

Dr. Abeer Assaf online lecture

Aseel N. Abdeen

Measles

“

3 c's

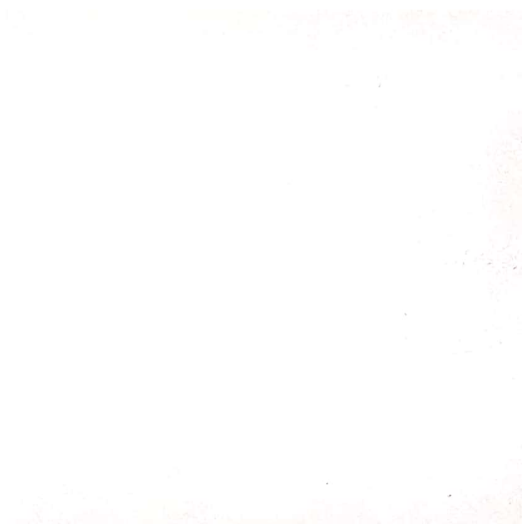
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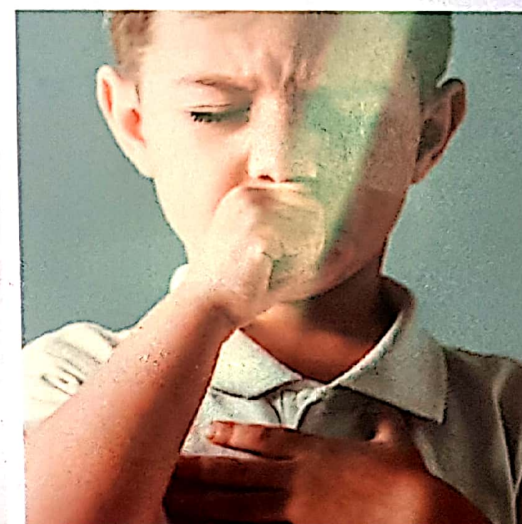
maculo(change in color) papular (raised) rash



purulent conjunctiva



corrisa (crusted nose)



high grade fever and cough

cont

- most common complication(or associated morbidity) of measles?

otitis media , encephalitis

-supplement of vitamin A decrease morbidity in these patients- not known why- theory: increase integrity of mucus membrane --> decrease mortality

- incubation period - 7-14 days



Koplik spots(in mouth) -pathognomic for measles.
if not seen doesn't mean not measles. why?
appear in first 24 hrs then disappear after few hours .

Erythema Infectiosum AKA 5th Disease

- cause by parvovirus (benign infection)

symptoms appear for a few days then disappear, usually no complications

- 2 groups of people may have serious complications if got this infection?

1- sickle cell (any hemolytic anemia) -- if exposed, will cause infection in bone marrow --> aplastic crisis

2- pregnant women --> fetal hydrops



“
slapped
cheek
”



Fifth Disease - Lace pattern rash

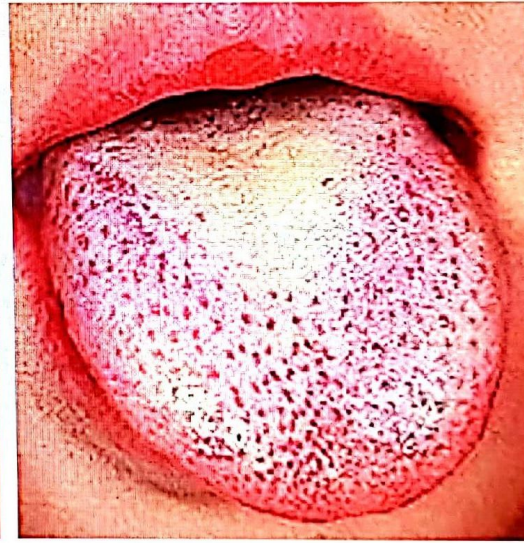
Scarlet fever - beta hemolytic group A strep



maculopapular rash



rough skin -sand
paper like



white strawberry
tongue then red
strawberry tongue



tonsillitis

cont ..

- **group A strep (pyogens) :**

- - tonsillitis of scarlet fever
- - impetigo
- - post strep GN
- -- (if complicated may cause rheumatic fever)

- **group B Strep (agalctia) :**

- - vaginal tract esp. in pregnant women
- - STD
- - neonatal meningitis and sepsis

- any patient with scarlet fever we have to check for
- 1. heart - rheumatic fever (if we suspect RF we have to ask was it preceded by URTI by 3-4 weeks ?)
- 2. kidney - post strep GN
- pt with hematuria.. put ddx .. one of them should be post strep GN .. must ask was there proceeding URTI before 2 weeks ?
- pt with recurrent hematuria, always after each URTI in 2-3 days? IgA nephropathy

- Major criteria of Rheumatic fever
- 1. Erythema Marginatum
- 2. subcutaneous nodules (if present, must have #3)
- 3. carditis (not necessarily occur with #2)
- 4. arthritis
- 5. sydenham chorea - appear late after 4 months
- * in rheumatic fever, we have to have evidence of strep infection either high ASO titre or throat swab positive culture for strep group A. Exception: sydenham chorea , appear after 4 months, so we wont have evidence of infection at that time

mnemonic: "JONES CAFE PAL"

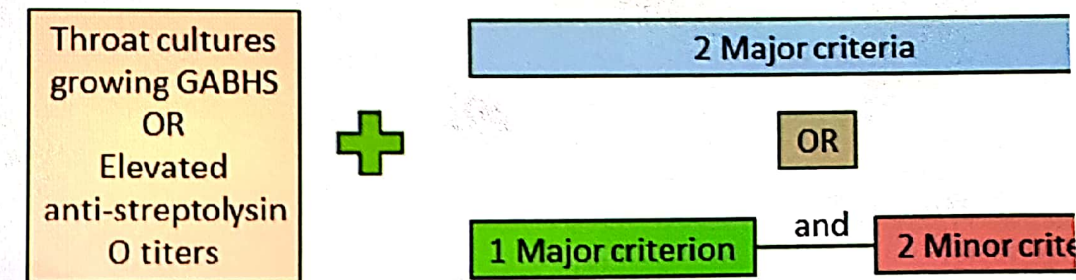
Major Criteria

| | |
|---|------------------------------------|
| J | Joint Involvement |
| O | O looks like a heart = myocarditis |
| N | Nodules, subcutaneous |
| E | Erythema marginatum |
| S | Sydenham chorea |

Minor Criteria

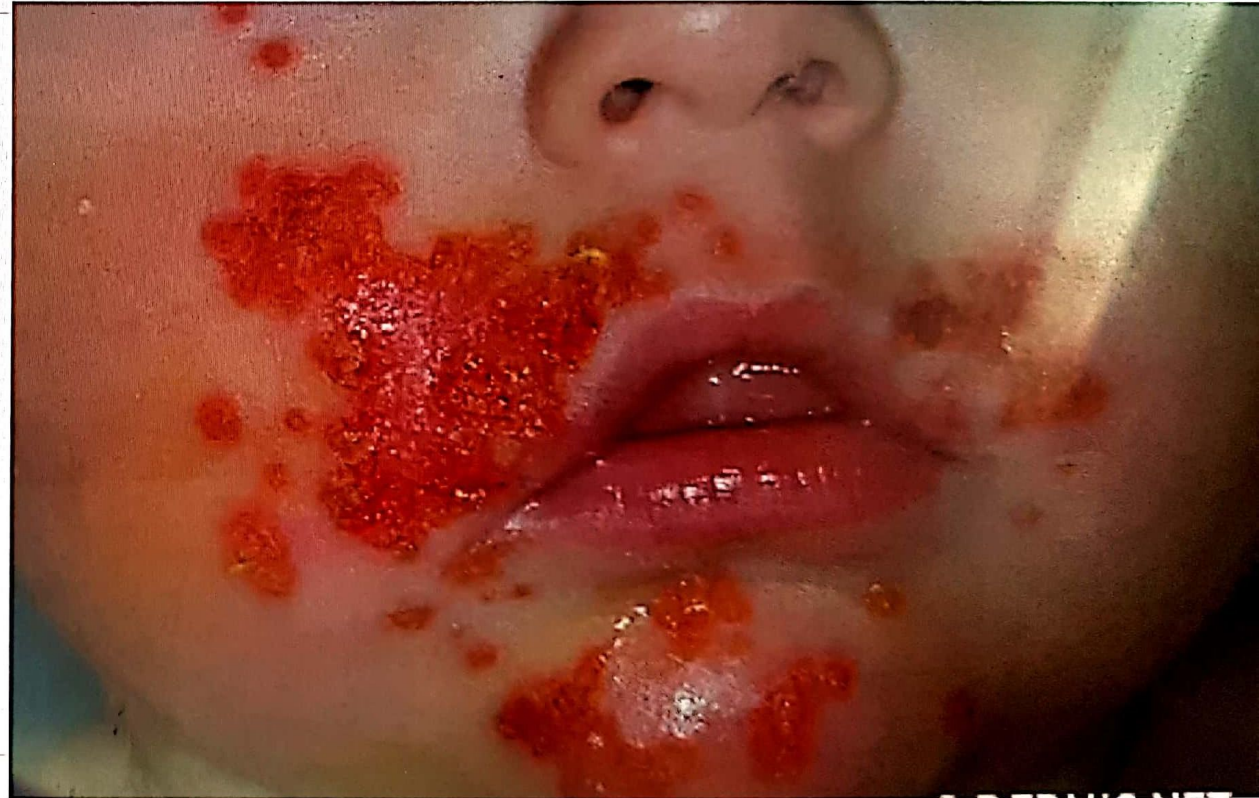
| | |
|---|------------------------------|
| C | CRP Increased |
| A | Arthralgia |
| F | Fever |
| E | Elevated ESR |
| P | Prolonged PR Interval |
| A | Anamnesis of Rheumatic fever |
| L | Leukocytosis |

Diagnosis

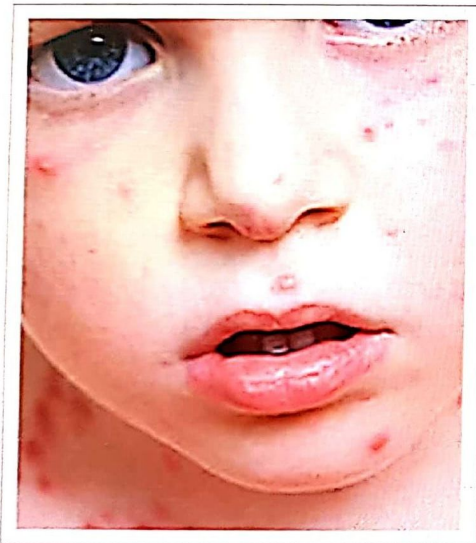


Impetigo - honey crust

- significant rash but good looking patient
- caused by group a strep and sometimes staph aureus
- if it was caused by group a strep (most common) and caused skin infection, will it cause rheumatic fever as a complication? **no**, but may cause post strep GN after 2-3 weeks of skin rash
- treatment of choice for group A strep?
penicillin, if allergic we give macrolides (erythromycin)
- when we give penicillin, we prevent rheumatic fever as a complication but not post strep GN.



Chicken pox -HZH



macule then papular then vesicles then
vehicular rash

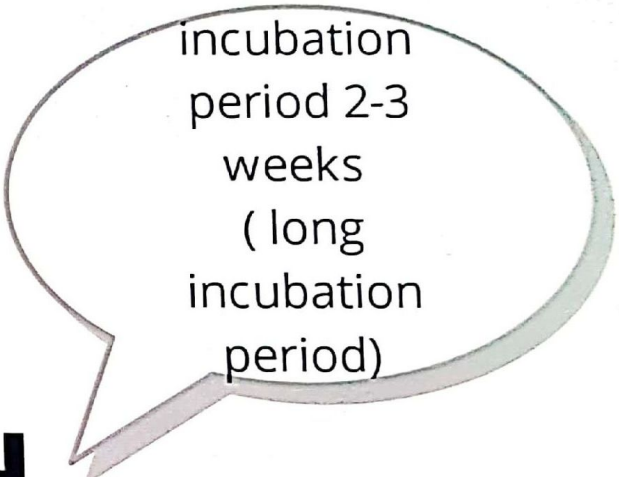
highly itchy

reactivation in adults cause
shingles on certain
dermatomes

incubation period : 2-3 weeks

MaRCH

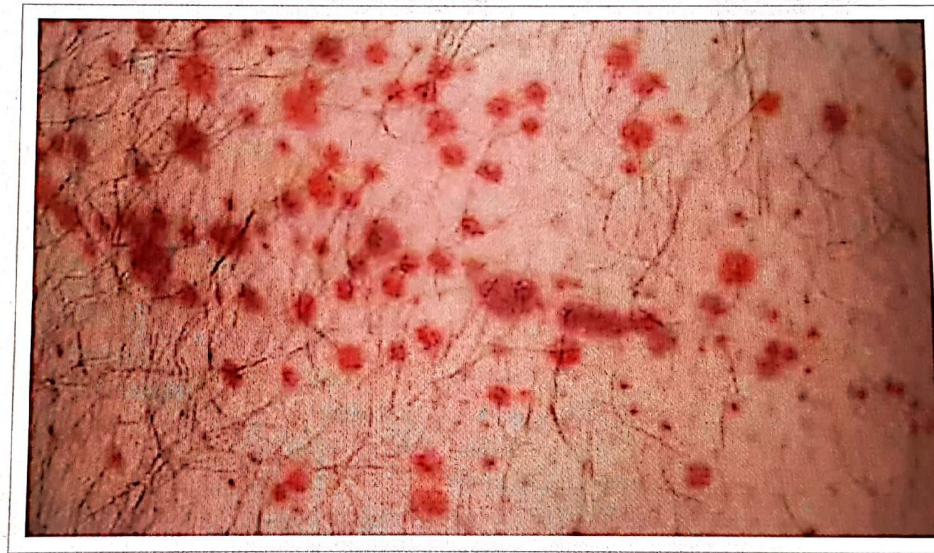
M: mumps
R: rubella
CH: chicken pox



incubation
period 2-3
weeks
(long
incubation
period)



petichia

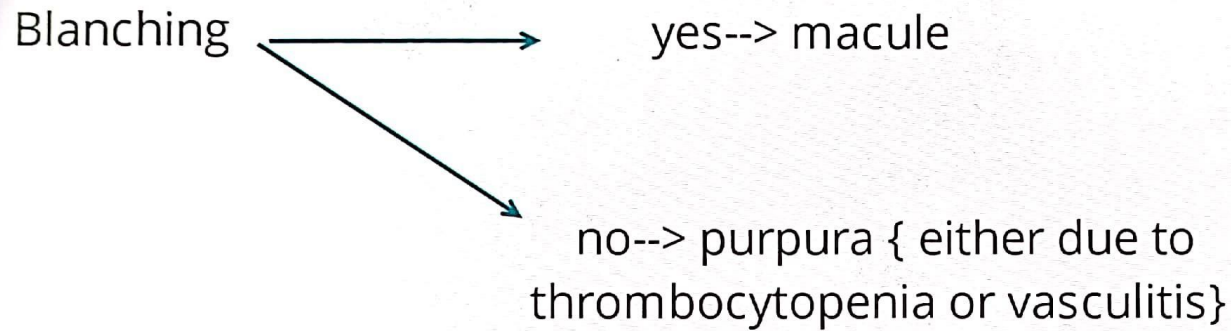


purpura



eccymosis

“ Same pathophysiology (bleeding under skin) but different size ”



“
most common cause of
vasculitis purpura?
henoch schonlein purpura
(has predilection for
small vessel disease)
”

“
child with non blanching
purpura, fever, and sick
looking. what is the cause?
(bacterial infection)
Nisseria Meningitidis
”

“
most common cause of
thrombocytopenic purpura?
ITP (well looking, no fever, low
platelet, only purpura)
”

“

how to differentiate through physical examination that this non blanchable
purpura is due to ITP or due to vasculitis?

we see if there is palpation (palpable or not)

if yes --> vacultits

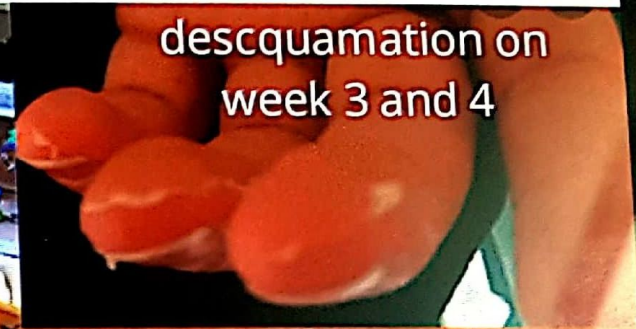
if not palbaple --> ITP

”

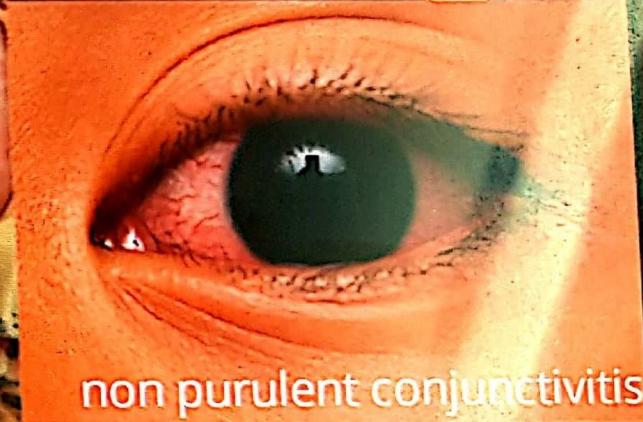
kawasaki disease



maculopapular rash



descquamation on week 3 and 4



non purulent conjunctivitis



*high grade fever for more than 5 days.

* Major criteria :

-2 things affect the skin (rash, swelling in hands and feet, desquamation of skin)

-2 things affect the mucos membrane (conjunctivitis, strawberry tongue, fissured tips)

-1 LN involvement (cervical lymphadenopathy, usually unilateral)

* acute phase: first 2 weeks

* sub acute phase: weeks 3 and 4

* drug of choice for Kawasaki?

gamma globulin IV { IVIg} - to prevent serious complications like coronary aneurysm.

* sometimes we give aspirin, in acute phase we give high dose (anti-inflammatory dose) first week

* on week 3 and 4 { subacute phase }, 3 things happen:

1. desquamation

2. coronary aneurysm if it will form

3. thrombocytosis (we give low dose aspirin - antiplatelet dose)

Erythema Multiforme - target lesion

- if erythema multiforme with mucus membrane involvement? Steve-Johnson disease - as a complication of this disease the patient may develop corneal ulcerations.

* causes:

viral infections (herpes, mycoplasma)

drugs (sulfa, penicillin)



“

2 common anti epileptic drugs, when given together , we have to adjust the dose; give lower doses (if we didn't adjust the dose and gave high doses we may cause Steven Johnson disease)
valpruic acid and lamotrigen

”

Molluscum Contagiosum

- caused by benign strains of pox virus
- central depression inside lesion
- mostly seen in chin and eyelids
- self limiting, takes time to disappear
- cosmetic problem
- highly infectious
- we may use cryotherapy



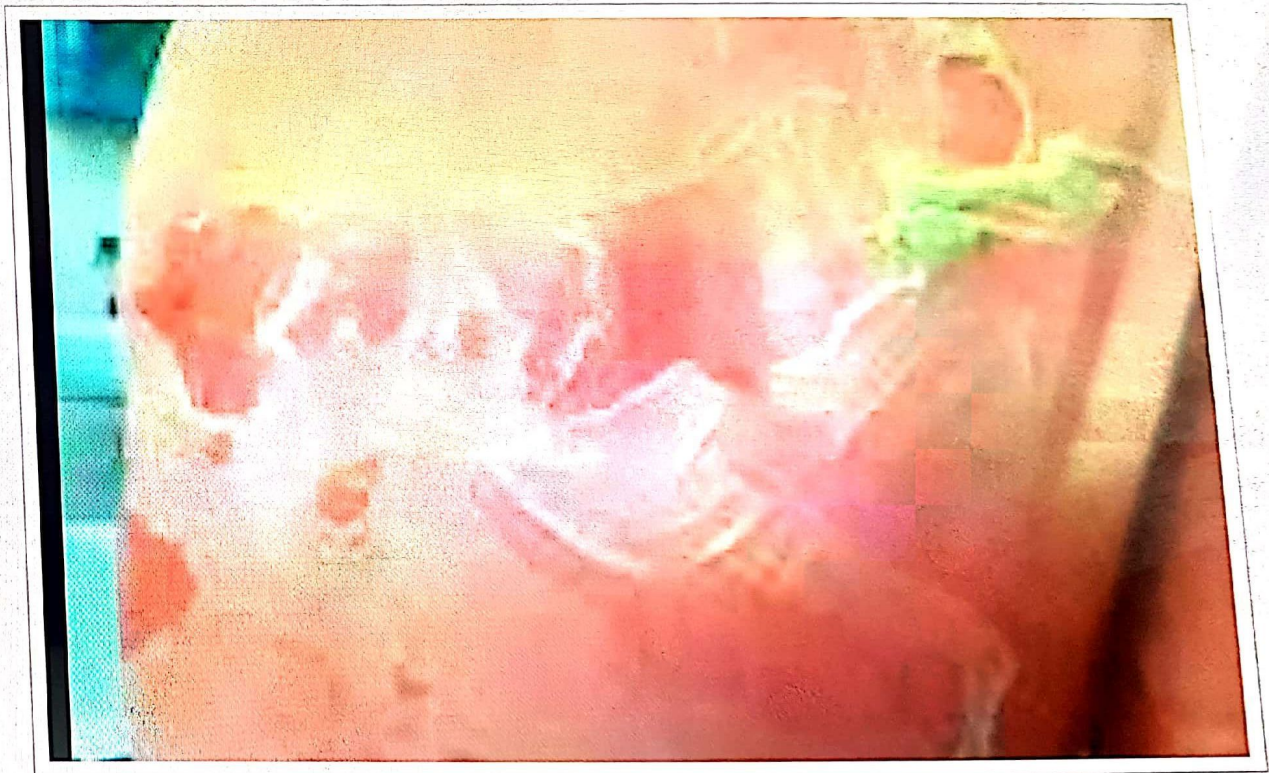
Erythema Migrans -Bulls eye - Lyme disease

- caused by borrelia
bugrdolefi



Scaled skin syndrome

- significant desquamation



Toxic shock syndrome

mostly caused by staph aureus

tx (anti staph) : vancomycin

-** we also give another drug to shut down toxin production--> clindamycin which may cause pseudomembranous colitis as a complication



-itchy rash, allergy--> urticaria

-angioedema (if we had a question about someone with bilateral periorbital oedema, we must include allergy rxn in our ddx along with nephrotic syndrome, liver disease...



Port wine stain

- if associated with vascular proliferation and compressing ipsilateral part of brain causing contralateral side weakness and seizure??

neurocutaneous syndrome --
Sturge Weber syndrome



ataxia telangiectasia

- recurrent sinuopulmonary infection

-with telegenictasia

* one of immunodeficiency disorders, therefore these patients are more prone to *leukaemia and lymphomas*.



Fragile X syndrome

- most common cause of mental retardation in boys ?

fragile X syndrome

elongated face

broad forehead

large prominent ears

congenital heart disease esp mitral valve prolapse

enlarged testis

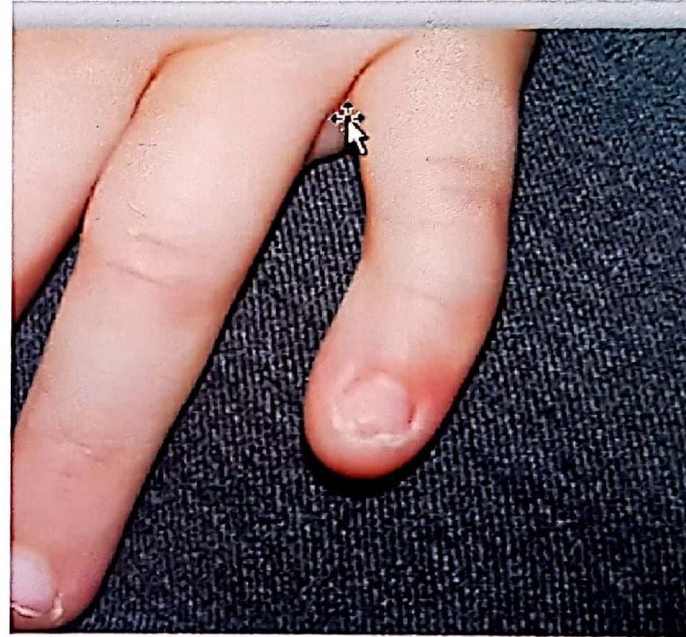
“ Tall stature and atrophied testis?
Klinefelter syndrome

”



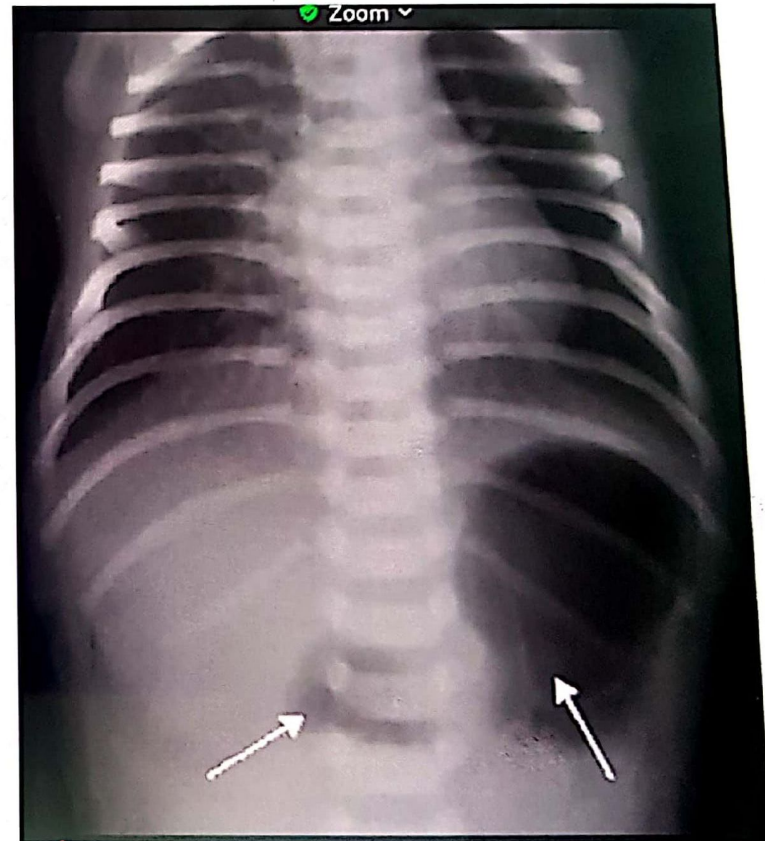
clinodactyly

- inward curve of little finger
- characteristic of down syndrome and others



double bubble sign

- in duodenal atresia
- olive sign in pyloric stenosis



epiglottitis -upper airway emergency

hx and pe:

sick looking , acute presentation

high grade fever , respiratory distress

bending forward gasping for air

drooling saliva

when you see this quickly send pt to operating room and under anaesthesia we do laryngoscopy and diagnose

dx:

swollen and red

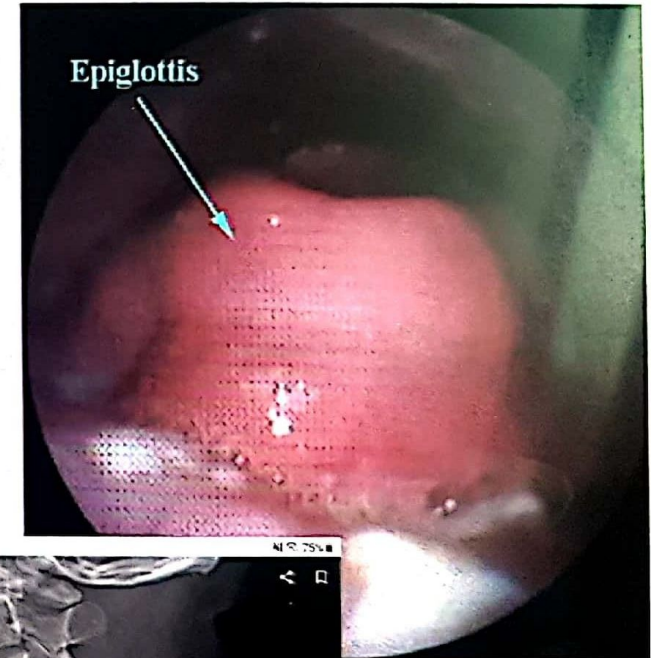
mc organism: h.influenza type b

Mgx:

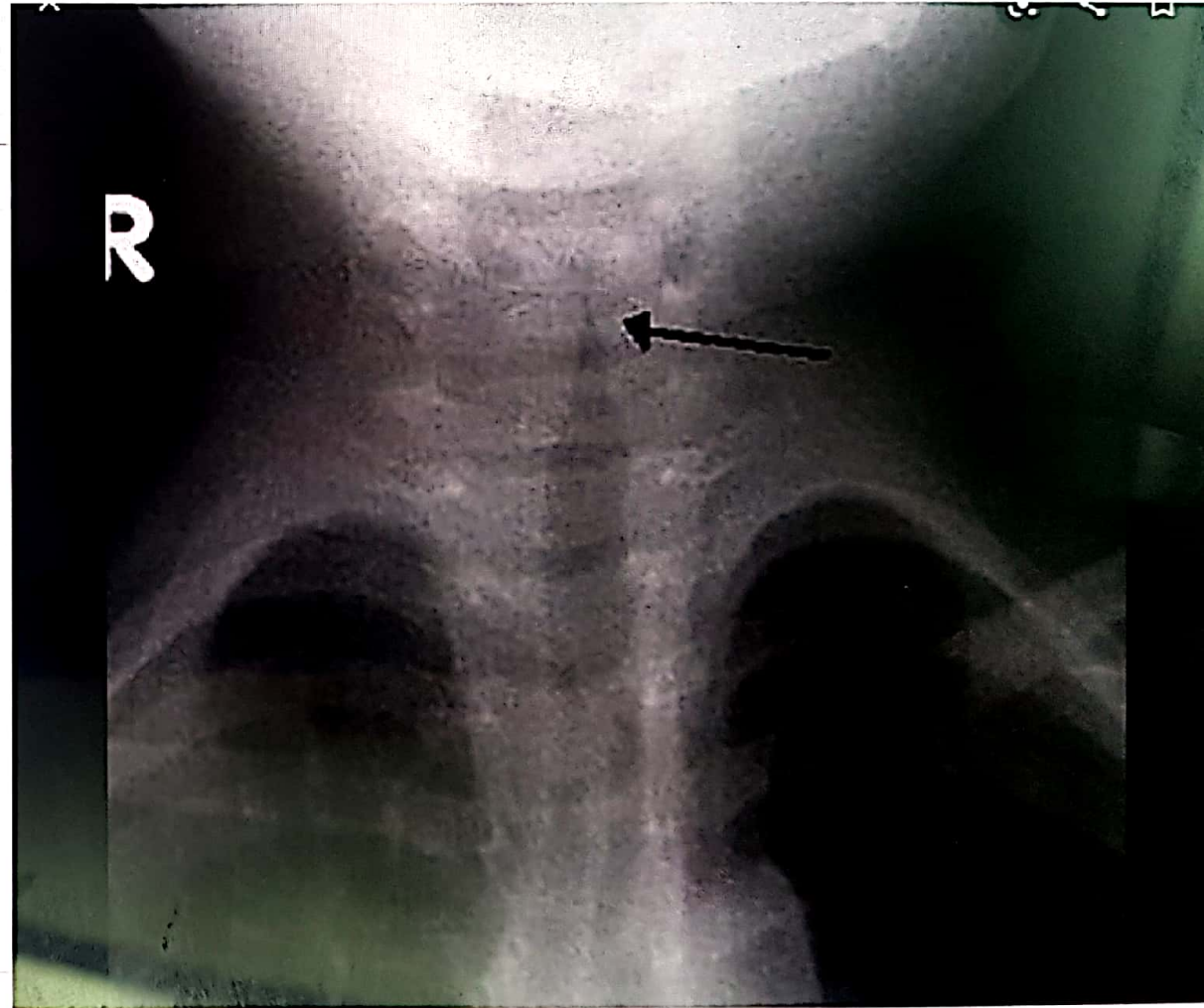
fluid and rehydration and abx

imagine when you did laryngoscopy you didn't find inflammation(normal epiglottis) instead, you found pus secretion from trachea. do suction and send to histology or lab (bacterial trachitis --> staph aureus)

if you made an lateral x- ray (we usually dont; We sent OR directly), well find thumb sign



**steep sign
also seen in
epiglottitis-
narrowing in
upper airway**



untreated congenital hypothyroidism

coarse features and large tongue



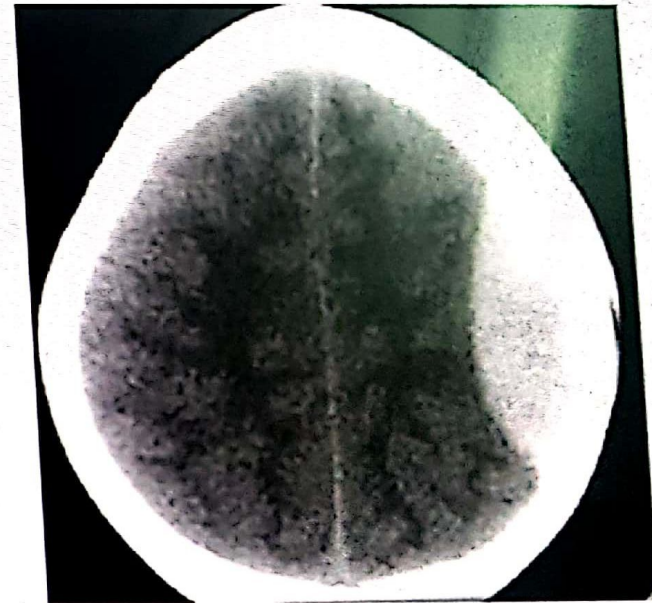
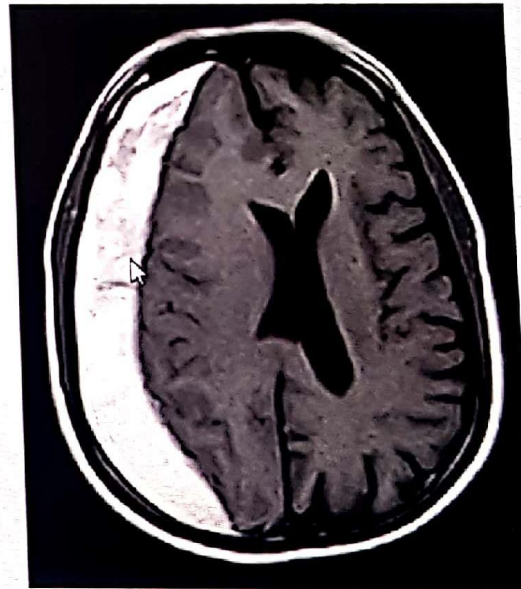
subdural hemorrhage(crescent shape) --> veins (cortical bridging veins)

epidural hemorrhage--> middle meingeal artery

{ trauma , loss of consciousness, wake up, LOC ,, and so on..) -->

(poor prognosis)

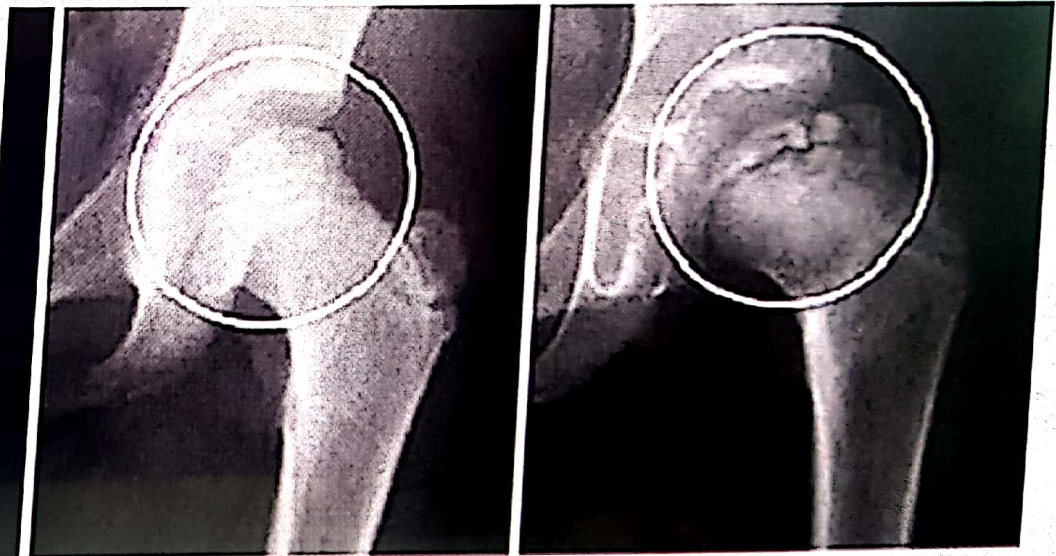
lucid interval



perthes disease

necrosis of femoral head

painless limbing is the most important sign



Normal hip

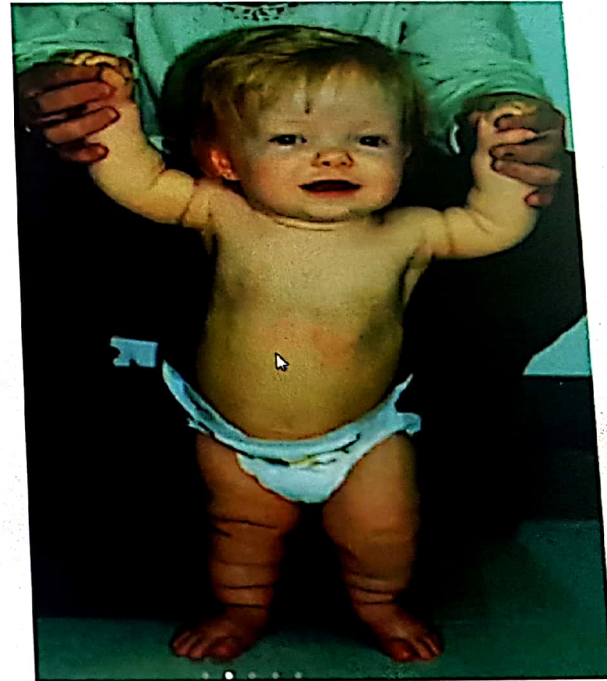
Hip with perthes

...

achondroplasia

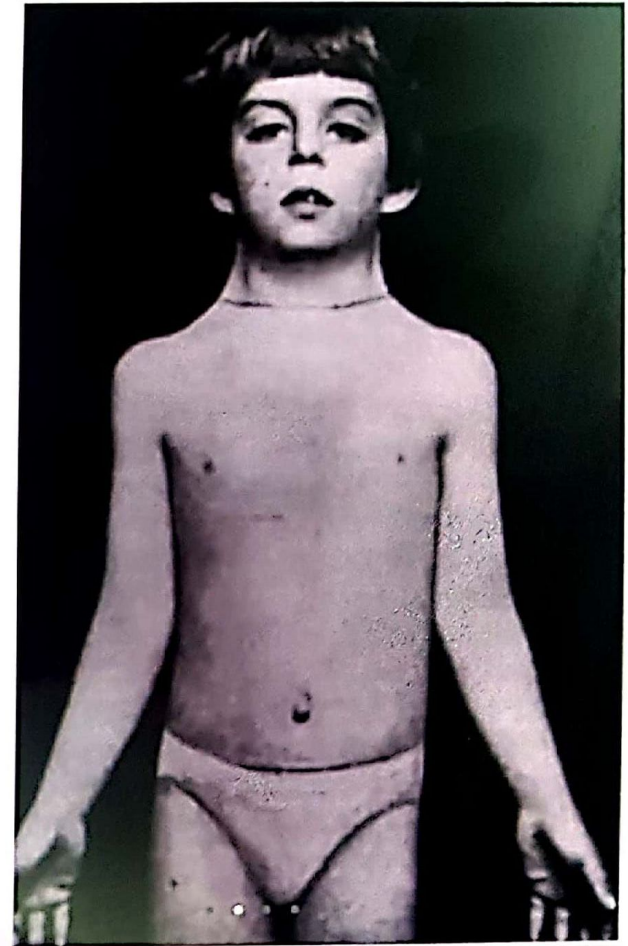
autosomal dominant or
denovo

severe short stature, normal
trunk but short limbs



Noonan syndrome

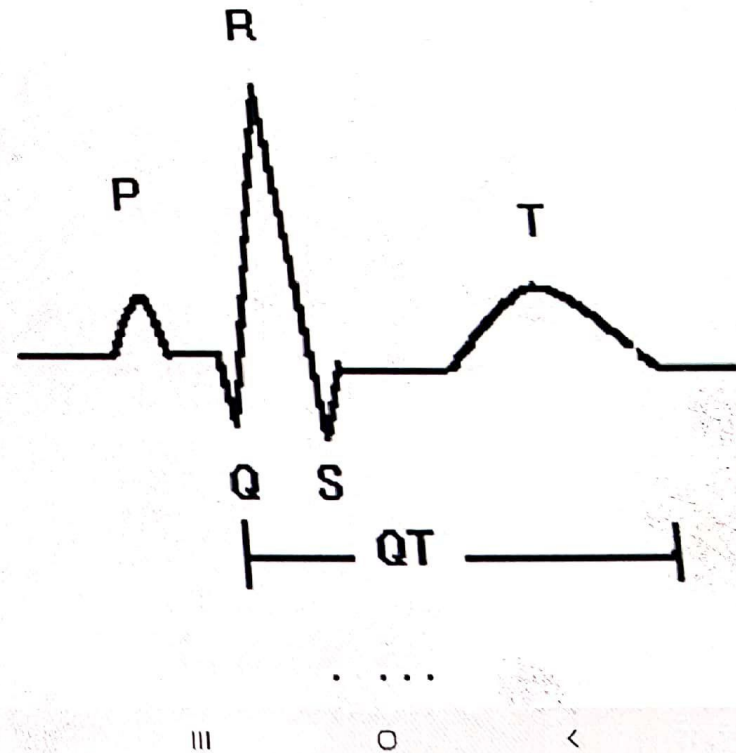
- widely spread nipples
- broad neck
- cubitus valgus
- male
- high risk for pulmonary stenosis
- ☆☆ differentiate from Turner syndrome (females, has high risk for 2 congenital heart disease mostly : bicuspid aortic valve and coarctation of aorta)*



prolonged QT interval

from the beginning of q till the end of t.

could be secondary to hypocalcemia or hypokalemia, hypothermia, intracranial bleeding or due to some certain syndromes like Romano ward syndrome?



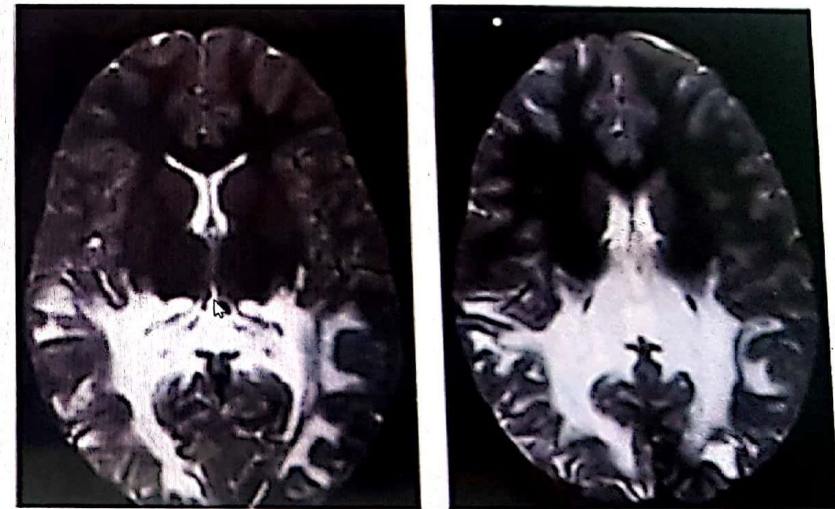
white matter disease (adrenal leukodystrophy)

MRI T2 (white matter dark, grey matter lighter, csf white)

T1 --> csf black

white matter 3aks il spinal cord..

white matter inner and grey matter outer



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tetralogy of fallout

abnormal shape - boot shape

four things

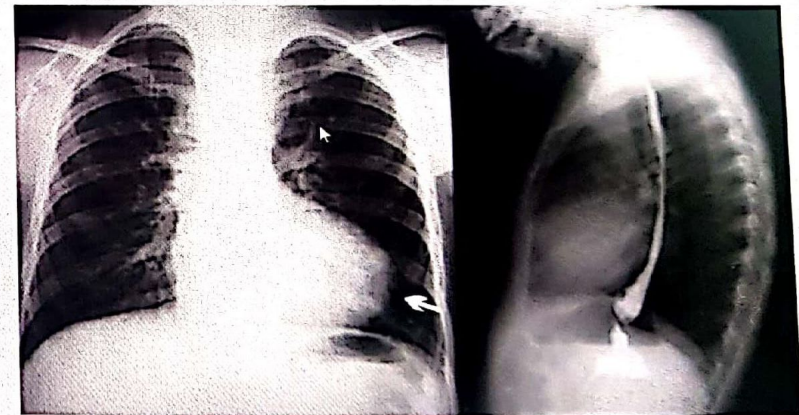
VSD, LV hypertrophy, overriding aorta,
pulmonary stenosis

we predict to be oligoemic lung field
due to pulmonary stenosis

lung field:

1- oligoemic lung field - dark lung field-
-decreased pulmonary blood flow

2- plethiric lung field -(white lung field
due to good vasculature)-- increased
pulmonary blood flow going to the lung



III

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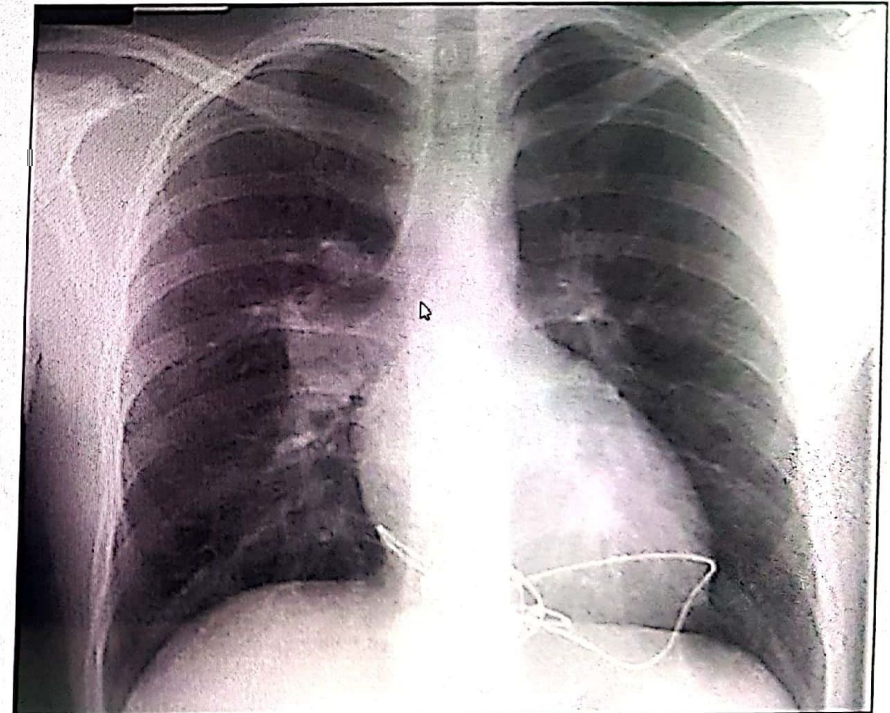
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transposition of great arteries

egg on string --TGA

plethoric lung field

cardiomegaly and narrow
mediastinum



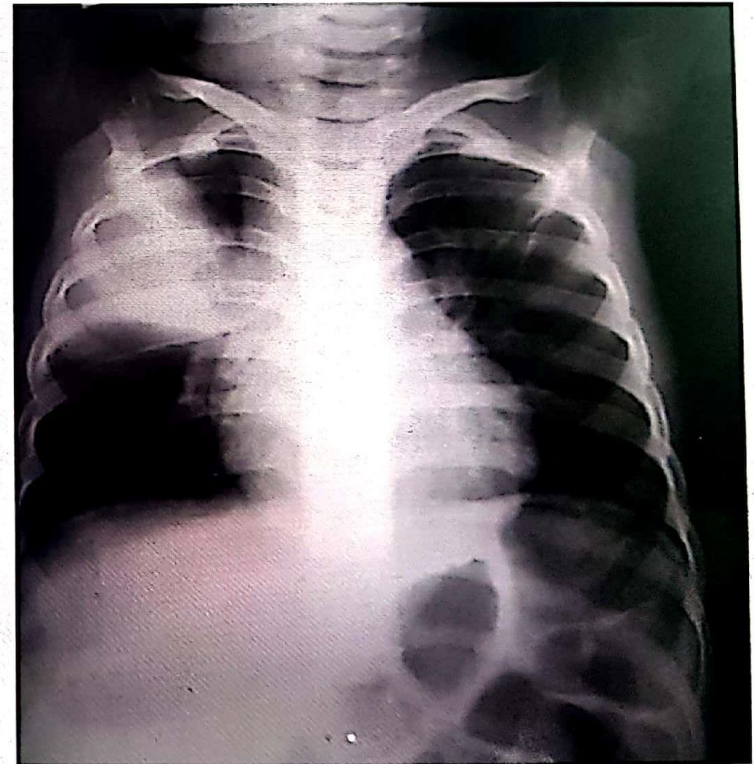
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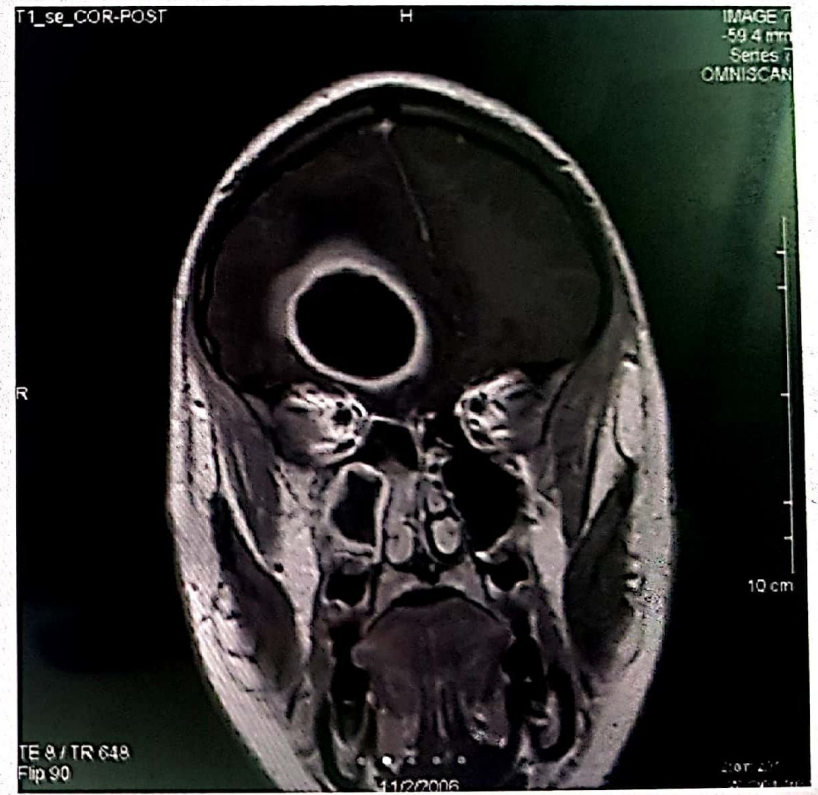
lobar pneumonia

high grade fever, cough,
crepitations on right lung



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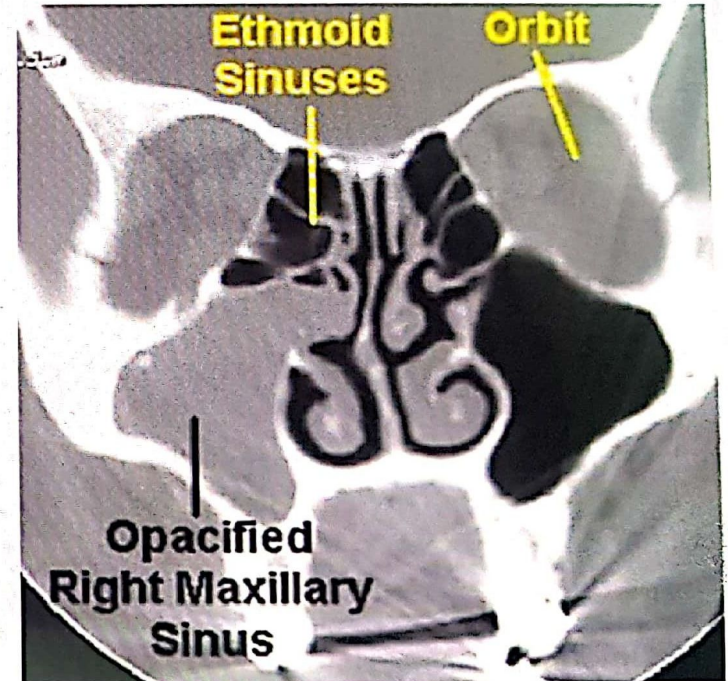
brain abscess



2 sinuses apparent in children : ME

maxillary sinus and ethmoid sinus

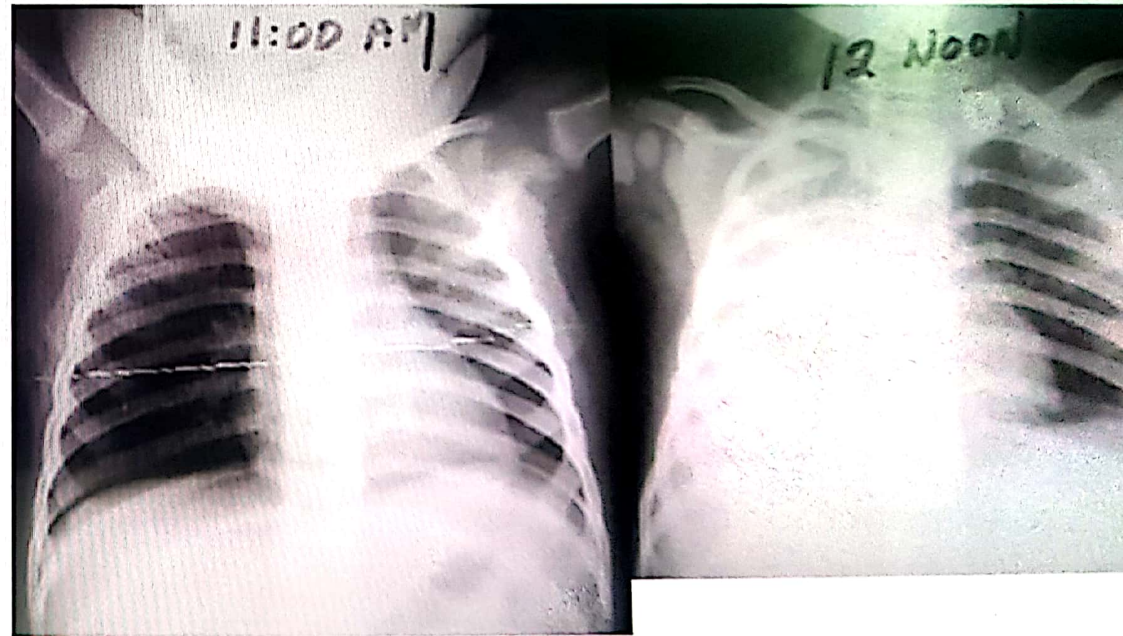
sphenoid sinus apparent at 7 years



....

foreign body aspiration

- came with respiratory distress, child was playing with his toys
- lung collapse



omphalocele

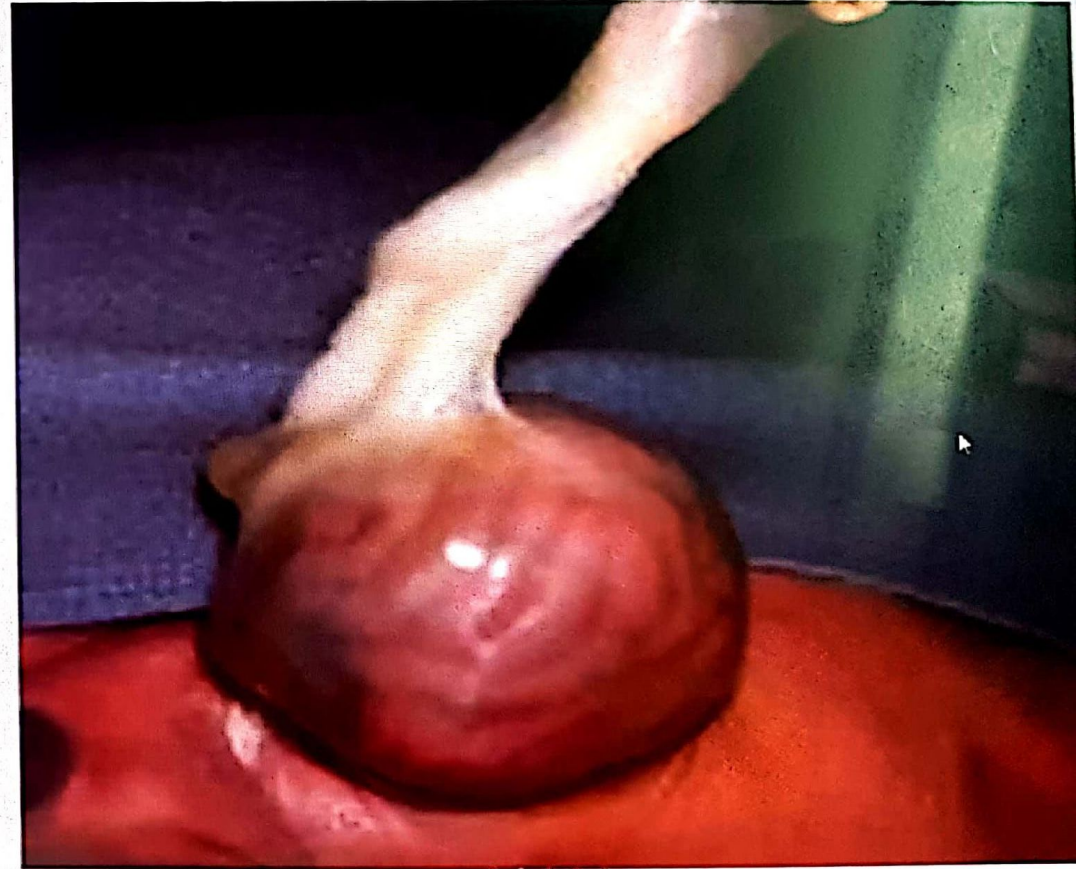
viscera covered with protrusion from umbilicus and covered by membrane

even when surgery is done he will not go back to normal..

associated with other morbidities mainly part of syndrome :

macrognathia, omphalocele, transverse ear crease , hypoglycemia due to beta cell ...(excess insulin) .. **dx?beckwith weisman syndrome**

if not covered by membrane -- gastroschisis



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gastroschisis

better prognosis than
omphalocele

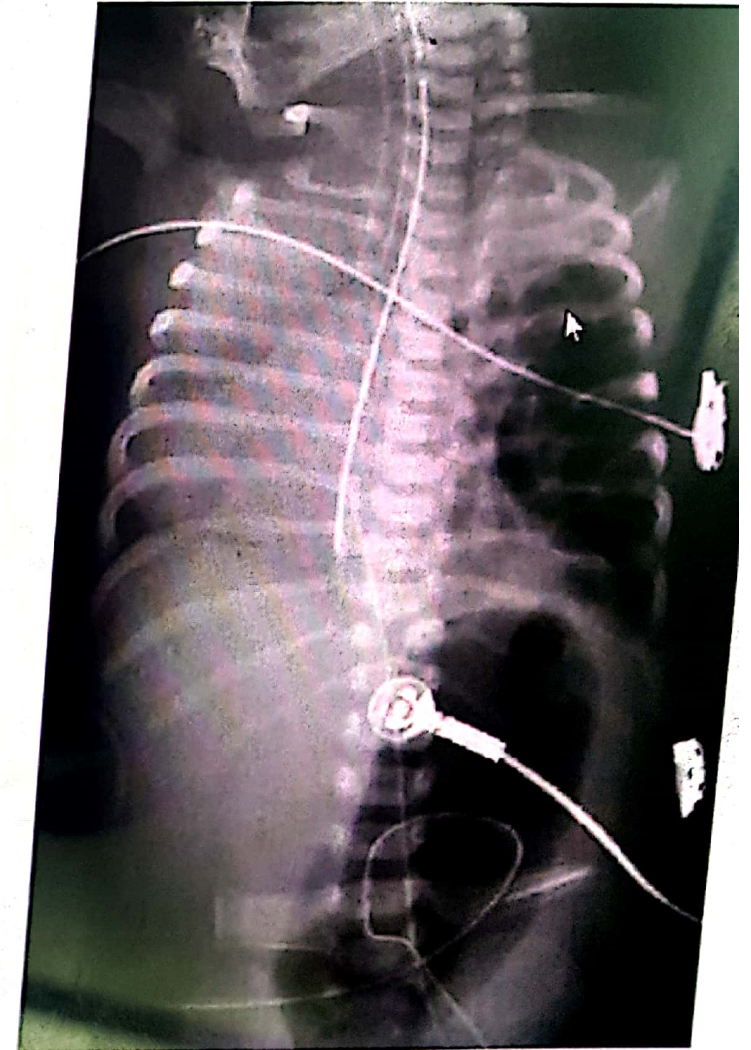
once correction surgery is
done everything will go back
to normal. (no associated
anomalies)



diaphragmatic hernia

has respiratory distress

bowel in chest



sebaceous retention cyst

normal variant

small dots on nose



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erythema toxicum

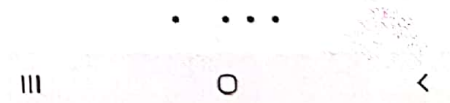
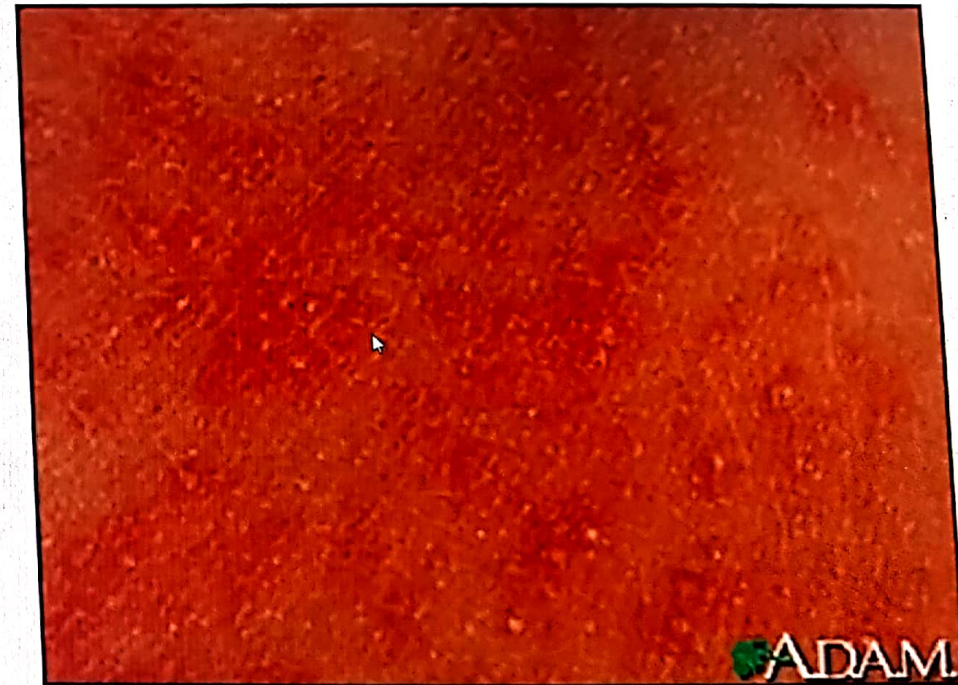
normal finding in neonates

background erythema on skin
with patches and papules

self limited - disappears on 7
days



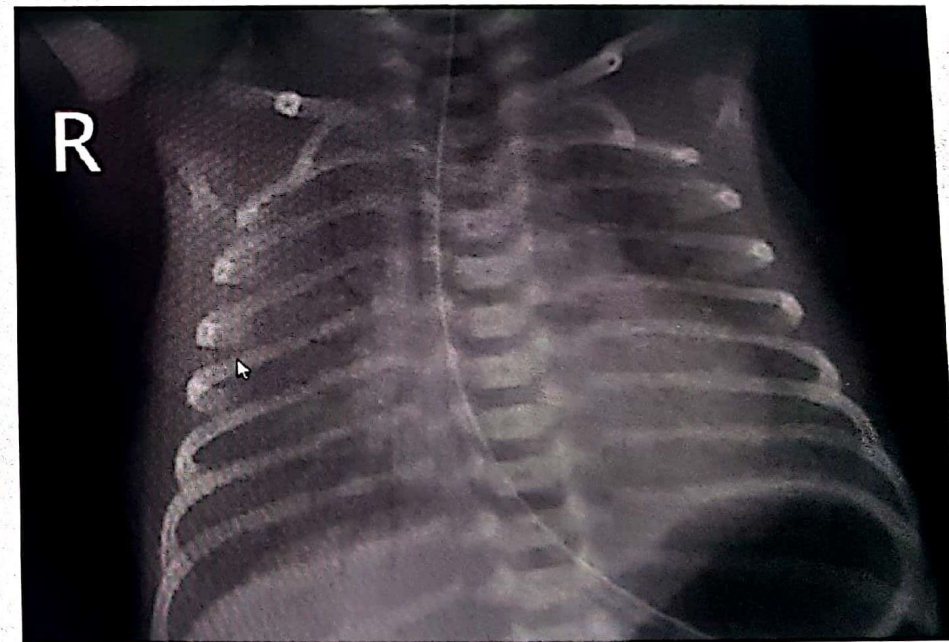
seborrhheoic dermatitis



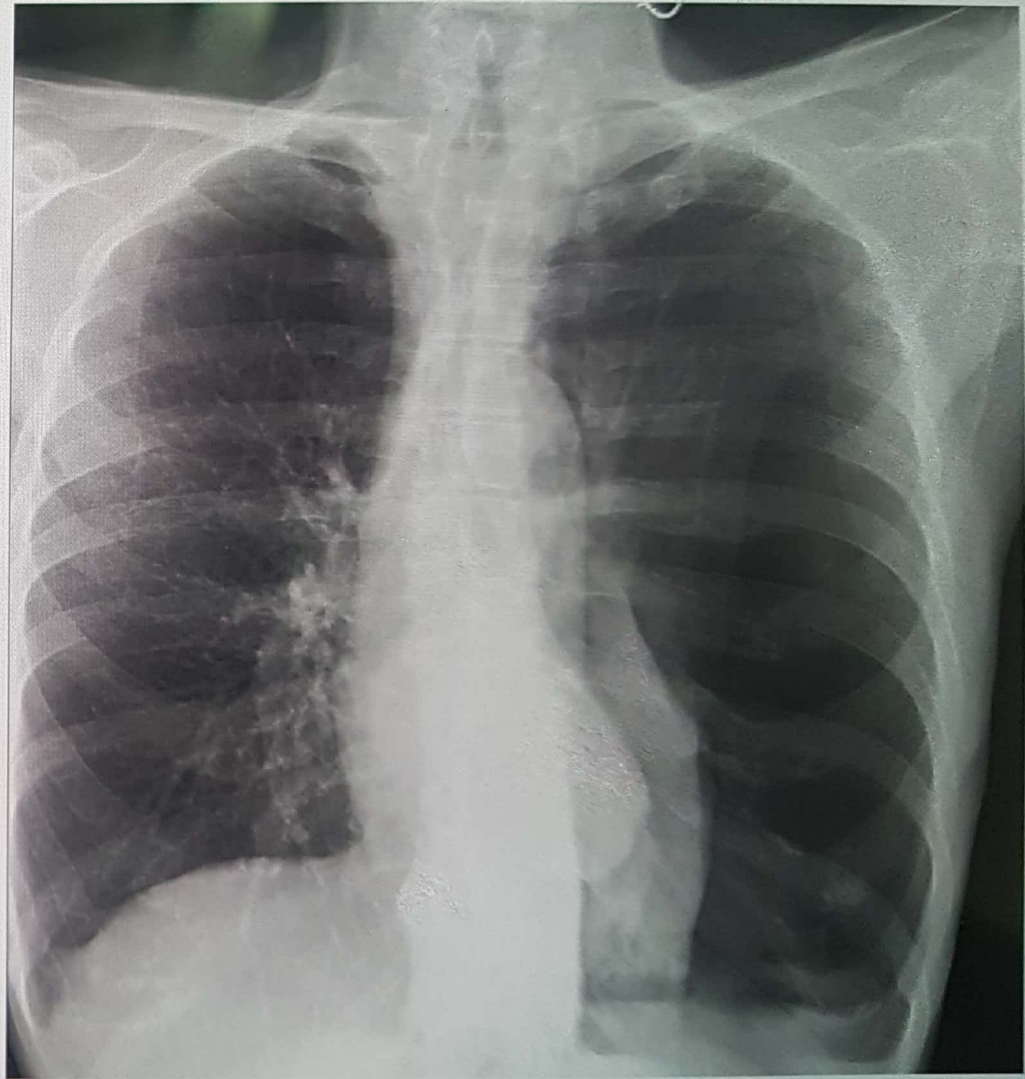
premature , reticuloglandular infiltration bilateral -- this is seen in two cases

1. respiratory distress syndrome -- we will find air bronchogram

2. congenital pneumonia .. that's why any premature baby we start on prophylactic antibiotic



pneumothorax



meconium aspiration

bilateral infiltration but not
reticuloglandular, fluffy
infiltrate , more coarse
infiltrate



transient tachypnea of newborn

pulmonary oedema, fissure
edema

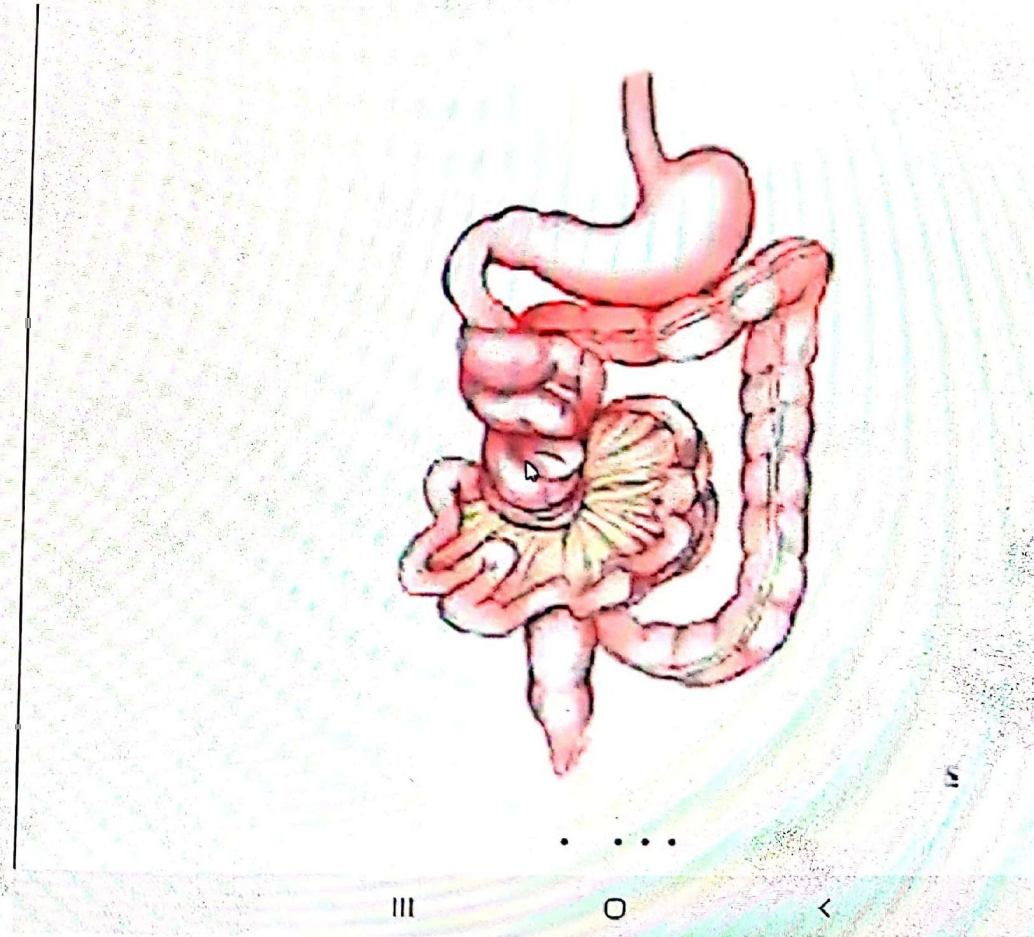
usually borns CS, have
retention of fluids in lung
mo2aqat , just need
respiratory support like
oxygen for 2 days max.



volvulus

malrotation around superior mesenteric artery

in adult due to high fiber diet



air under diaphragm

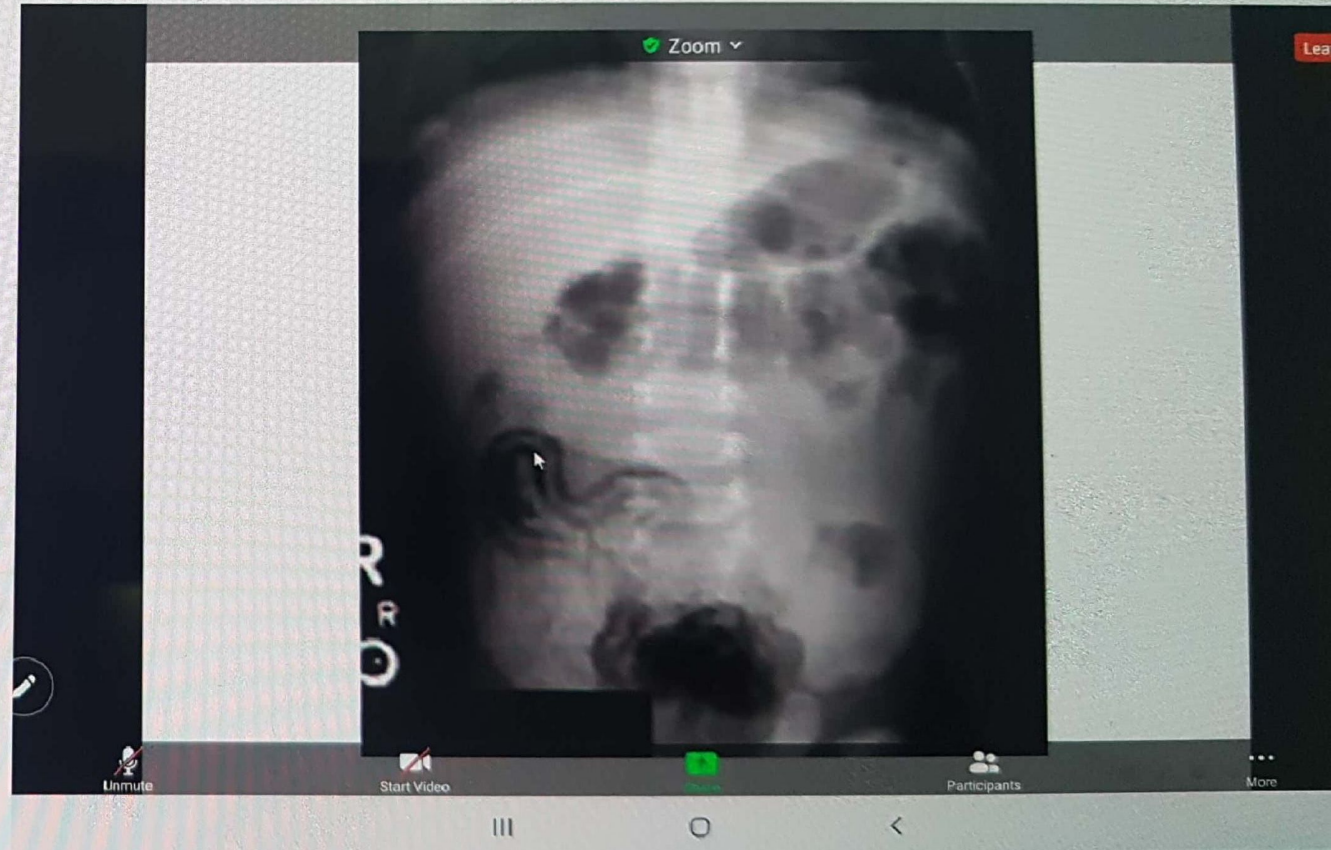
probably has perforation



pnematosi intestinalis

premature, complication of gi system of premature, has this sign

common complication in premature children : ARDS, necrotizing interocolitis



Hirschsprung disease

delayed passage of meconium, has some sort of intestinal obstruction, he is a neonate



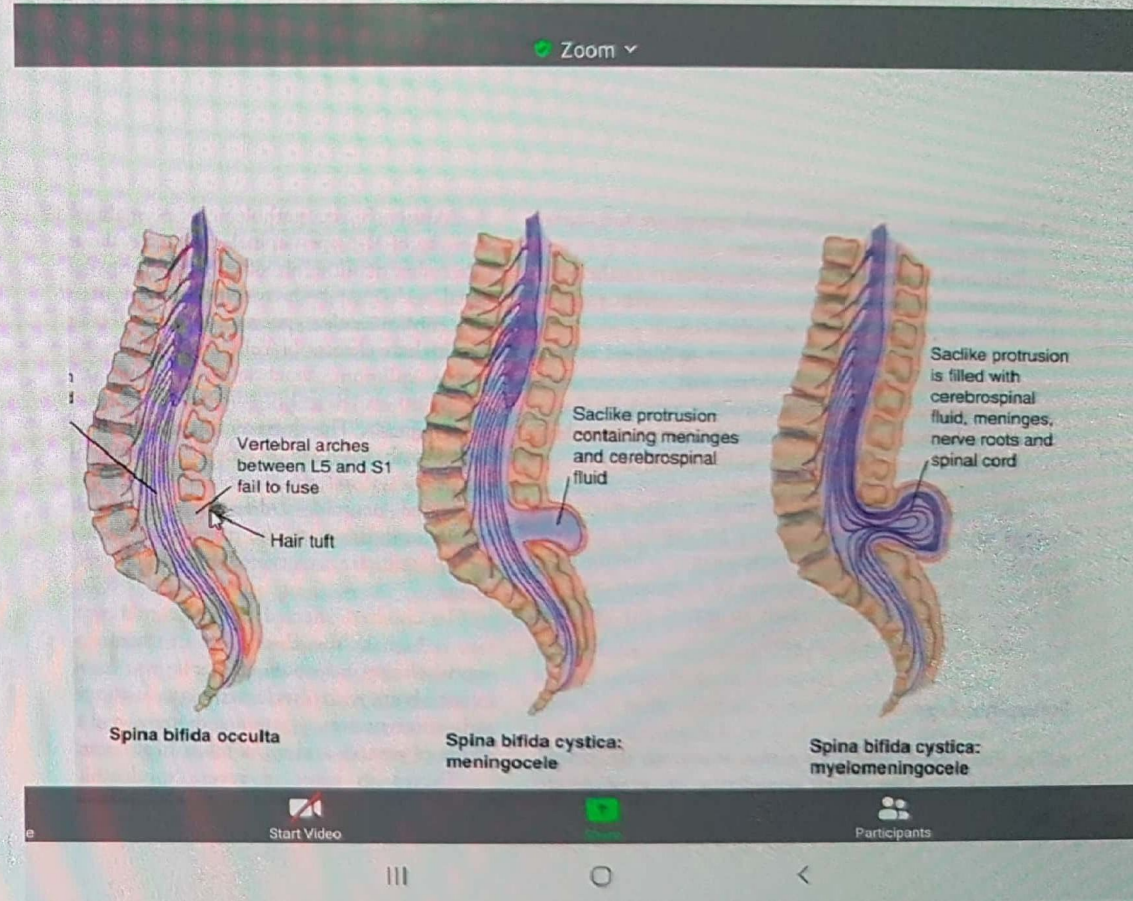
meningiomyelocele



just spina bifida without
dimples and hair tuft--- occulta

just meningeal membrane --
meningocele

with tissues--
meningomyelocele



tuberous sclerosis

one of the neurocutaneous syndromes , periventricular calcification, findings: edematous and schagreen patch - thick skin on orange peel texture and angual fibrosis



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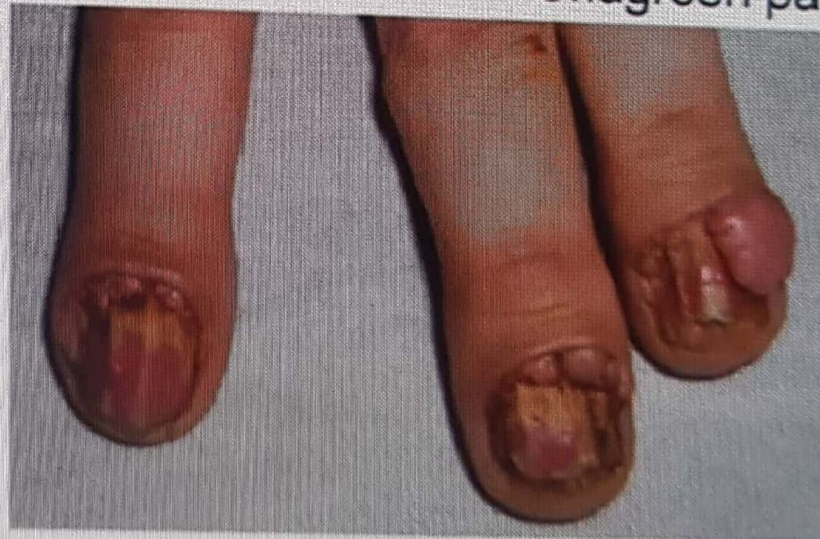
Tuberous sclerosis



Adenoma sebaceum



Shagreen patch



Ungual fibromas

anti reflux



lactose free

for patients with
galactosemia or lactase
deficiency

HA-- hypoallergenic .. for
patients with cow milk allergy



v tach

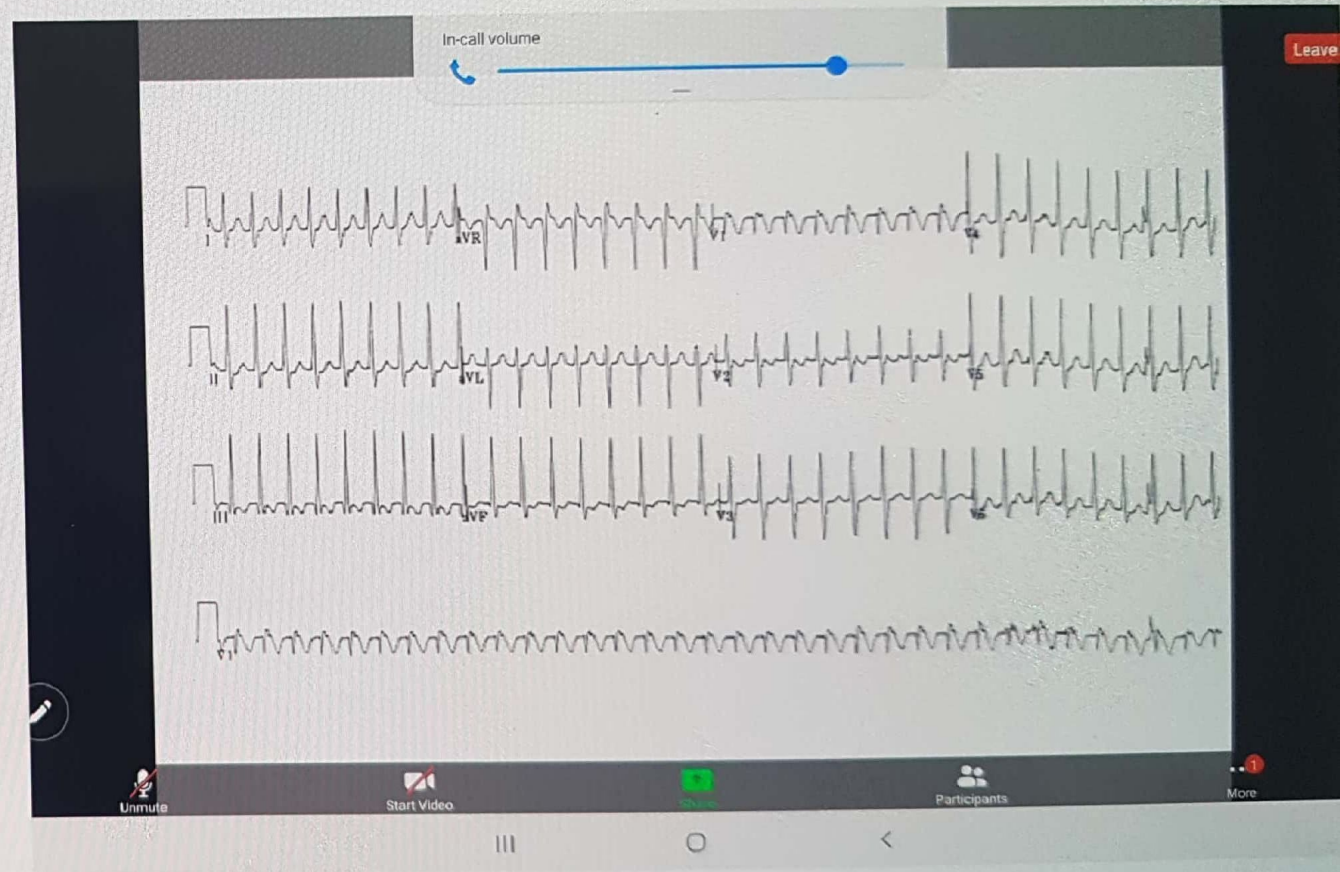
wide qrs interval
tachycardiq



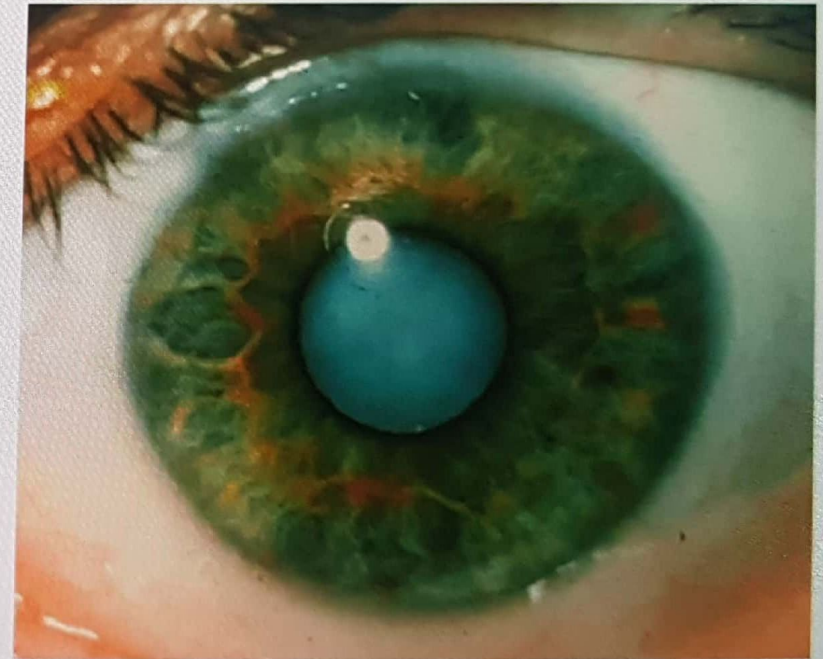
svt

narrow qrs and absent p wave

treated by adenosine



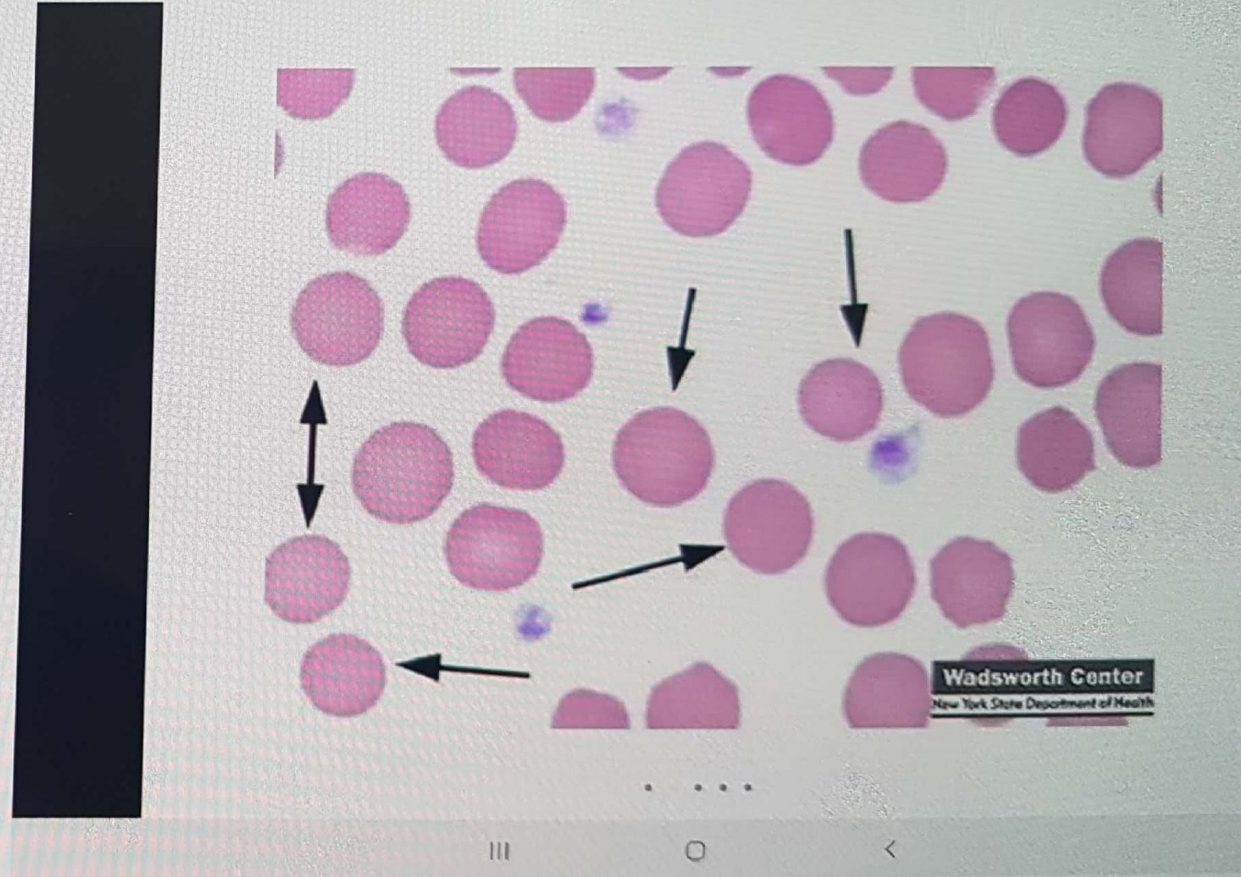
cataract



spherocytosis

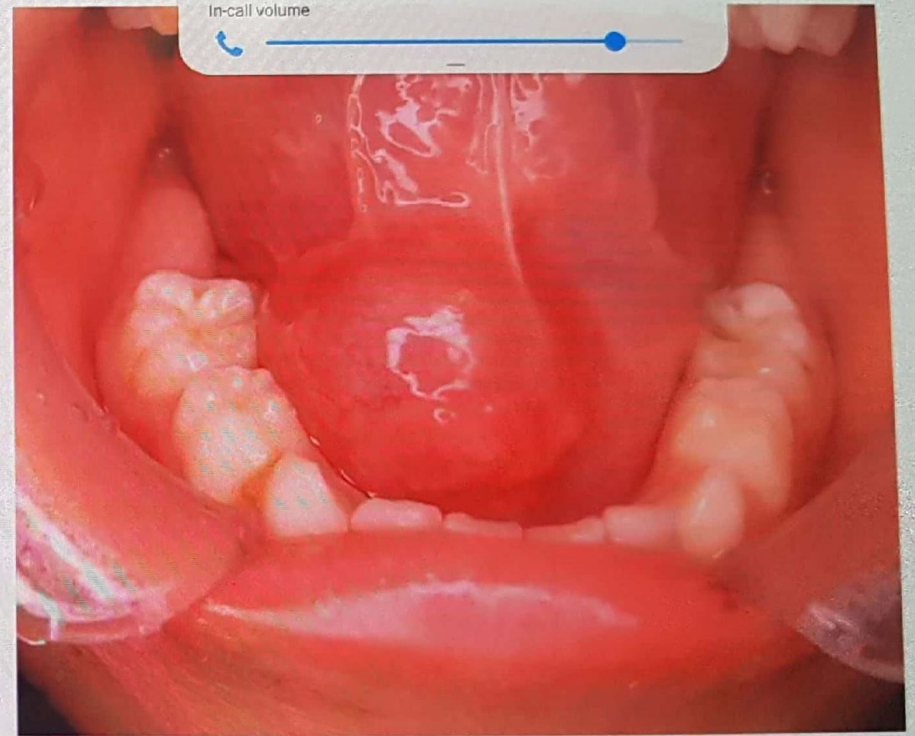
hemolytic anemia

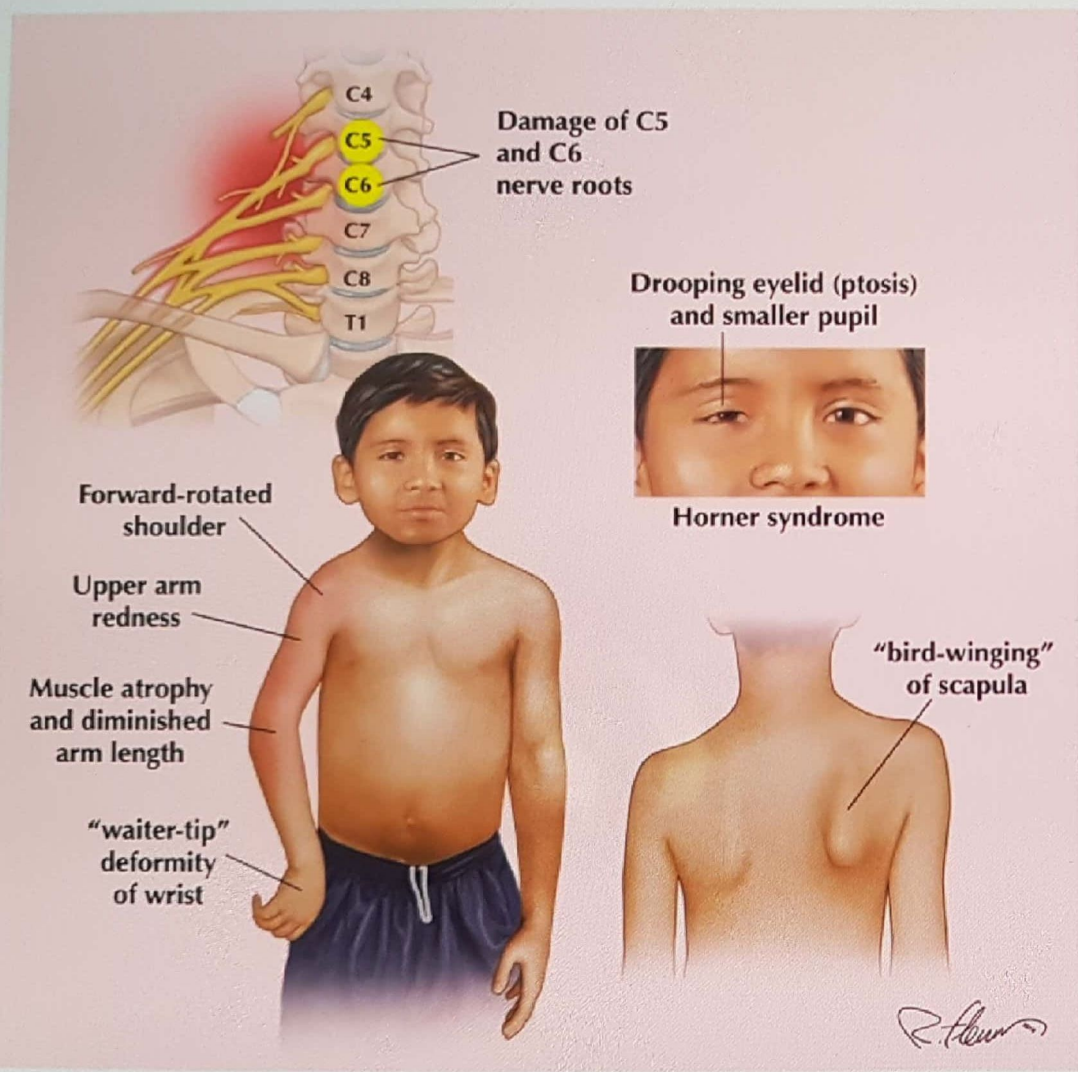
aut. dominant



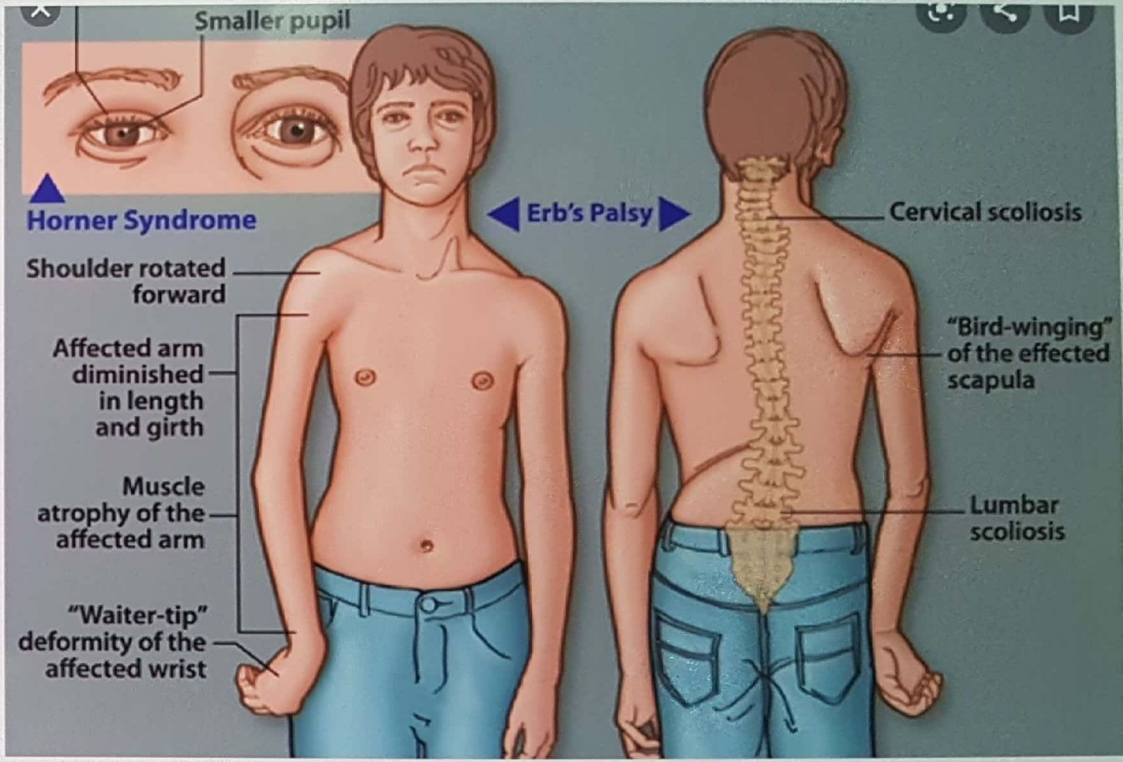
Ranula

mucus retention cyst
sublingual





Erb's palsy



splinter hemorrhage

seen in subacute bacterial
endocarditis

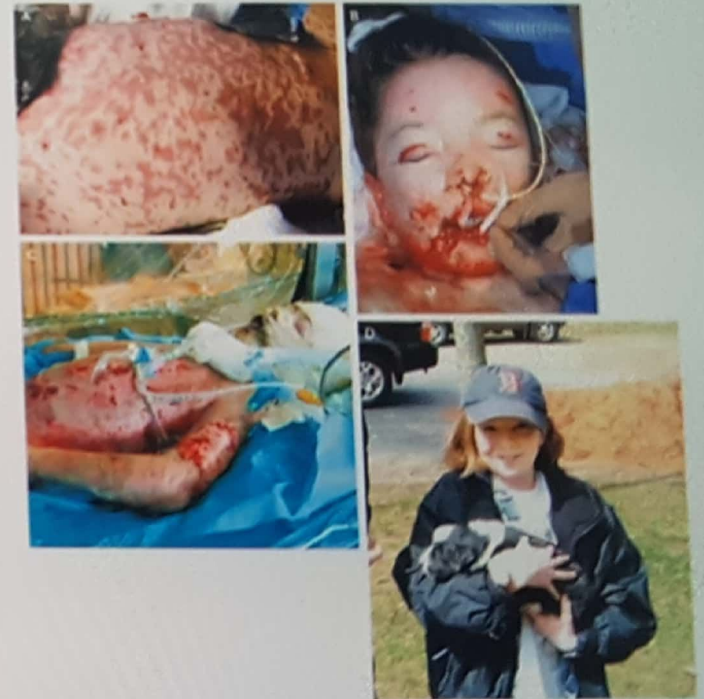


purpura, fever, (think of
Nisseria meningitidis) so she
has meningitis

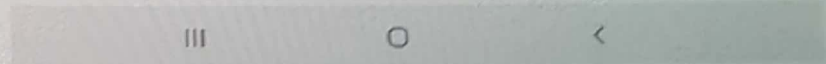
intubated

took rocephen

complete recovery



• • •



gram stain for nisseria
mengidiitz

color: grame negative , red

