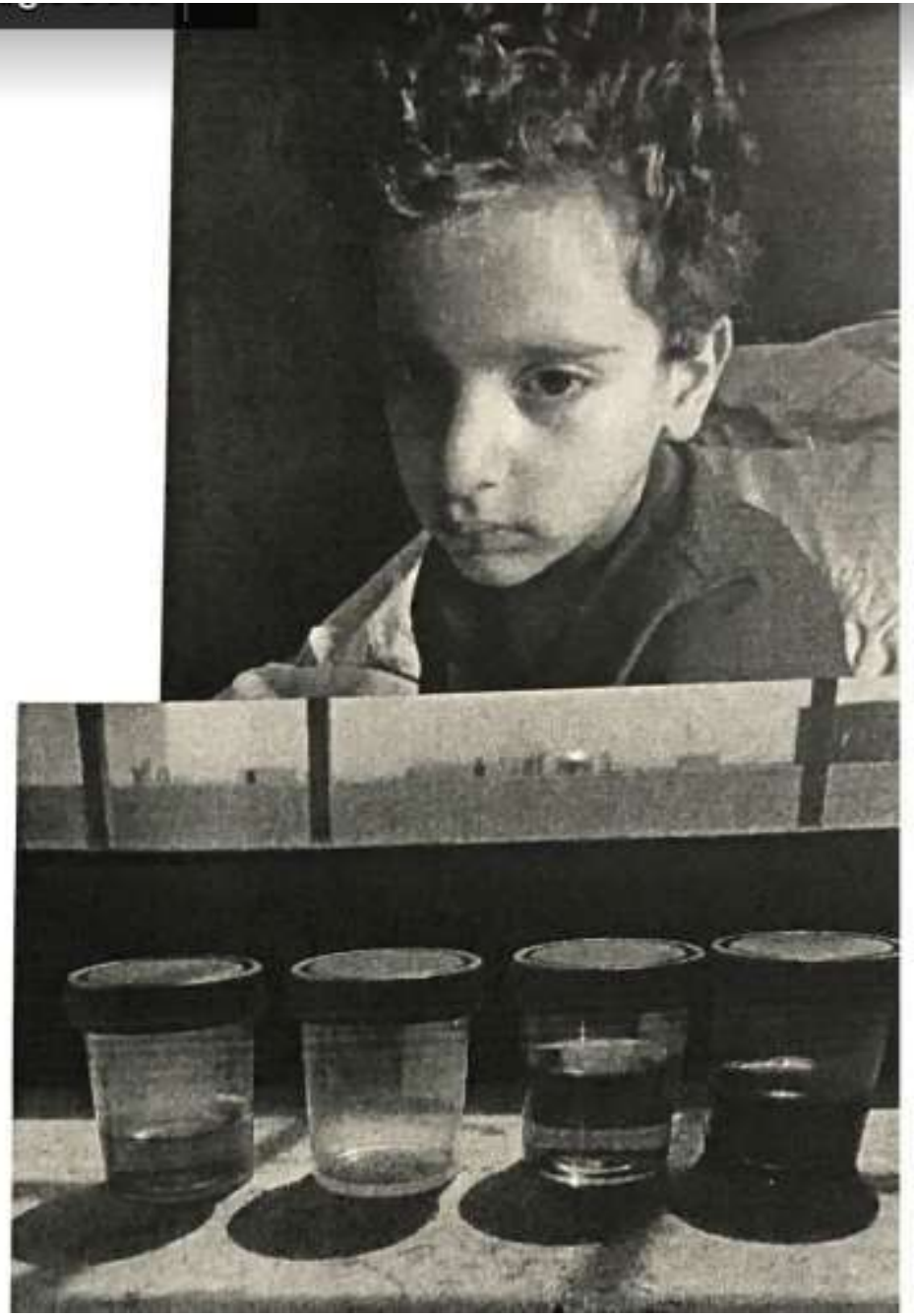
Q3: Mode of inheritance?

X-linked recessive





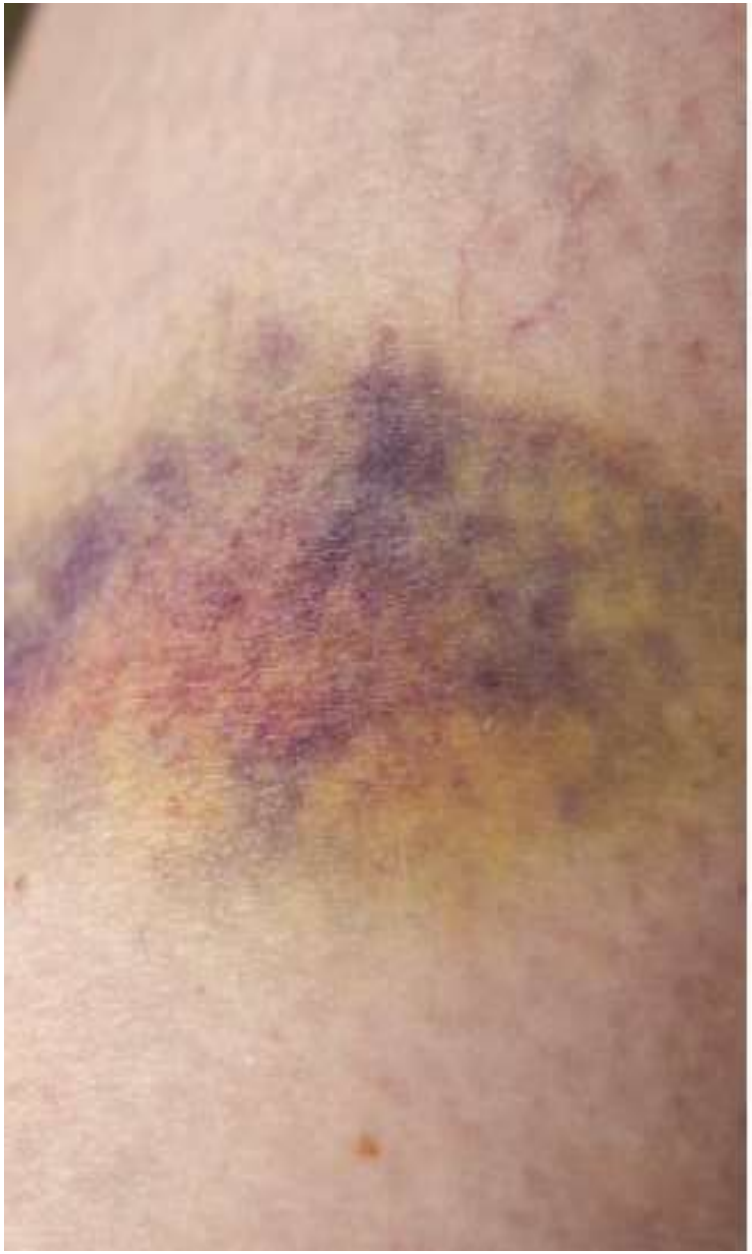
This child presented with acute onset of pallor, jaundice, and red urine (as shown).



What is the most likely cause?

Hemolysis

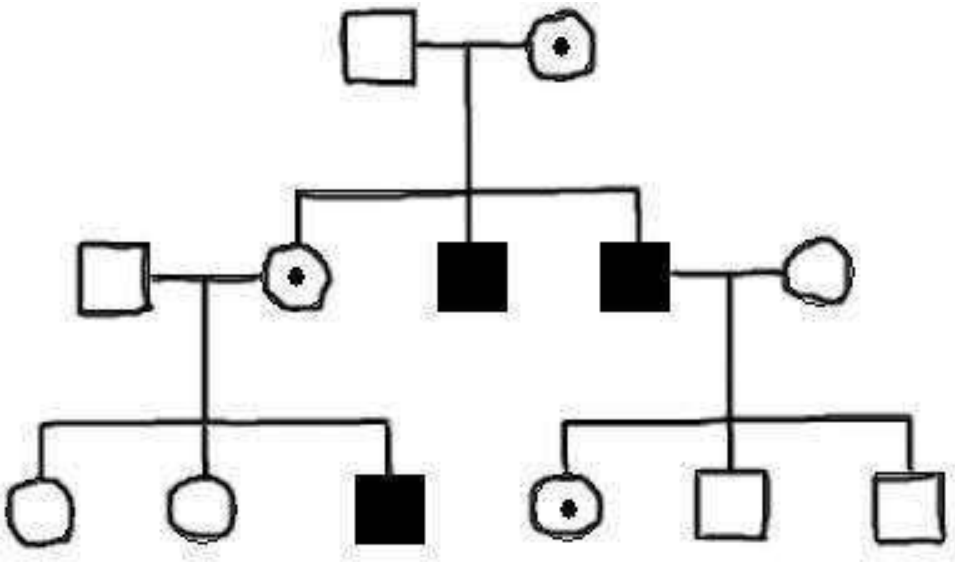
* G6PD



Q8) Sth year old girl presented with heavy menstruation and this lesions mention Two Inherited platelet dysfunctions.

---

1. Glanzmann thrombasthenia
2. Bernard-Soulier syndrome

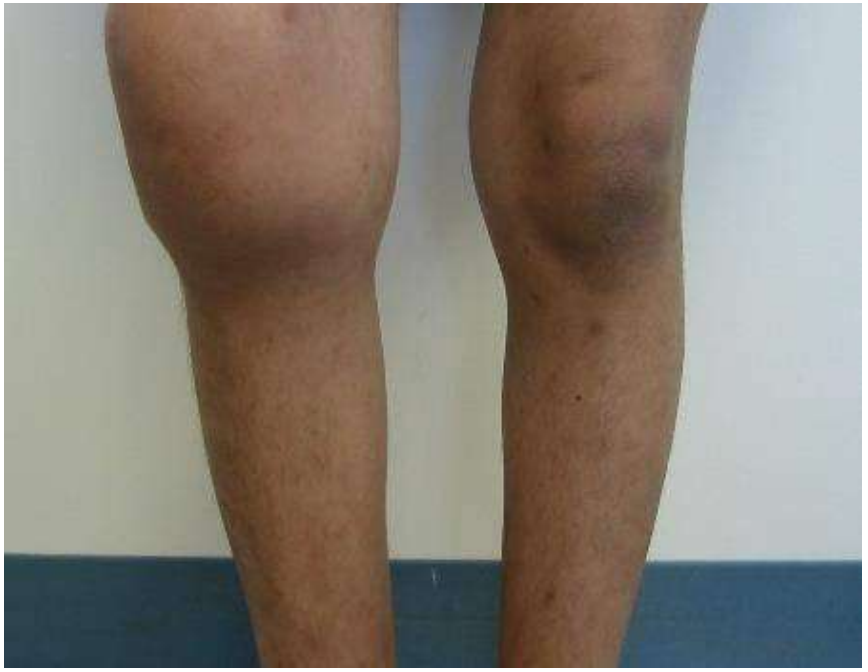


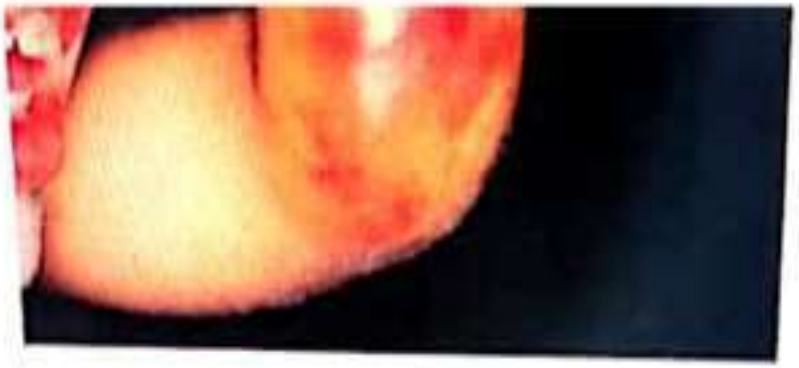
1. **What is your Dx?**

   Hemophilia

2. **Mode of inheritance:**

   X-linked Recessive





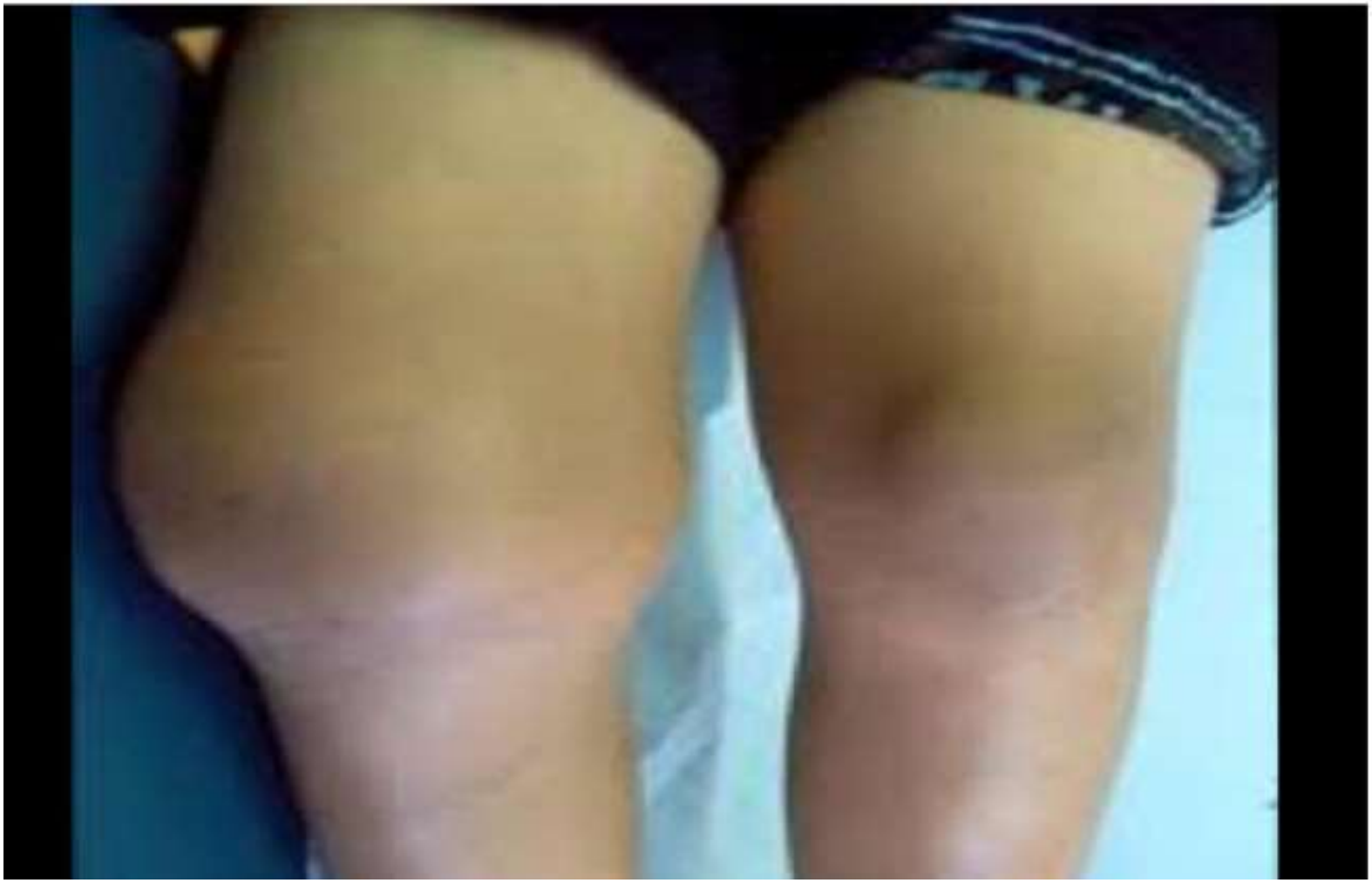
This boy presented to the emergency department immediately after falling down, on physical examination this was the only abnormal finding (shown in the photo).

PT/INR are normal. ⊐PTT is prolonged.

What's the diagnosis? *
(1 Point)

5- a child present after falling down , present with knee swilling and bruiseing , in the examination he was healthy، afebrile and no other problems .... in the next day he present with recurrent bleeding and bruise ? Diagnosis ?hemophilia

And mention the most serious complication ? Bleeding in to the brain



1. **What is the Dx?**

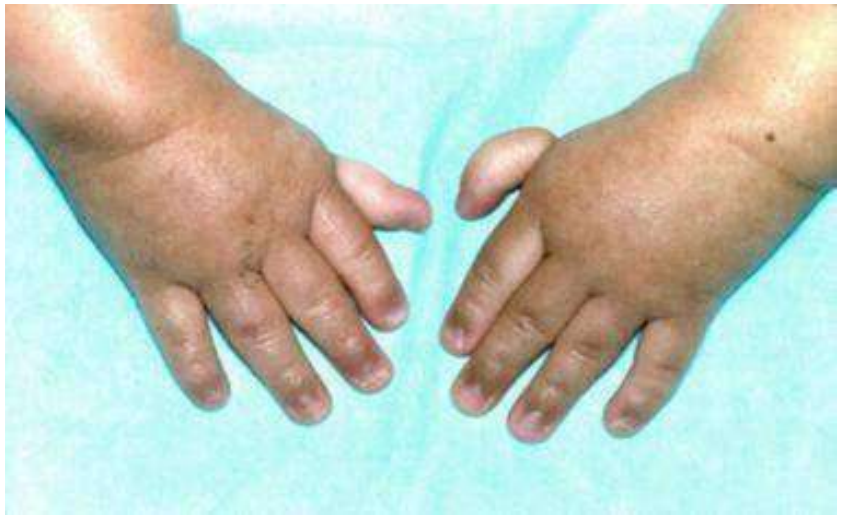
Fanconi Anemia

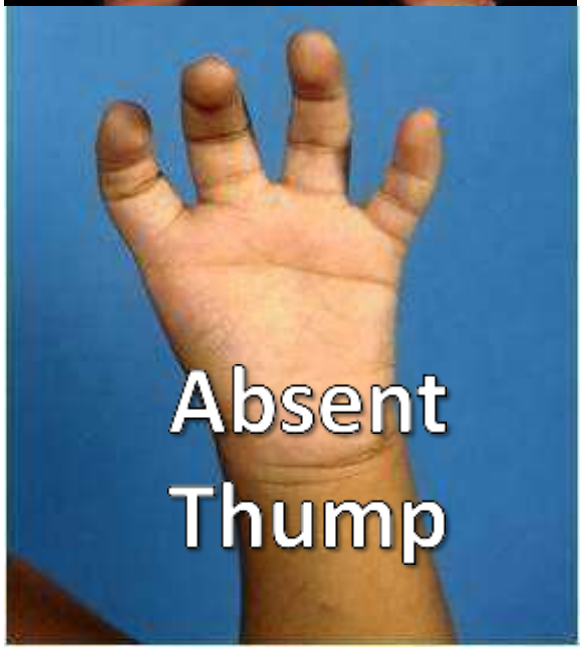
2. **Definitive diagnostic test?**

Karyotyping

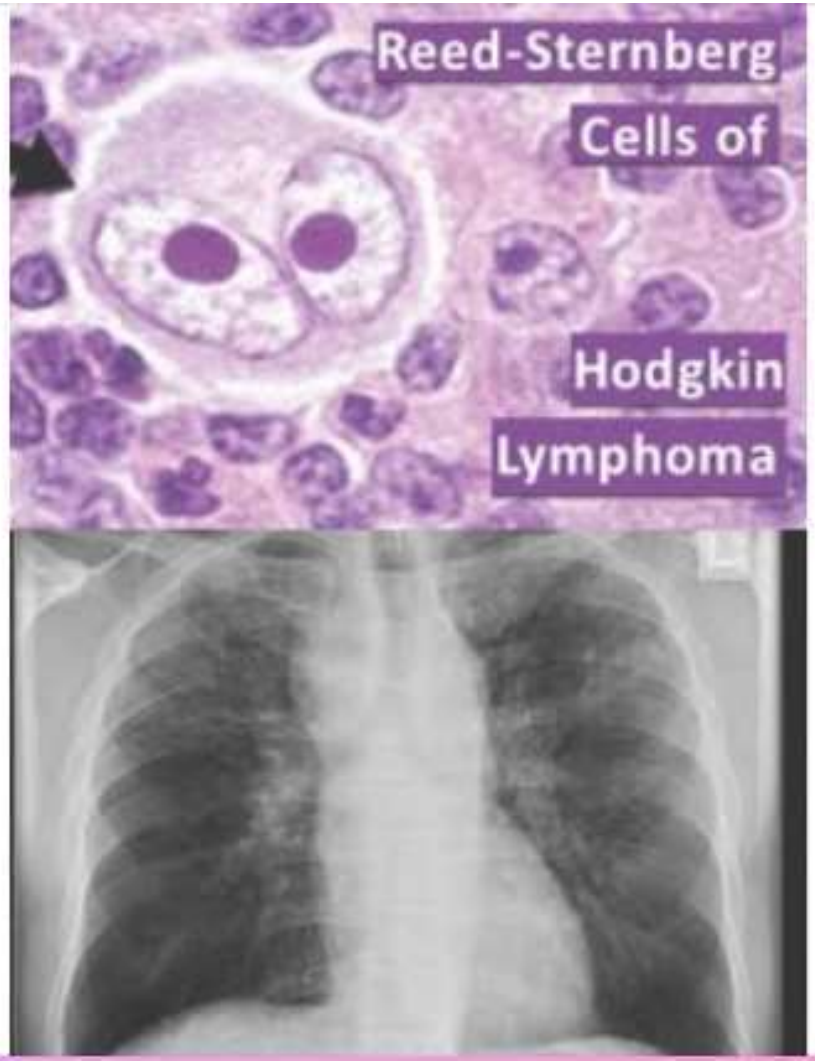
3. What does the hand show?

- Absent thump





- Whats your diagnosis? Hodgkin lymphoma
- What you see in chest xray related to disease? Hilar lymphadenopathy (infiltrate)

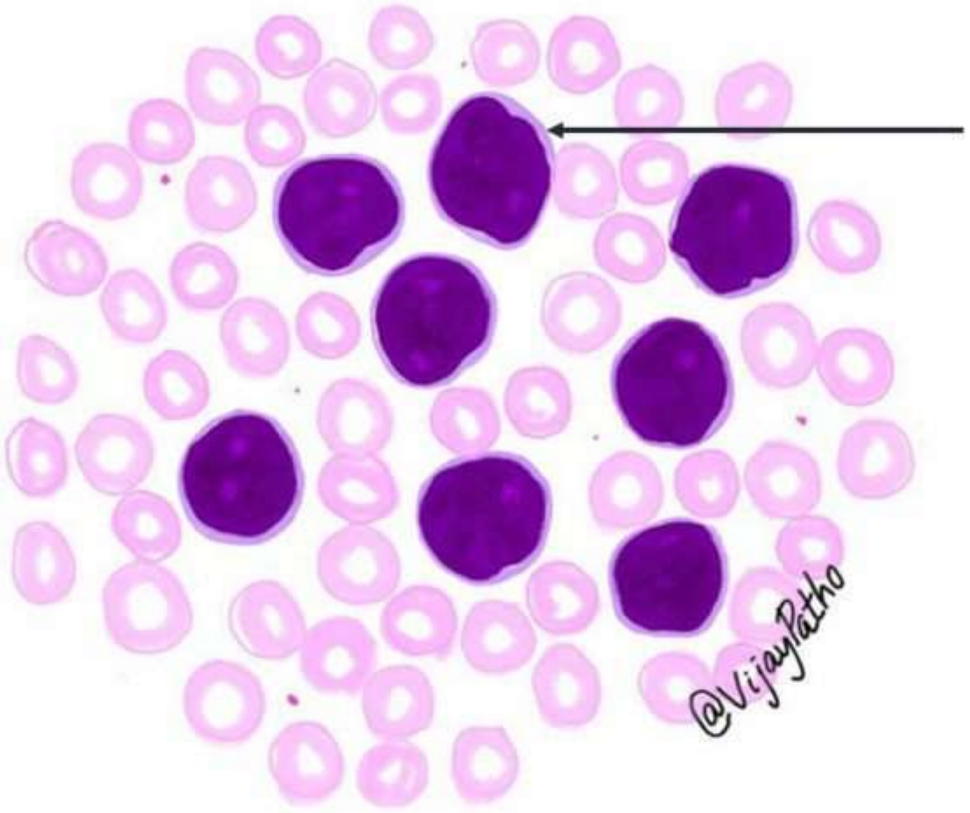


A 4 year old boy, previously healthy, presented with two weeks of progressive pallor, bruising fever and leg pain, he also has splenomegaly. The picture is of his peripheral smear.

What is the diagnosis? *
(1 Point)

acute lymphoblastic lukemia

ACUTE LYMPHOBLASTIC LEUKEMIA



Large cell with round to oval nucleus, with coarse, clumped chromatin, and inconspicuous nucleoli and scanty cytoplasm

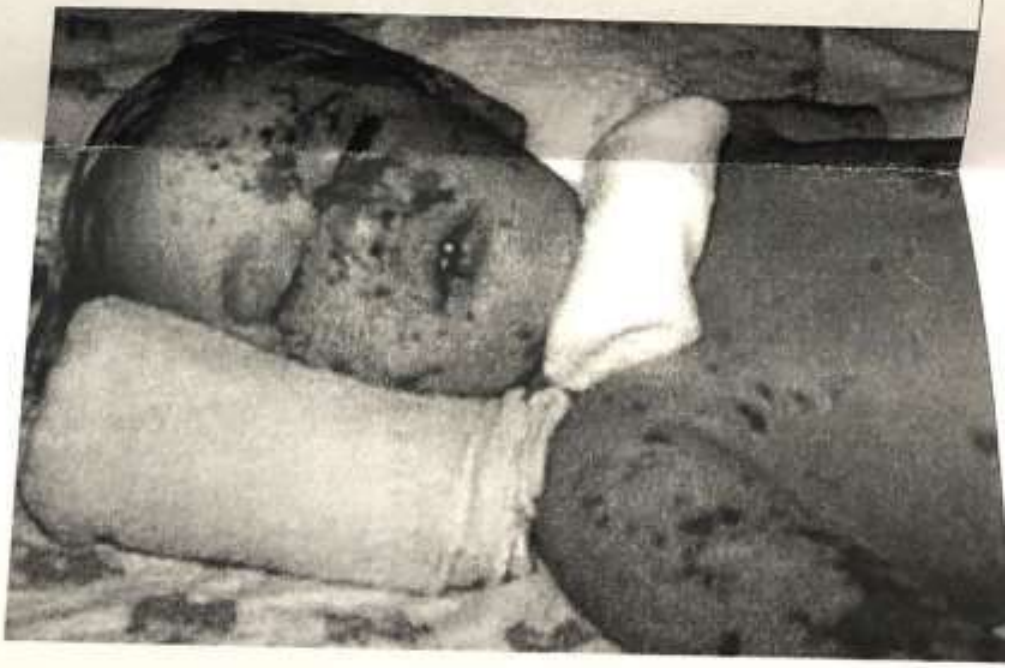
LYMPHOBLAST

- 5y/o boy present with short stature +anemia + impareid KFT…
- 1- what's the diagnosis ? CKD
- 2-another 2 possible causes of anemia?

Question 23

This is a very sick 4-year-old boy who had fever, neck stiffness, and sudden appearance of this rash.

DIC



* 3rd gen
* G-ve Diplococci

What is the most likely causative organism?

* N. Meningitids.

Meningo

Q: long hx of a 4 year old boy who developed high fever and rash, admitted to PICU where he developed thrombocytopenia, respiratory distress and other stuff I can't remember! Explain what happened ?

Meningococcemia , leading to respiratory distress and DIC

Q: Vomiting and fever:

8)

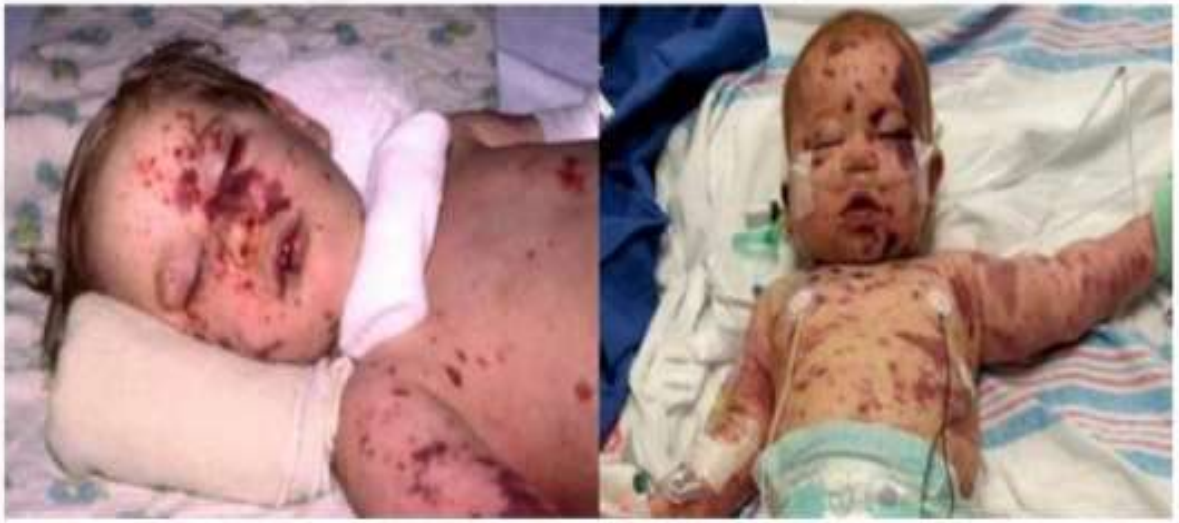
Q1 What is the Dx? Meningococcemia

Q2: What is the causative agent? Neisseria Meningitides

a) What is the causative agent?

Q3: What does it stain? Red gram-negative diplococci

Neisseria Meningitides

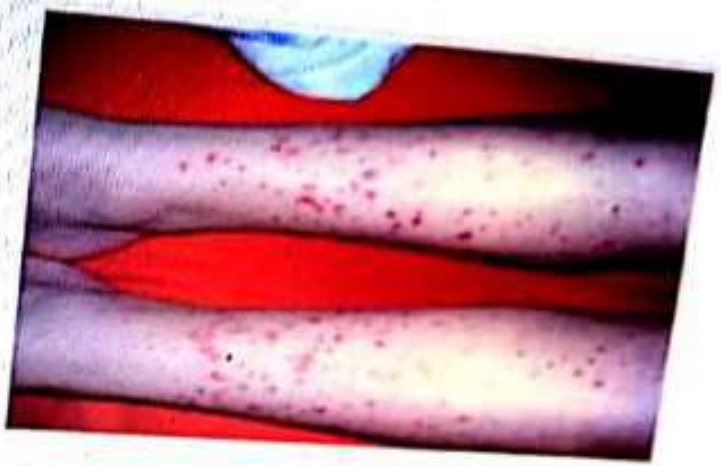


b) treatment?

3rd generation cephalosporin

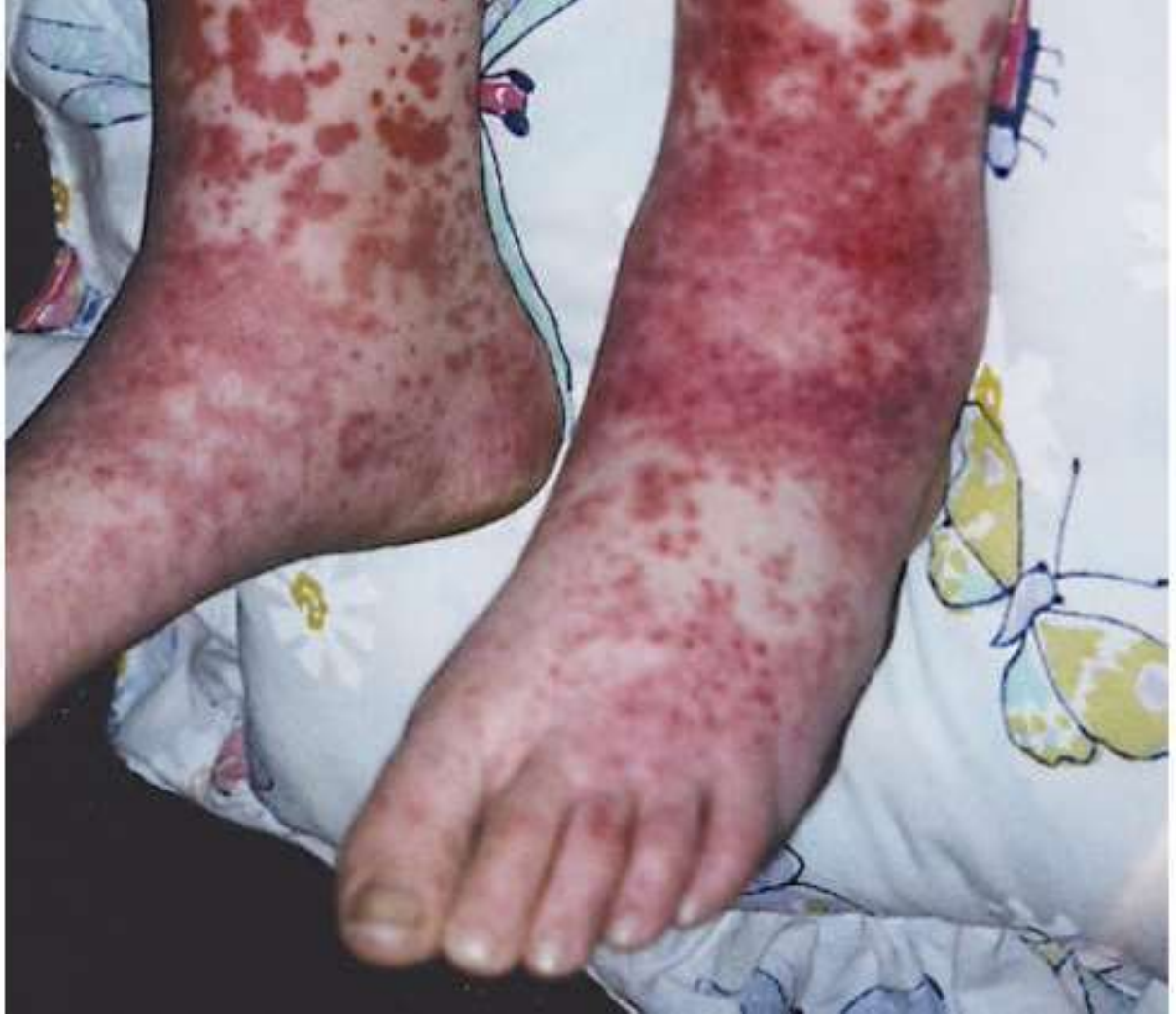
Henoch-Schönlein purpura	
Pathogenesis	• IgA-mediated leukocytoclastic vasculitis
Clinical manifestations	• Palpable purpura • Arthritis/arthralgia • Abdominal pain, intussusceptions • Renal disease similar to IgA nephropathy
Laboratory findings	• Normal platelet count & coagulation studies • Normal to ↑ creatinine • Hematuria +/- RBC casts +/- proteinuria
Treatment	• Supportive (hydration & NSAIDs) for most patients • Hospitalization & systemic glucocorticoids in patients with severe symptoms

RBC = red blood cell; **NSAIDs** = nonsteroidal antiinflammatory drugs.



This 5 year old boy presented with abdominal pain and right ankle swelling
□Q: Which organ involvement can predict the long term prognosis? *
(1 Point)

Kidney



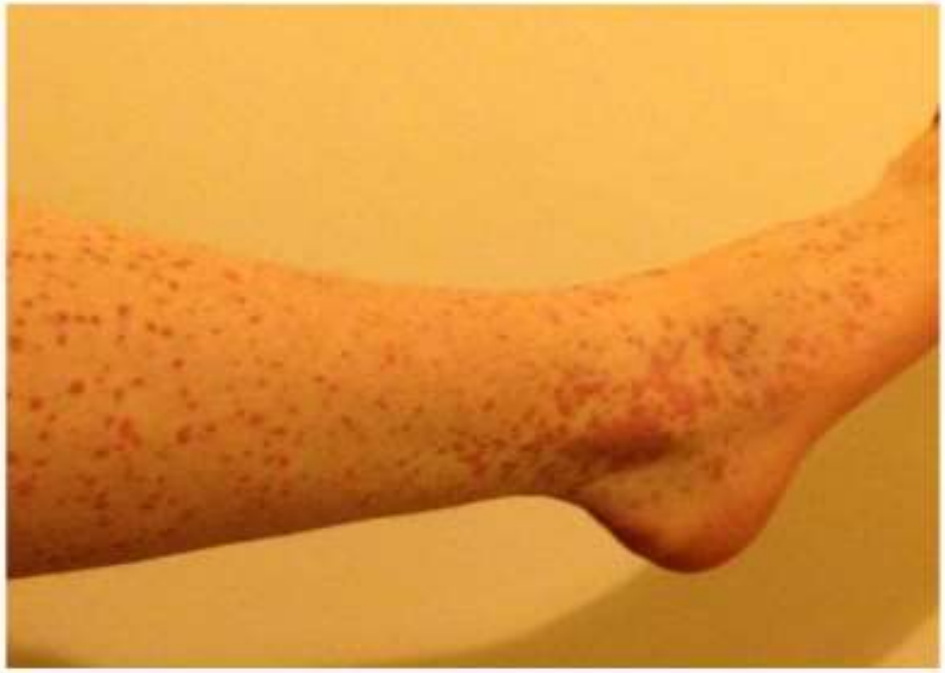
1)Pt presented with rt knee swilling , and with this rash:

Diagnosis? HSP

~~And mention 2 complications ? Nephritis , intestinal intssusception~~

Q2. Child complains of abdominal pain and ankle swe,swelling, what is your dx

- Henoch schinlen purpura



Q1: What is the Dx?

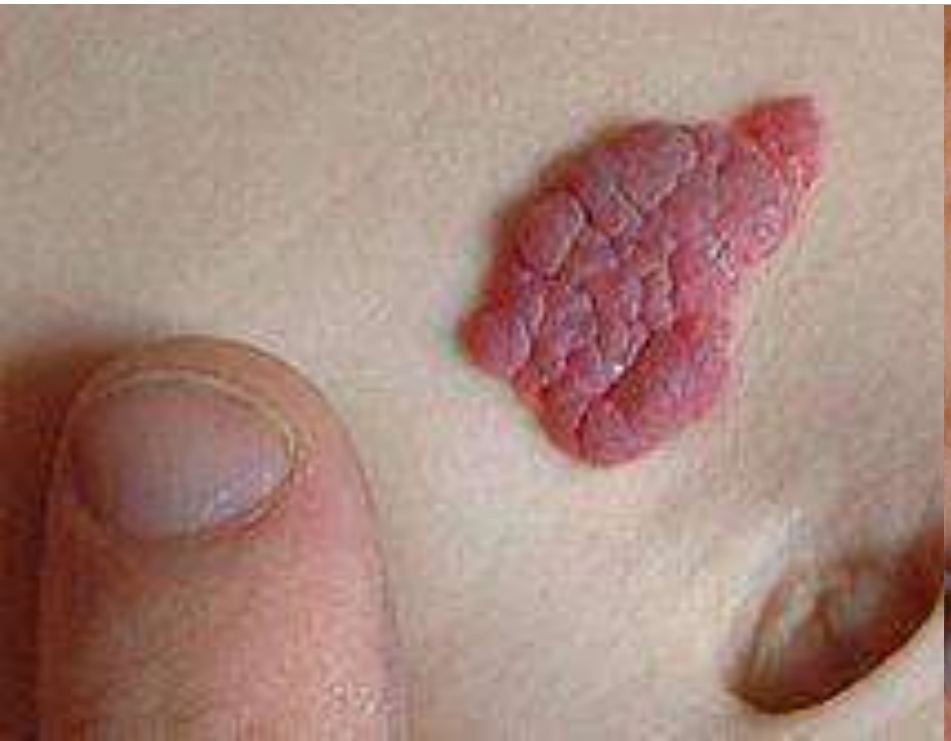
- Hemangiomas

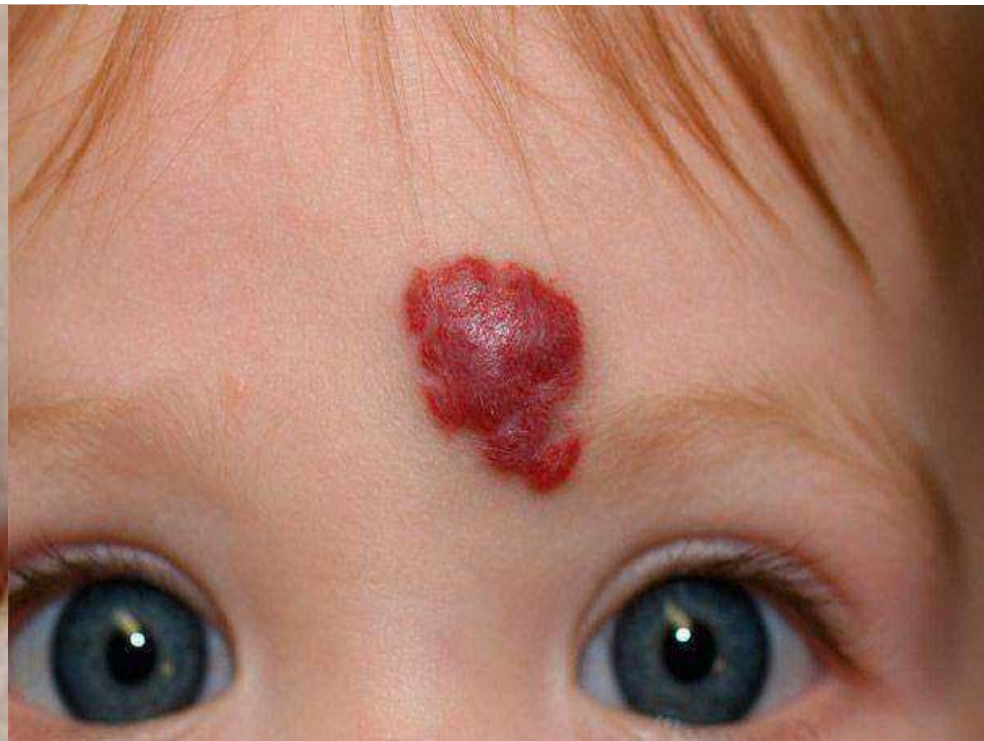
Q2: Female/male ratio?

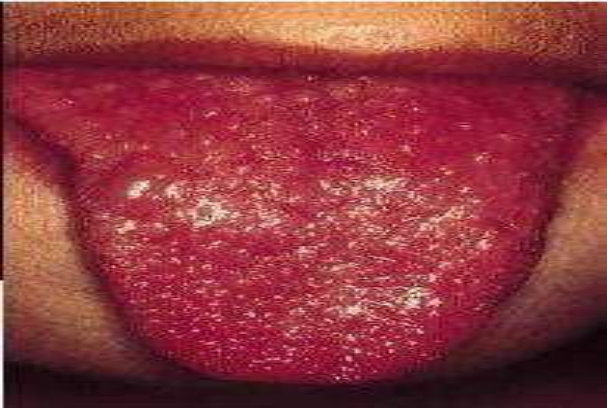
- 3:1

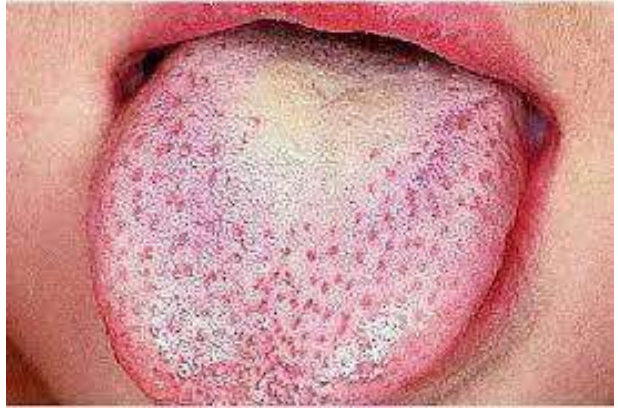
Q3: Complication may develop?

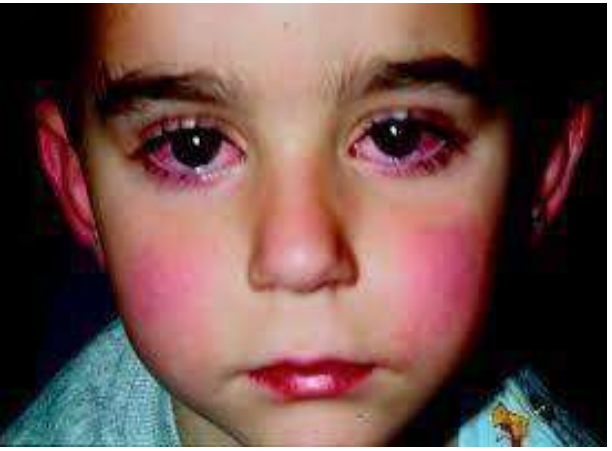
- Ulceration (MC), hemorrhage, scarring

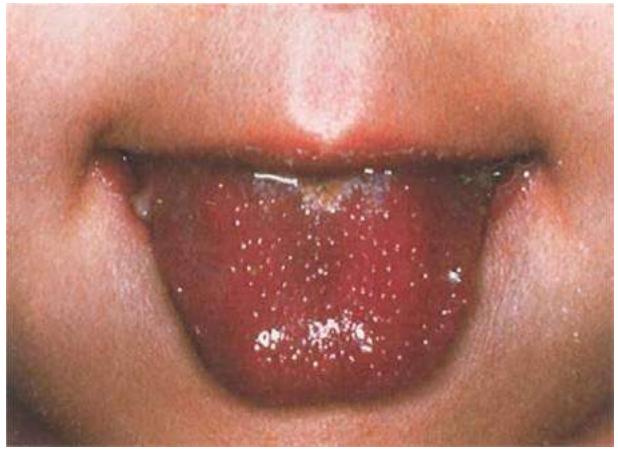


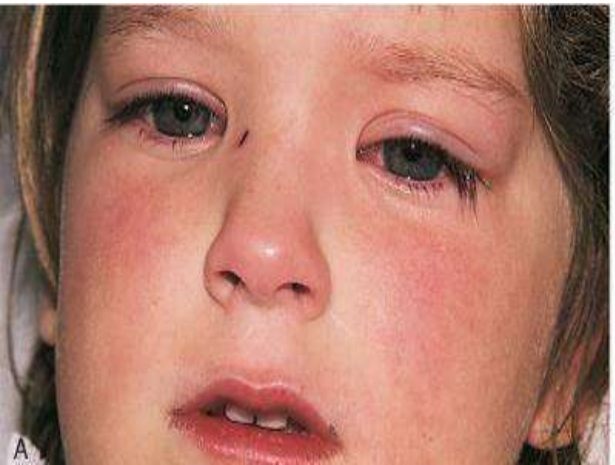


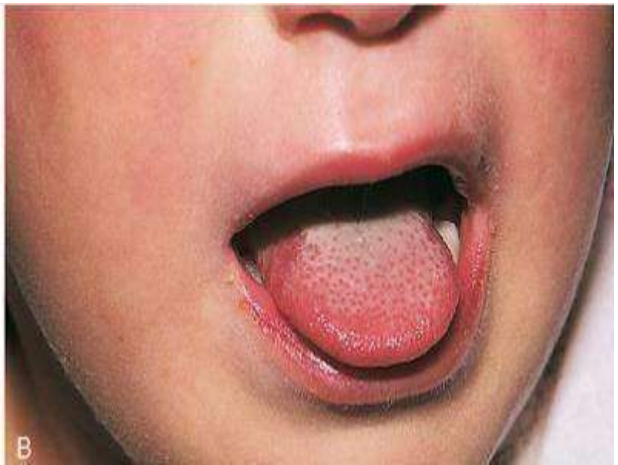












Q: This is a child with 6 days of fever:

Q1: Name the Dx:

- Kawazaki disease

Q2: 2 organs to examine?

1) Hand & feet (peeling),
2) Trunk (rash),
3) Tongue (strawberry)

Q3: Name the eye?

- Non-suppurative conjunctivitis

Q4: What is the most serious complication?

-Inflammation of the coronary arteries

Q5: What is the sign observed in the tongue?

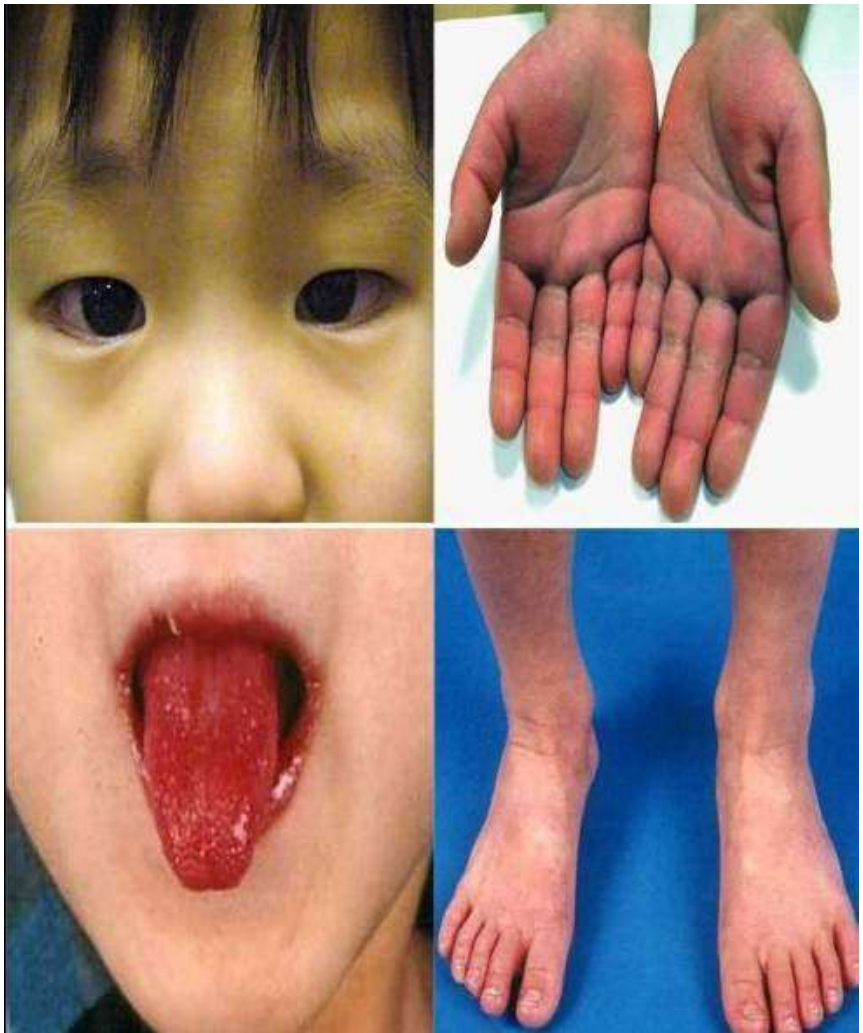
- Strawberry tongue

Q6: Name another cause of strawberry tongue?

- Scarlet fever

1. What is the Dx?

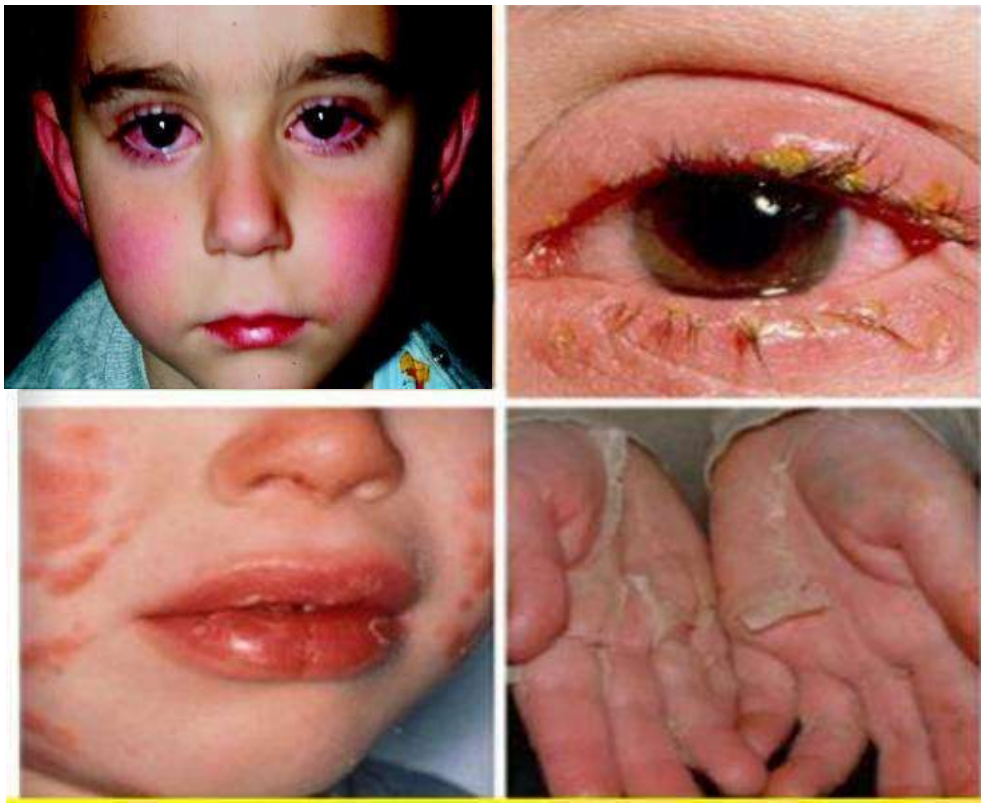
Kawasaki Disease



2. Name the most serious complication:

Coronary Artery Aneurysms

- Other: Pericarditis



Q: a patient came with URTI:

Q1: What is the sign: Strawberry tongue

Q2: What is the Dx: Scarlet fever

Q3: What is the causative organism: Group A Strep Pyogens

Q4: What is the Mx? Penicillin