BTR Pediatrics - 16-10-2025

Dr. Zainab Vora

1. An ultrasound shows a fetus with intrauterine growth restriction with head circumference at 75th percentile. All of the following could cause this pattern except:

A. Poor maternal nutrition ✓✓
B. Pregnancy-induced hypertension ✓✓
C. TORCH infections / Aneuploidy - Symm
D. Placental insufficiency / Preclamp

EFW < 10th percentile + abN doppler /

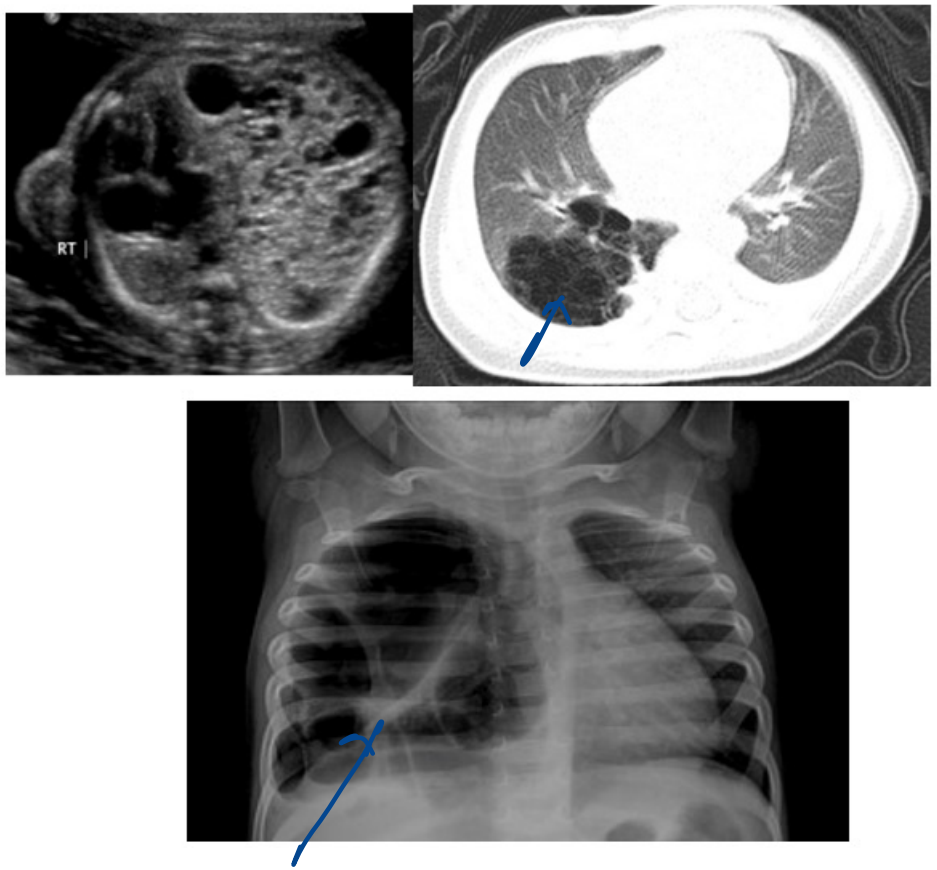
< 3rd percentile

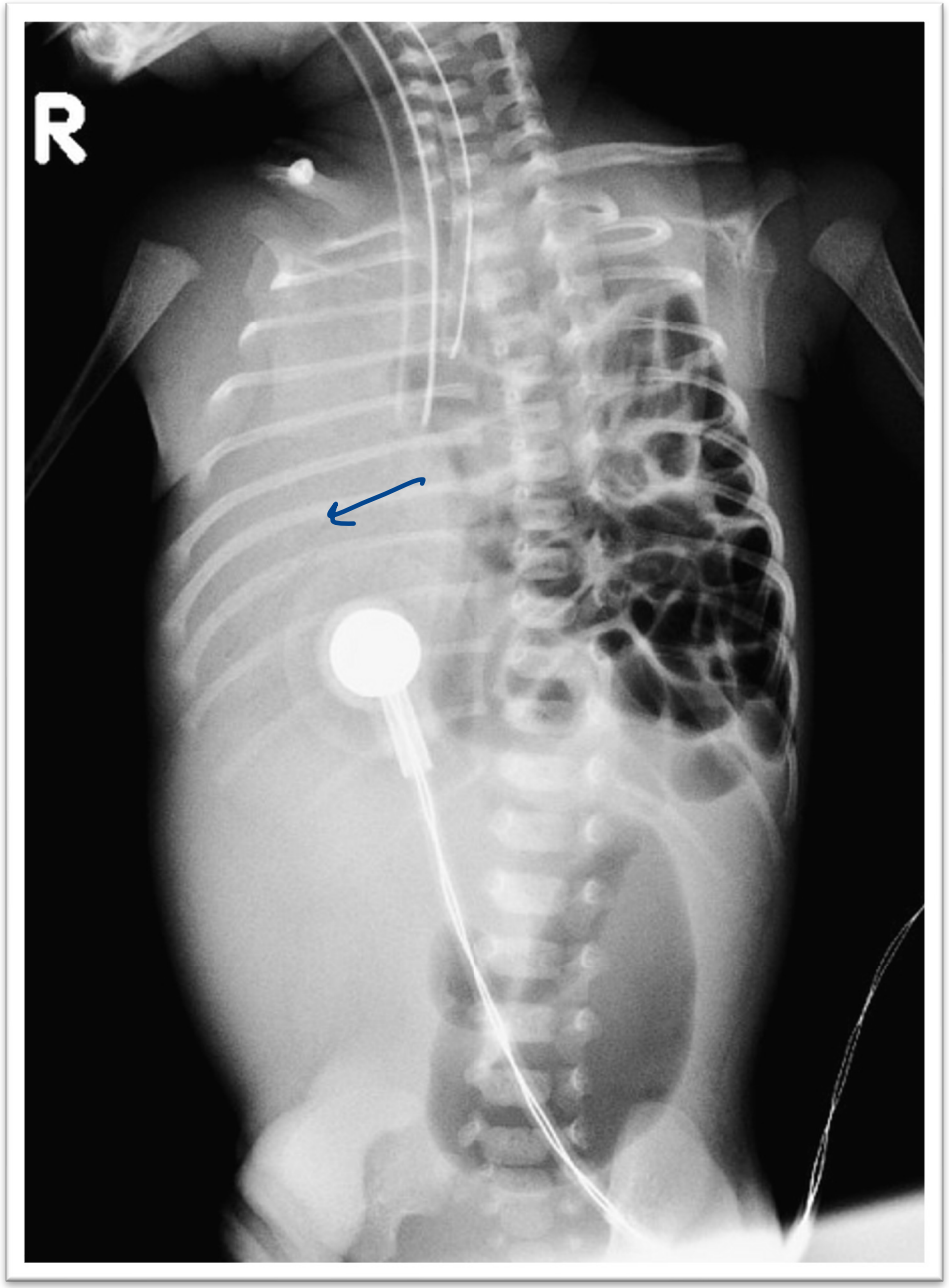
'Head sparing'

Asymm IUGR

2. A 6-year-old child presenting with recurrent respiratory infections. What is the likely diagnosis?

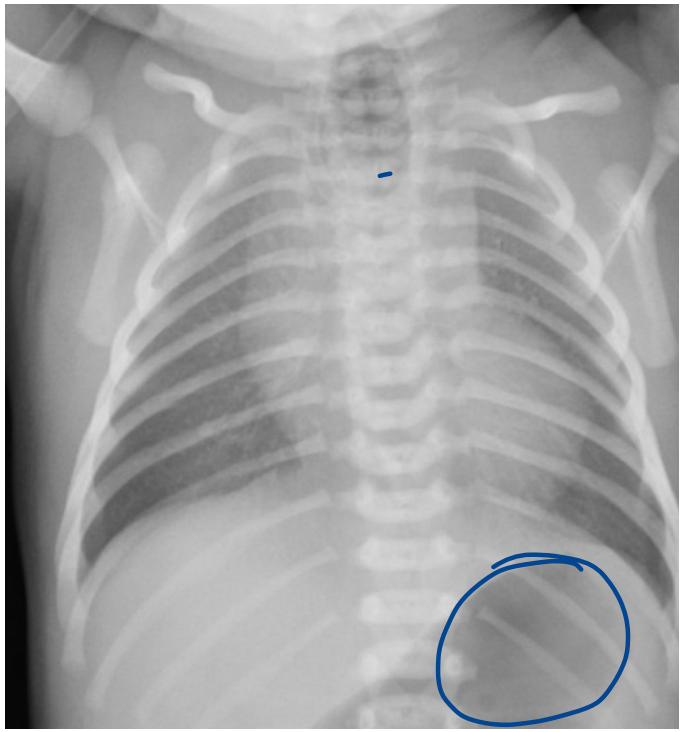
A. Pyopneumothorax
B. CPAM
C. CDH (Bochdalek)
D. Lung abscess



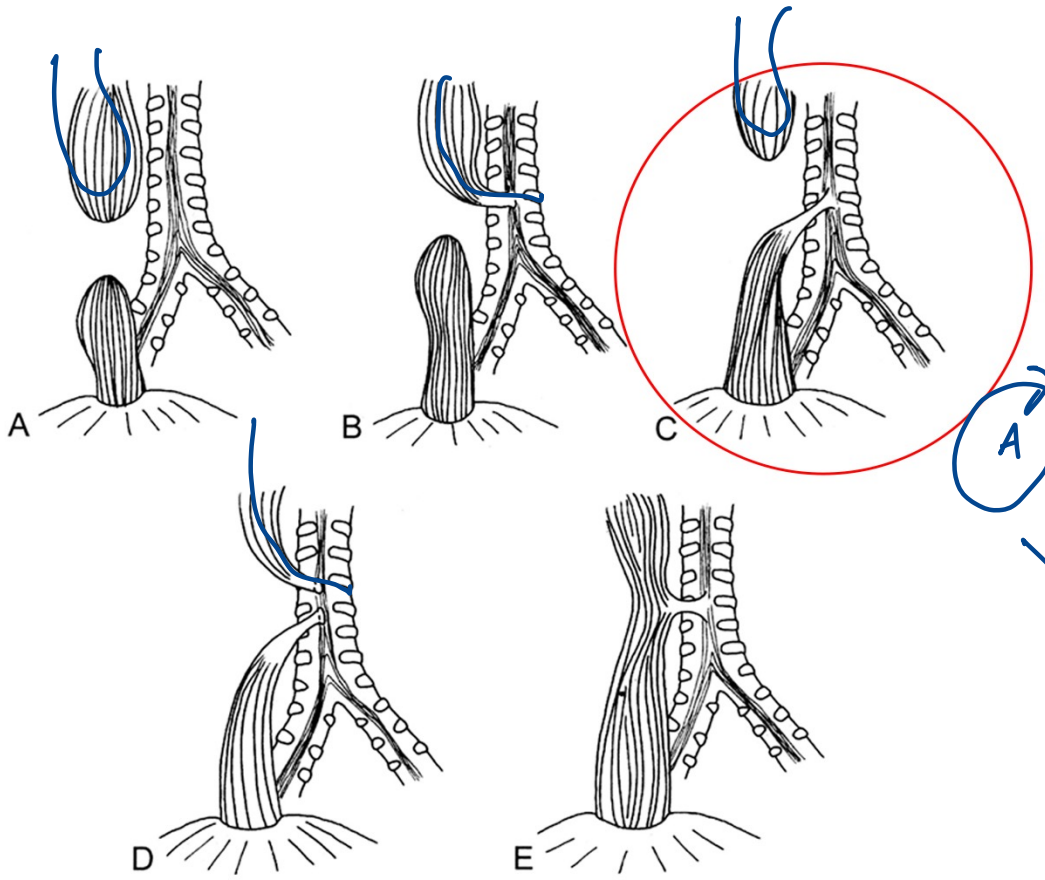


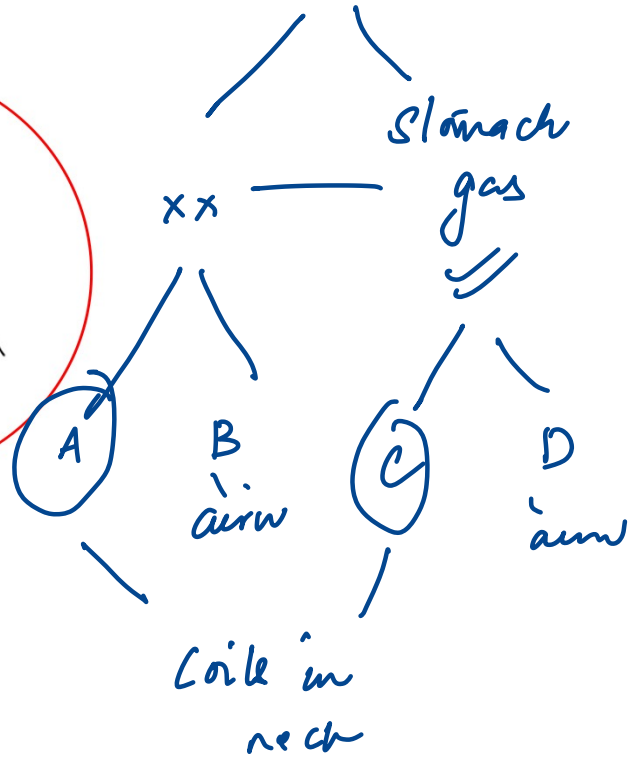
CDH → Lung-Head ratio
<1 ☹
EXIT procedure

3. A newborn baby presents with continuous dribbling of saliva and choking while feeding. CXR is shown here. Identify the type of TEF:



A. A
B. B
C. C
D. E


A
B
C
D
E


xx
Stomach gas
A
B
air
C
D
air
Coil in neck

4. Which of these is incorrect about Wilms' tumor?

A. Can invade into the IVC
B. Presents in children < 5 years of age
C. Calcification is uncommon
D. Lung metastasis is rare

NB
Ca 2+ (−)
- invasion → encase
- lung mets → bone mets
- one side → midline

NB 4S
<18mon
- skin
- marrow
- liver

5. A 5-month-old girl is brought to the physician for a weight check. The patient has been evaluated several times for poor weight gain. Current weight is <5th percentile; length and head circumference have been tracking along the 25th percentile. The infant appears thin, but the remainder of the physical examination is unremarkable. Newborn screening results were normal. Laboratory results are as follows:

Serum Chemistry:
- Sodium: 140 mEq/L
- Potassium: 3 mEq/L
- Chloride: 121 mEq/L
- Blood urea nitrogen: 10 mg/dL
- Creatinine: 0.5 mg/dL
- Calcium: 9 mg/dL
- Glucose: 98 mg/dL

Arterial Blood Gases:
- pH: 7.21
- $PaCO_2$: 31 mm Hg
- Bicarbonate: 14 mEq/L

Urinalysis:
- pH: 7.9
- Potassium: Normal
- Sodium: Normal

Which of the following is the most likely cause of this patient's failure to thrive?

A. Cystic fibrosis
B. Gastroesophageal reflux
C. Insufficient caloric intake
D. Fanconi disease

6. Which of the following statements is incorrect about breastmilk composition?

A. Polyunsaturated fatty acids help nerve myelination.
B. Lactoferrin provides antimicrobial action.
C. Breastmilk is deficient in vitamin C
D. Exclusive breastfeeding may cause vitamin D deficiency.

vit K 1mg im.
Fe

7. A 10-month-old infant presents to the OPD with a 3-day history of lower respiratory tract symptoms accompanied by expiratory wheezing. A chest X-ray is shown below. Which of the following statements is incorrect regarding this condition?

A. The mainstay of treatment is antibiotics
B. The risk increases in infants born to young mothers or those exposed to maternal smoking during pregnancy
C. There is a greater risk of asthma
D. Breastfeeding is protective

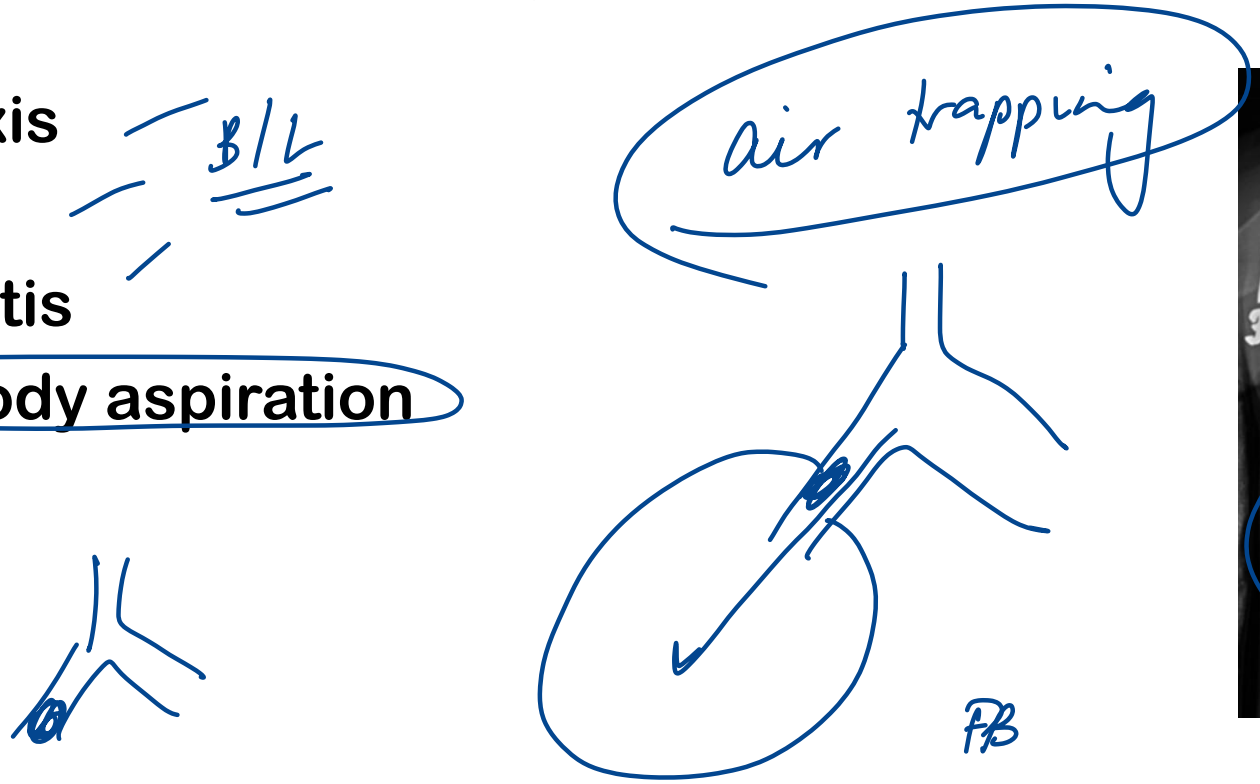
RSV → bronchiolitis
↓
High-risk: Ribavirin // palivizumab → F protein → prophylaxis.

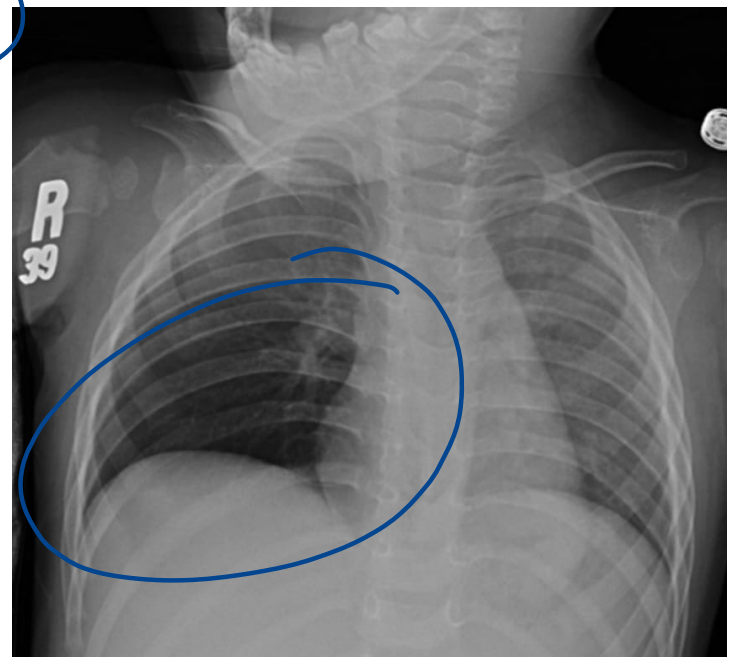
8. A concerned mother brings her 4-day-old infant and worriedly points to the rash that appears as shown below. Microscopic examination of this lesion revealed neutrophils. Which of the following is the most probable diagnosis?

A. Pustular melanosis
B. Mongolian spots
C. Erythema toxicum
D. Cutis marmorata

9. 8-month-old boy is brought to the emergency department due to respiratory distress. Severe cough and wheezing began an hour ago while the patient was playing at his cousin's house. Chest radiograph is shown in the image below. Which of the following is the most likely cause of this patient's symptoms?

A. Anaphylaxis
B. Asthma
C. Bronchiolitis
D. Foreign body aspiration





10. Which of the following statement is false in a 1-year-old child?

A. Chest circumference is equal to head circumference

B. Birth weight is quadrupled

C. Arm span is lesser than height

D. Head circumference is approximately 46–47 cm

Weight with age:

Birth – x
20-40g/day * 3months
400g/month till 1 year
5mon – 2x
1yr – 3x
2yr – 4x
3yr – 5x
5yr – 6x
7yr – 7x
10yr – 10x

Height with age:

Birth – 50cm
3mon – 60cm
1yr – 75cm
2yr – 90cm
4yr – 100cm
6cm / yr till 12yrs

50% P

US:LS :

Birth 1.8 : 1
3yr 1.3 : 1
7yr 1 : 1
Adults: 0.9 : 1

33 + 12
= 45

HC

Birth-32-35cm
1st 3month: 2cm/month → 6
Next 3month: 1cm/m → 3
Next 6month: 0.5cm/m → 3
Next 2 yrs: 0.25cm/m
>2cm/month always abN

12cm

HC > CC by 2.5cm at birth
At 9-12mon: HC=CC
>1yr: CC > HC

QQ

Surrogate marker of height: Arm span
Mid-parental height: ± 6.5cm

Proportionate short stature: GH ↓
Dispoportionate short stature-Short trunk
SED, MPS, Pott spine, Alagille Sx
Dispoportionate short stature-Short limb
Rickets, Achondroplasia, OI, Congenital hypothyroidism

Arm span is shorter than the length by 2.5 cm at birth, equals height at 11 years, and after that is slightly (usually < 1 cm) greater than height.

11. Which of the following is not seen in a child with cystic fibrosis?

A. Sweat chloride test chloride conc of 70 mEg/L ≥60 (T)
B. Increase immunoreactive trypsinogen level (T)
C. Hyperkalaemia : ↓K+
D. Contraction alkalosis

Sweat Cl- ↑↑

RAAS

12. A newborn weighing 1.6 kg is born at 30 weeks gestation. What is the best primary feeding method for this neonate?

A. Breastfeeding
B. Gavage feeding
C. Paladai feeding
D. Intravenous fluids

≥ 34 wks - bf

32 - 34 wks - spoon

30 - 32 wks - Gavage

≤ 30 wks - iv fluids.

13. A 1-month-old infant, born at 35 weeks gestation, presents with blood-streaked, mucous-filled diarrhea after taking a standard cow's milk-based formula. Symptoms resolved upon switching the formula. If a biopsy was performed during the symptomatic period, which of the following histological findings would most likely be observed?

A. Neutrophilic crypt abscesses in the colon
B. Eosinophilic infiltration in the distal colon
C. Hemorrhagic necrosis of the intestinal wall
D. Presence of heterotopic gastric mucosa in the distal ileum

14. On examination of a newborn baby, flattened nose, recessed chin, prominent epicanthic folds, and low-set ears are noted. Which of the following conditions would have led to this presentation?

A. Renal agenesis → Potter sequence

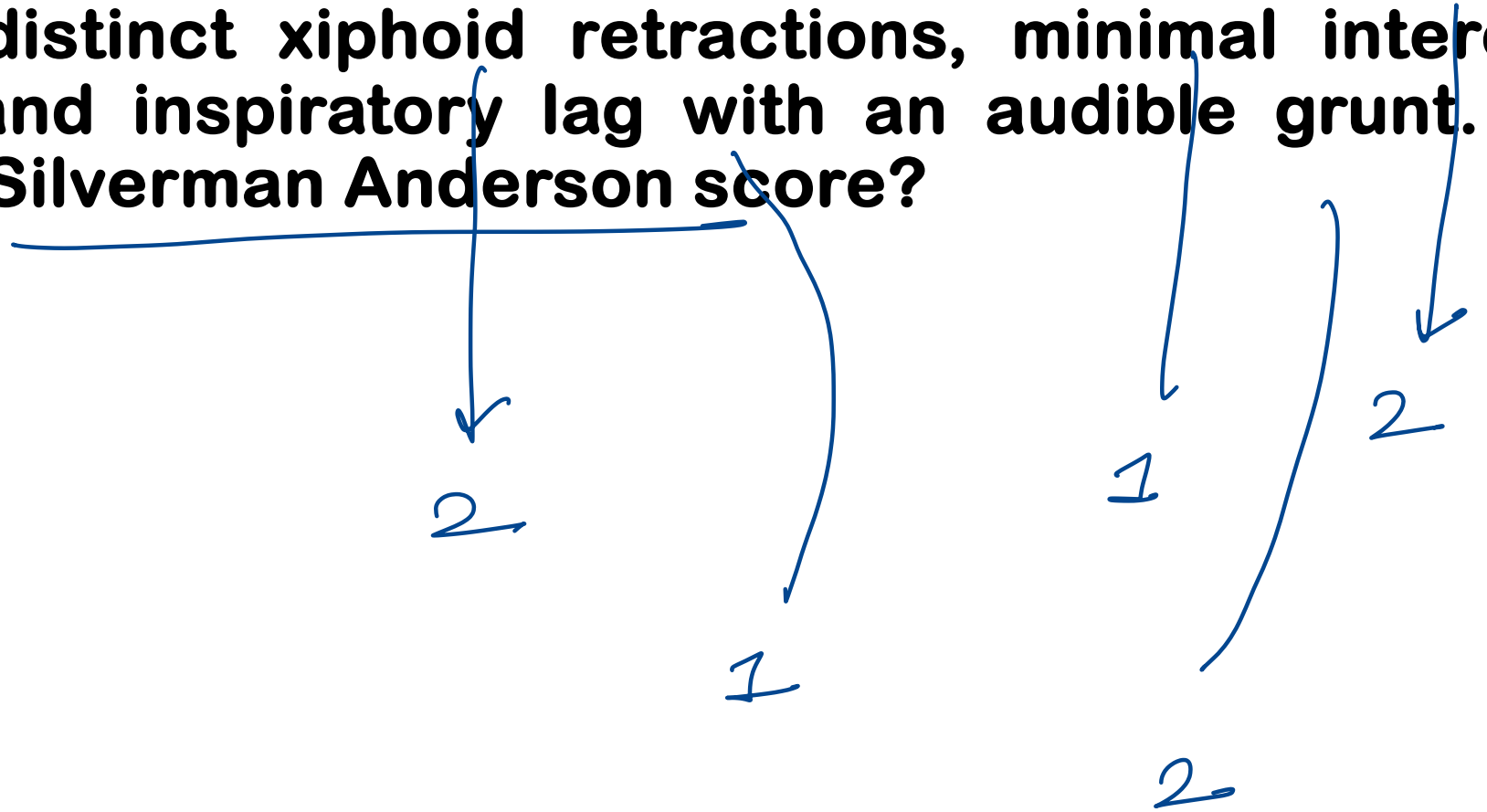
B. Tracheosophageal fistula

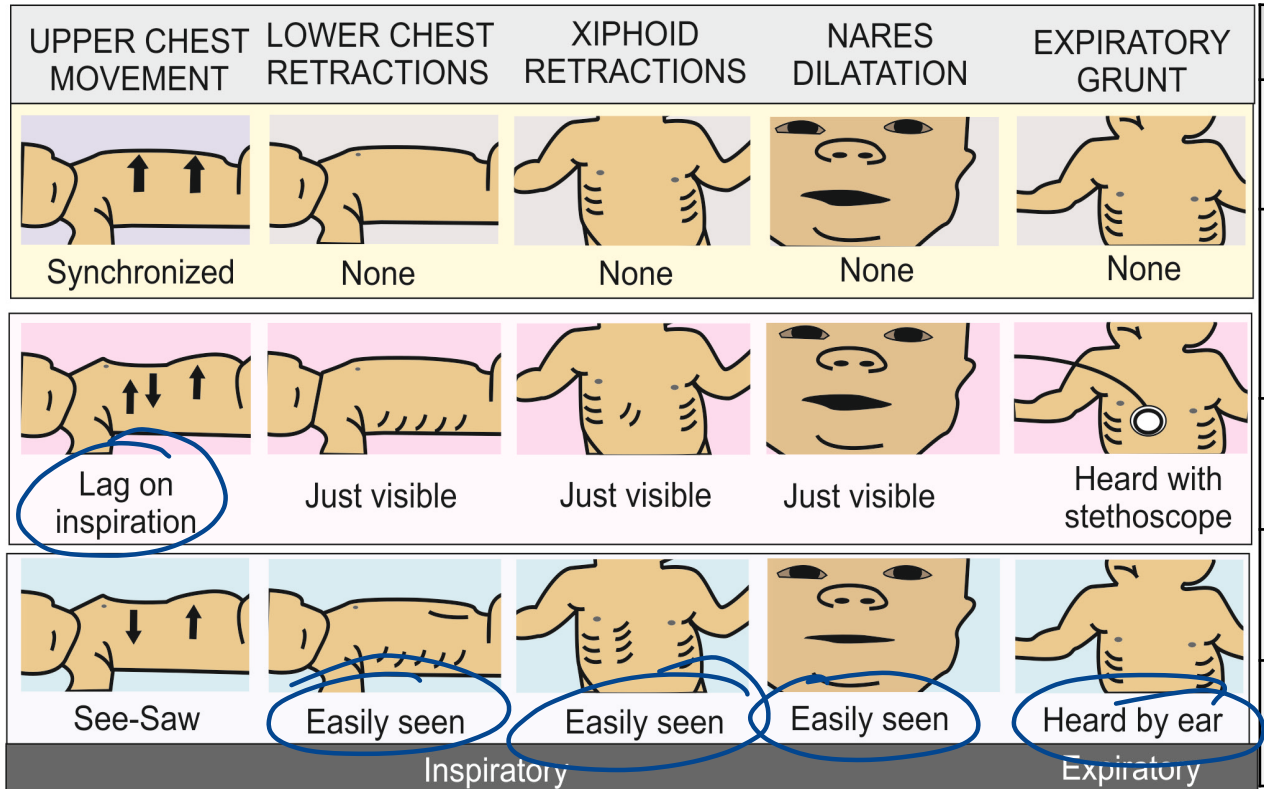
C. Trisomy 21

D. Monosomy X

15. A preterm infant in the NICU was observed to have marked nasal flare, distinct xiphoid retractions, minimal intercostal retractions, and inspiratory lag with an audible grunt. What would be the Silverman Anderson score?

A. 10
B. 7
C. 8
D. 9





Score	0	1	2
Respirate Rate	<60	60-80	>80
Cyanosis	None	No cyanosis with oxygen	Cyanosis with oxygen
Retraction	None	Mild	Moderate to severe
Grunting	None	Audible with stethoscope	Audible without stethoscope
Air Entry	Good	Decreased	Barely Audible

16. Which of the following newborn presenting with which of the following signs can be managed in a newborn stabilization unit (NBSU)?

1. Respiratory rate of 60/min without grunting or retractions
2. Sepsis who are hemodynamically stable
3. Hypothermic who are hemodynamically unstable
4. Jaundiced who requires phototherapy

A. 1, 2, 3, and 4
B. 1, 3 and 4 only
C. 1, 2, and 4 only
D. 1 and 3 only

Newborn Care Corner (NBCC)

NBCC is a space within the delivery room in any health facility where immediate care is provided to all newborns at birth. This area is MANDATORY for all health facilities where deliveries are conducted. About 20,337 NBCCs are operational in the country *(6)*.

Newborn Stabilization Unit (NBSU)

NBSU is a facility within or in close proximity of the maternity ward where sick and low birth weight newborns can be cared for during short periods. All FRUs/CHCs need to have a neonatal stabilization unit, in addition to the newborn care corner. It requires space for 4 bedded unit and two beds in post-natal ward for rooming-in. About 2,579 NBSUs are functional in the country.

Special Newborn Care Unit (SNCU)

SNCU is a neonatal unit in the vicinity of the labor room which is to provide special care (all care except assisted ventilation and major surgery) for sick newborns. Any facility with more than 3,000 deliveries per year should have an SNCU (most district hospitals and some sub-district hospitals would fulfil this criteria).

The minimum recommended number of beds for an SNCU at a district hospital is 12. However, if the district hospital conducts more than 3,000 deliveries per year, 4 beds should be added for each 1,000 additional deliveries. A 12 bedded unit will require 4 additional adult beds for the step down. 894 SNCUs are functional in the country.

Navjat Shishu Suraksha Karyakram (NSSK)

NSSK is a programme aimed to train health personnel in basic newborn care and resuscitation. It has been launched to address care at birth issue i.e. prevention of hypothermia, prevention of infection, early initiation of breast-feeding and basic newborn resuscitation. The objective of the new initiative is to have a trained health person in basic newborn care and resuscitation unit at every delivery point *(46)*.

stable

unstable

JSSK ✓

RBSK – 4Ds

17. A 4-year-old male child with a body weight of 15kg and height of 100cm is admitted with renal failure. His blood urea was 100 mg/dL and serum creatinine was 1 mg/dL. What is the closest calculated eGFR in the patient?

A. 33 ml/min/1.73 m2 BSA

B. 40 ml/min/1.73 m2 BSA

C. 55 ml/min/1.73 m2 BSA

D. 80 ml/min/1.73 m2 BSA

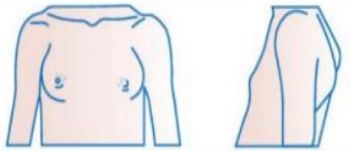
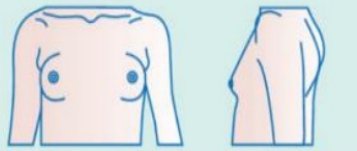
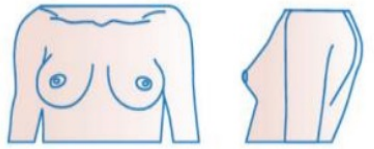
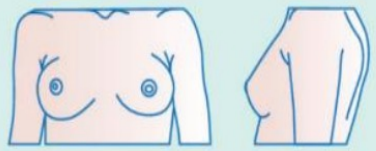
Schwartz formula

$$eGFR = \frac{k}{0.4} \times \frac{ht}{100}$$

creat 1

18. An 11-year-old girl is brought to the physician for a physical examination prior to participating in sports. She is at the 50 percentile for height and weight. Physical examination shows a normal female body habitus, a slight increase in breast areolar diameter with nipple protrusion, and normal-appearing external genitalia with sparse straight hair on the labia majora. The physician concludes that the patient's breast and external genitalia are in the same stage of sexual development. Which of the following terms best describes the sexual development of this patient?

A. Tanner stage 1
B. Tanner stage 2
C. Tanner stage 3
D. Tanner stage 5

	Tanner stage	Male genital appearance	Male genital description	Female pubic hair appearance	Pubic hair description	Breast appearance	Breast description
3 <2,5	1		Testicular volume <3ml		No pubic hair		Elevation of papilla only
4 2,5-3,2	2		Testicular volume <3ml, change in texture to scrotal skin		Sparse growth chiefly along the labia/base of penis		Breast bud stage
10 3,6	3		Increase in size of penis with further testicular enlargement		Darker, coarser, more curled hair		Enlargement of breast and areola
16 4,1-4,5	4		Further enlargment of penis and testicles with development of glans penis		Adult type hair over a smaller area		Projection of the areola and papilla
25 >4,5	5		Adult size and shape		Spread to the medial surface of the thighs		Recession of the areola to the contour of the breast, projection of papilla only

prepubertal

adult

Prader's

19. A 3-week-old girl is brought to the emergency department due to lethargy. The patient was breastfeeding well until this morning when she became increasingly difficult to rouse. She was born at term to a 35-year-old woman who had a spontaneous vaginal delivery at home. The patient did not receive any vaccinations or medications after birth due to parental preference. Head circumference is at the 99th percentile. Weight and length are at the 25th percentile. Temperature is 37° C (98.6° F). Physical examination shows a large, bulging anterior fontanelle. The eyes are driven downward, and the patient does not appear to be able to look upward. No scalp swelling is present. Intracranial hemorrhage is confirmed on CT scan of the head. Which of the following is the most likely underlying cause of this patient's condition?

A. Germinal matrix fragility XX IVH -
B. Inherited hemophilia XX
C. Trauma during birth XX
D. Vitamin deficiency Vit K

20. Which of the following is not a method of administering free-flow oxygen in a neonate?

A. Bag and mask ventilation with oxygen inlet
B. Face mask
C. Tubing near mouth and nose
D. Bag and mask ventilation without oxygen inlet

PPV

21. A 10-year-old boy is brought to the physician by his parents for a follow-up examination. He has had a short stature since birth and underwent diagnostic testing. Genetic analyses showed a gain of function mutation in the fibroblast growth factor receptor 3 (FGFR3) gene. He has met all developmental milestones. He is at the 10th percentile for height and 90th percentile for weight. Which of the following additional findings is most likely on physical examination?

A. Absent collar bones → CCD ~ Sutural wormians Achondroplasia

B. Blue sclerae – OI

C. Telephone handle femur → Thanatophoric dysplasia – telephone

D. Frontal bossing

Platybasia

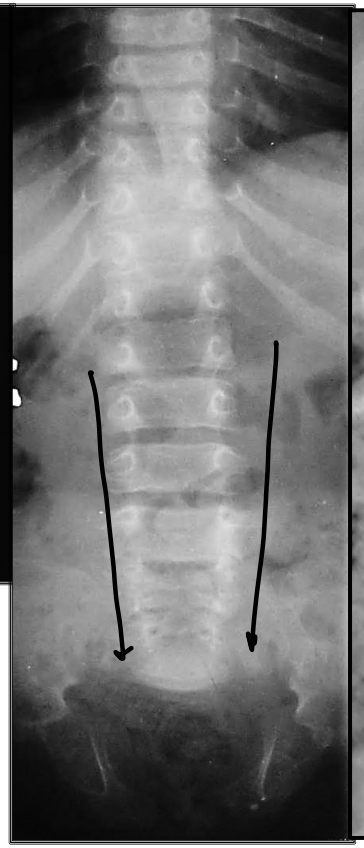
- Trident hand
- Rhizomelic
- Y Chevron sign

↳ mc skeletal dysp lethal

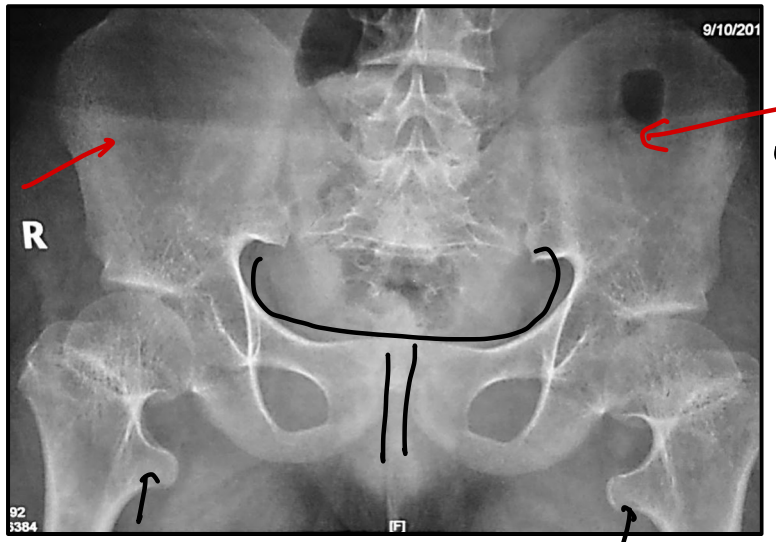
DIAGNOSIS?

Achondroplasia FGFR3

platybasia



Interpedicular dist ↓



champagne glass pelvis

trident

22. All of the following are correct about routine newborn care:

1. Dried blood spot sample is taken for metabolic screening

2. Blackish stools in newborn are due to biliverdin

3. All new borns are routinely injected with 0.5mg-1mg iv Vit K

4 Positive scarf sign is seen in preterm babies

A. 1, 2, 3, 4

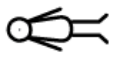
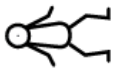
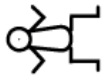
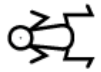
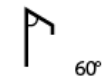
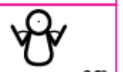
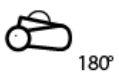
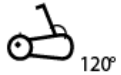
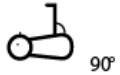
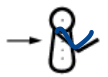
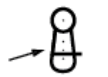
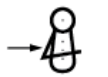
B. 1, 2, 4

C. 1, 3

D. 2, 3, 4

Expanded new Ballard score

Neuromuscular Maturity

Score	−1	0	1	2	3	4	5
Posture							
Square window (wrist)	 >90°	 90°	 60°	 45°	 30°	 0°	
Arm recoil		 180°	 140–180°	 110–140°	 90–110°	 <90°	
Popliteal angle	 180°	 160°	 140°	 120°	 100°	 90°	 <90°
Scarf sign							
Heel to ear							

Physical Maturity

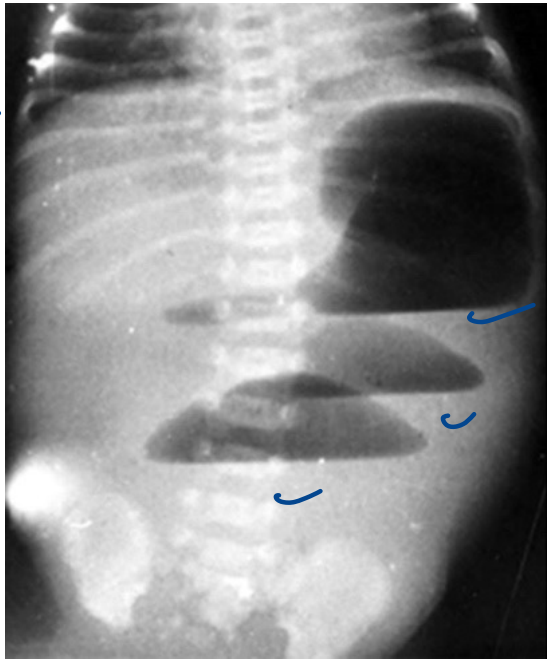
Skin	Sticky, friable, transparent	Gelatinous, red, translucent	Smooth, pink; visible veins	Superficial peeling and/or rash; few veins	Cracking, pale areas; rare veins	Parchment, deep cracking; no vessels	Leathery, cracked, wrinkled
Lanugo	None	Sparse	Abundant	Thinning	Bald areas	Mostly bald	
Plantar surface	Heel-toe 40–50 mm: −1 < 40 mm: −2	> 50 mm, no crease	Faint red marks	Anterior transverse crease only	Creases anterior 2/3	Creases over entire sole	
Breast	Imperceptible	Barely perceptible	Flat areola, no bud	Stippled areola, 1–2 mm bud	Raised areola, 3–4 mm bud	Full areola, 5–10 mm bud	
Eye/Ear	Lids fused loosely: −1 tightly: −2	Lids open; pinna flat; stays folded	Slightly curved pinna; soft; slow recoil	Well curved pinna; soft but ready recoil	Formed and firm, instant recoil	Thick cartilage, ear stiff	
Genitals (male)	Scrotum flat, smooth	Scrotum empty, faint rugae	Testes in upper canal, rare rugae	Testes descending, few rugae	Testes down, good rugae	Testes pendulous, deep rugae	
Genitals (female)	Clitoris prominent, labia flat	Clitoris prominent, small labia minora	Clitoris prominent, enlarging minora	Majora and minora equally prominent	Majora large, minora small	Majora cover clitoris and minora	

Maturity Rating

Score	Weeks
−10	20
−5	22
0	24
5	26
10	28
15	30
20	32
25	34
30	36
35	38
40	40
45	42
50	44

23. A 3-day-old neonate presented with recurrent bilious vomiting. X-ray erect abdomen was done and is shown below, which of the following will be next step in the management of the given patient?

A. CECT abdomen with oral contrast
B. Gastrografin follow through.
C. Barium enema
D. Exploratory laparotomy



24. A 3-day-old newborn baby boy is brought to the hospital with difficulty breathing, cyanosis and coughing whenever he is fed. The baby was born full-term via vaginal delivery, and his mother had an uneventful pregnancy. He had a birth weight of 2.8 kg and was discharged from the hospital after 48 hours of observation. On examination, the baby appears to be in respiratory distress, with increased work of breathing and decreased oxygen saturation levels. What would be the best contrast of choice for study?

A. Iohexol non-ionic
B. Gastrografin ionic = Diatrizoate
C. Water ×
D. Barium ×

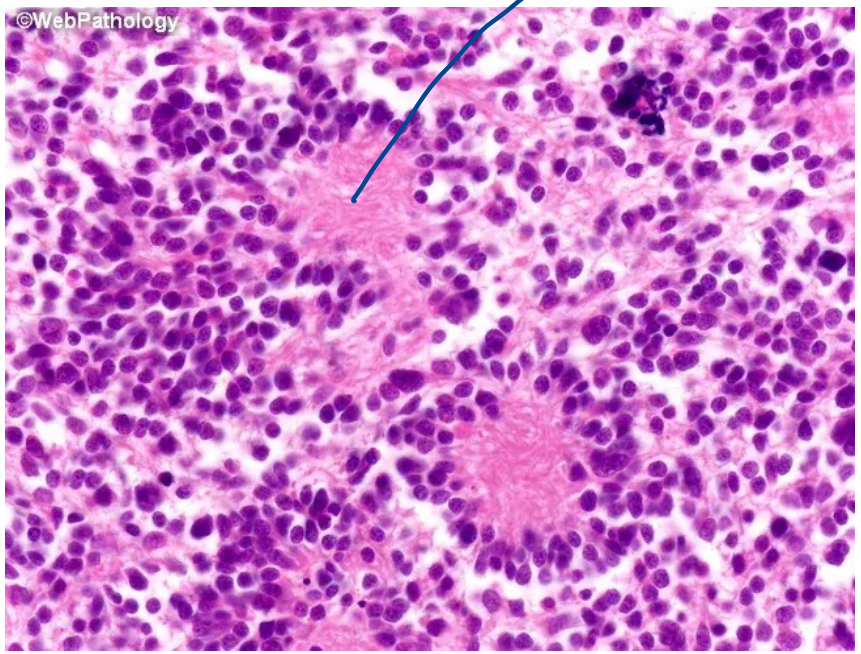
TEF
safe

25. What is the most likely site of the lesion shown in the image?

myxopapillary ependymoma.

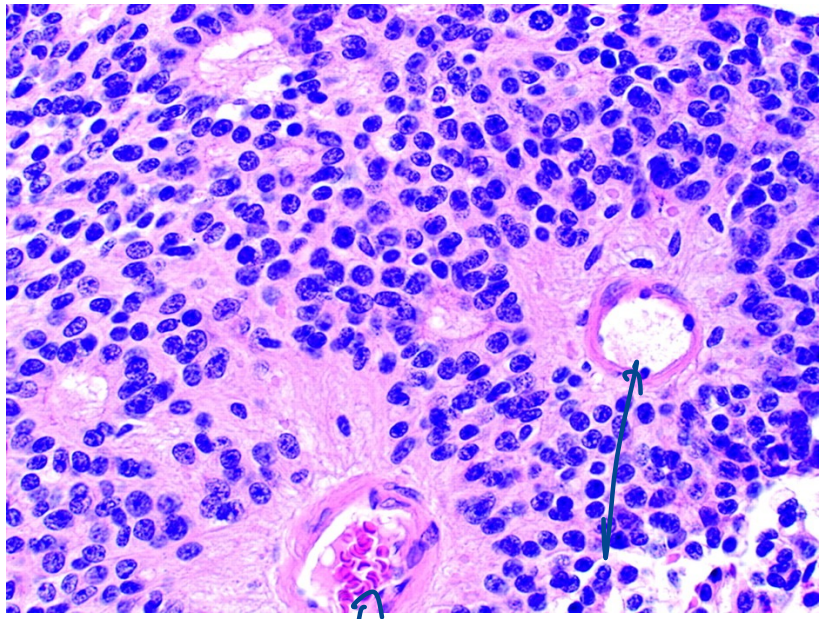
A. Filum terminale
B. Roof of 4th ventricle
C. Floor of 4th ventricle
D. Cerebellopontine angle

VS



Homer Wright : MB

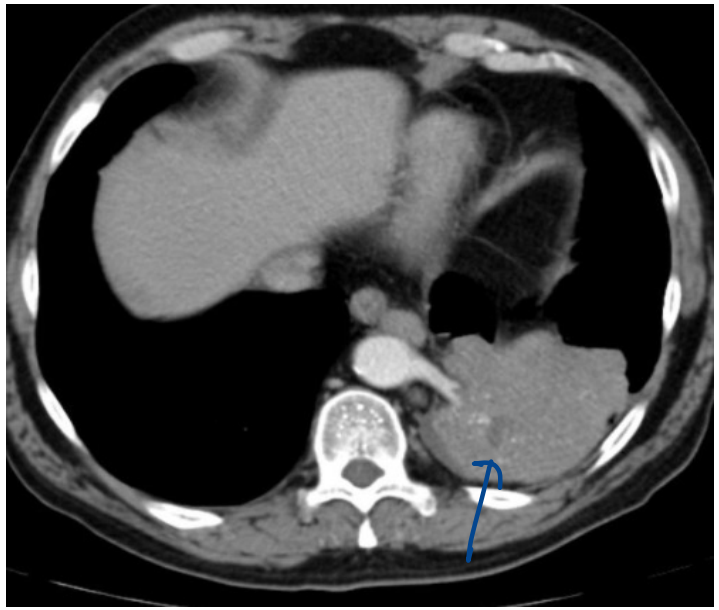
pseudo & perivasc : Ependymoma



26. A 6-month-old boy is brought to the OPD for follow-up after a urinary tract infection. The boy was initially brought in 2 weeks ago with fever for 4 days. The fever resolved within 48 hours with antibiotic therapy, and a full course of antibiotics was completed. Renal ultrasound performed 2 days ago showed mild right hydronephrosis. MCU is shown below. If untreated, which of the following is the most likely long-term complication of this patient's condition?

A. Development of renal cysts
B. Fibrosis of renal interstitial space
C. Inflammation of the renal glomerulus
D. No long-term complications

27. A 19-year-old college student who had a history of frequent respiratory infections as a child presents to the OPD. He has been experiencing recurrent episodes of coughing and shortness of breath over the past few months. He also complains of fatigue and chest pain, particularly on the left side. The CT scan reveals a mass in the lower lobe of his left lung as shown. What is the likely diagnosis?



A. Hamartoma
B. Lobar pneumonia
C. Sequestration
D. Squamous cell carcinoma

28. What is the fluid requirement in a 3 days old baby with birth weight of 1300 grams?

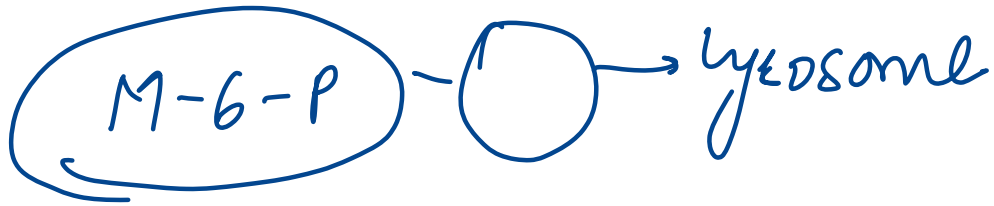
A. 180 ml /kg/day
B. 100-110 ml /kg/day
C. 120-130 ml /kg/day
D. 130-150 ml /kg/day

Table 45.2: Parenteral fluid and electrolyte requirements during the first week after birth

	Parenteral fluid in ml/kg/day *Day after birth*						
	1	*2*	*3*	*4*	*5*	*6*	*7*
Term neonates AND Preterm neonates with birth weight >1500 g	60–80	80–100	100–120	120–140	140–160	140–160	140–160
Preterm neonates with birth weight <1500 g	80–90	100–110	120–130	130–150	140–160	150–170	150–180

29. All of the following lysosomal storage disorders have enzyme replacement therapy available, except:

A. Gaucher disease
B. Fabry disease
C. Hurler syndrome
D. I-cell disease



30. All of the following are criteria for a vigorous newborn, except:

MSL

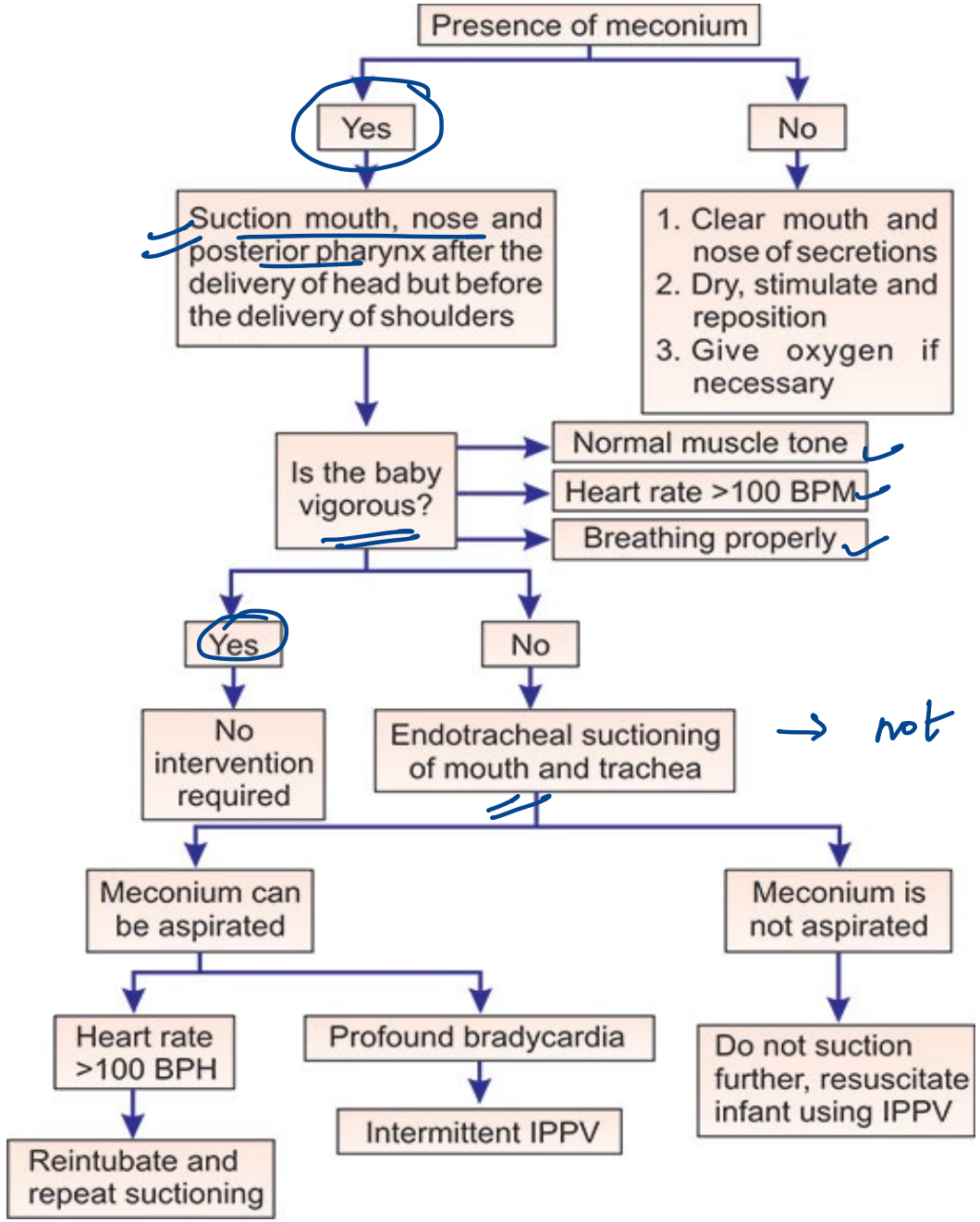
A. Heart rate > 100/min

B. Good respiratory effort

C. Good muscle tone

D. Term

THR



→ not recommended now.

31. All of the following are included in AIIMS high-risk neonate criteria, except:

A. Birth weight < 1500 g
B. Gestational age < 32 weeks
C. <3rd centile weight
D. Grand multipara mother

High-risk neonate criteria (AIIMS):

- **Birth weight < 1500 g (very low birth weight)**
- **Gestational age < 32 weeks (very preterm)**
- **Weight < 3rd centile for gestational age (SGA/severe growth restriction)**
- **Apgar score < 7 at 1 minute**
- **Need for resuscitation at birth**
- **Meconium aspiration**
- **Major congenital malformations**
- **Severe jaundice, sepsis, or perinatal asphyxia**

32. All of the following are major risk factors for recurrence of febrile seizure, except:

A. Age < 1 year
B. Duration of fever < 24 h
C. Temperature 38–39 °C
D. Family history of epilepsy

Febrile seizures: Fever (>100.4) + seizure in 6mon-6yrs

Simple-GTCS, <15min, No recurrence in 24hrs

Complex

No long-term AED

>5min: Midazolam / Lorazepam

High risk for recurrence:

MAJOR: <1yr, <24hr fever, 100-102 F

MINOR: Complex, Family history , Low Na, Male, Daycare

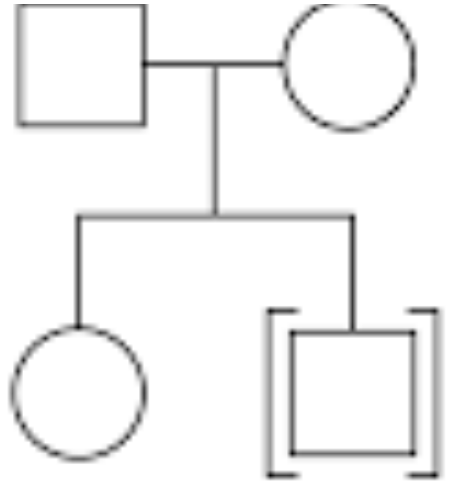
Febrile epilepsy

33. All of the following are screening tests for developmental assessment, except:

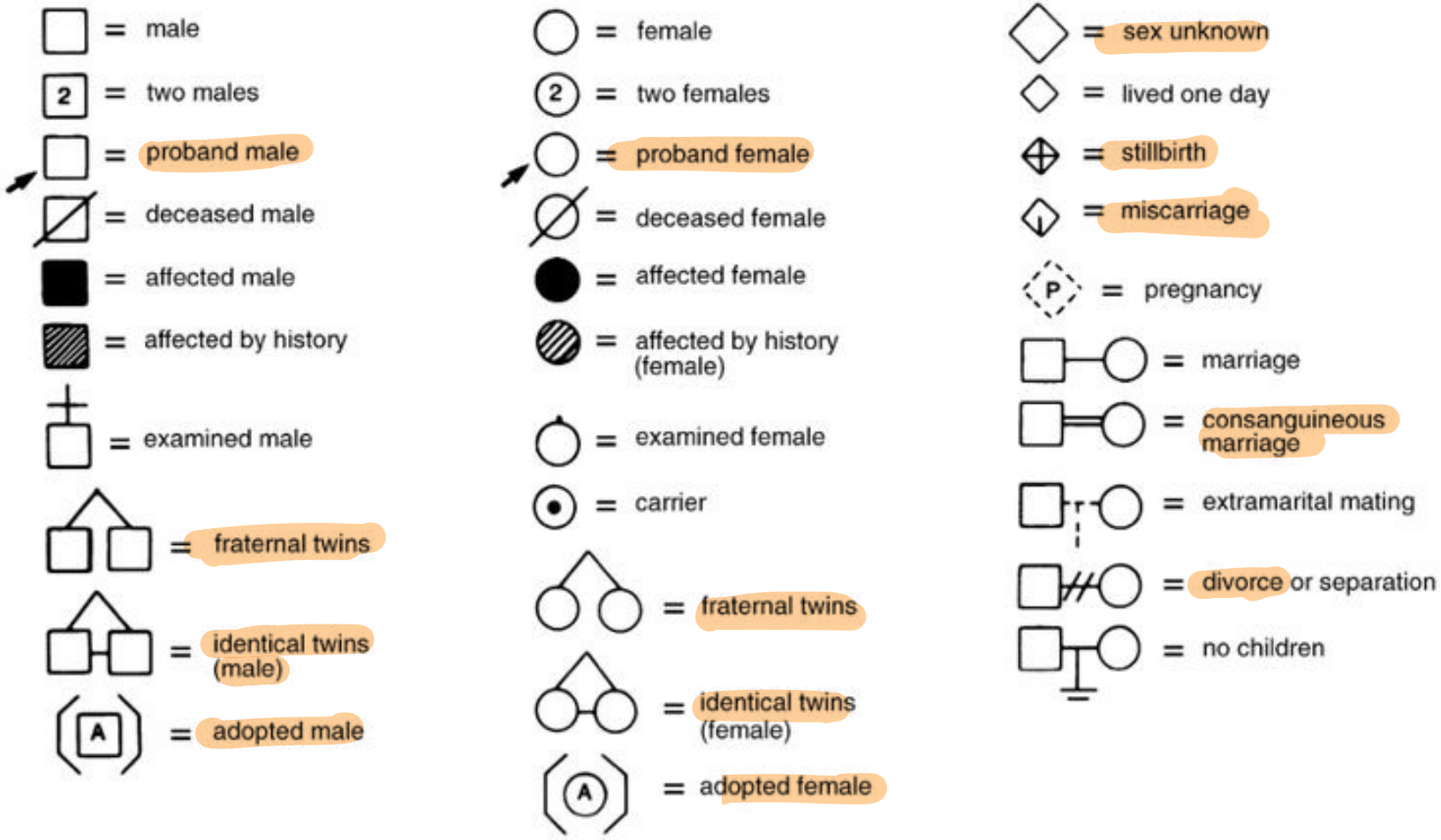
A. Trivandrum development screening chart
B. Denver-II developmental screening test
C. Stanford-Binet Intelligence Scale
D. Phatak's Baroda screening test

34. The following pedigree symbol is for?

A. Multiple marriages
B. Proposita
C. Consanguineous marriage
D. Adopted individual



PEDIGREE SYMBOLS



35. All of the following statements are true, except:

A. Triceps skinfold <6 mm → Malnutrition

B. Bangle test – 4 cm bangle should not cross elbow

C. Shakir's tape: severe malnutrition < 11.5 cm

D. QUAC stick test is given by formula height of child/MUAC

QQ

MUAC / ht.

36. All of the following are included in hospital management of SAM, except:

A. Treat hypoglycemia, hypothermia, infection
B. Start iron from Day 1 wk 2
C. Begin cautious feeding and micronutrients
D. Start catch-up growth after stabilization

37. All of the following are risk factors for coronary aneurysm in Kawasaki disease, except:

A. Male sex
B. Age < 1 year or > 9 years
C. Hematocrit > 35 %
D. Fever ≥ 14 days

Risk factors:

- Age **<1 year** or **>9 years**
- **Male sex**
- **Fever ≥14 days**
- **Hematocrit <35%**
- Serum sodium concentration **<135 mEq/L**
- White blood cell count **>12,000/mm^3**

38. All of the following are radiographic signs of left atrial enlargement, except:

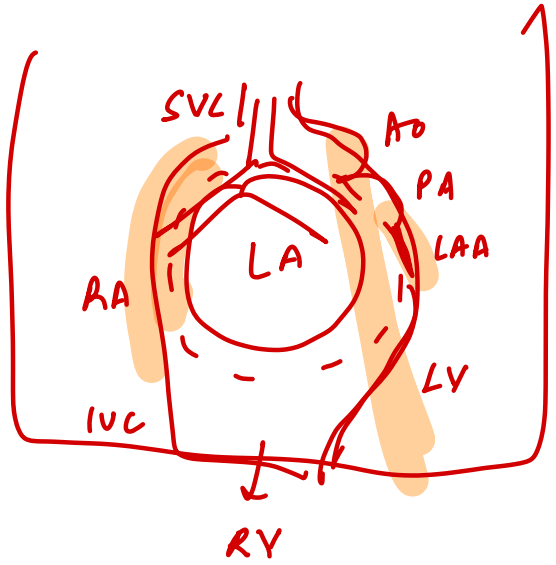
A. Double ~~left~~ Rt heart border

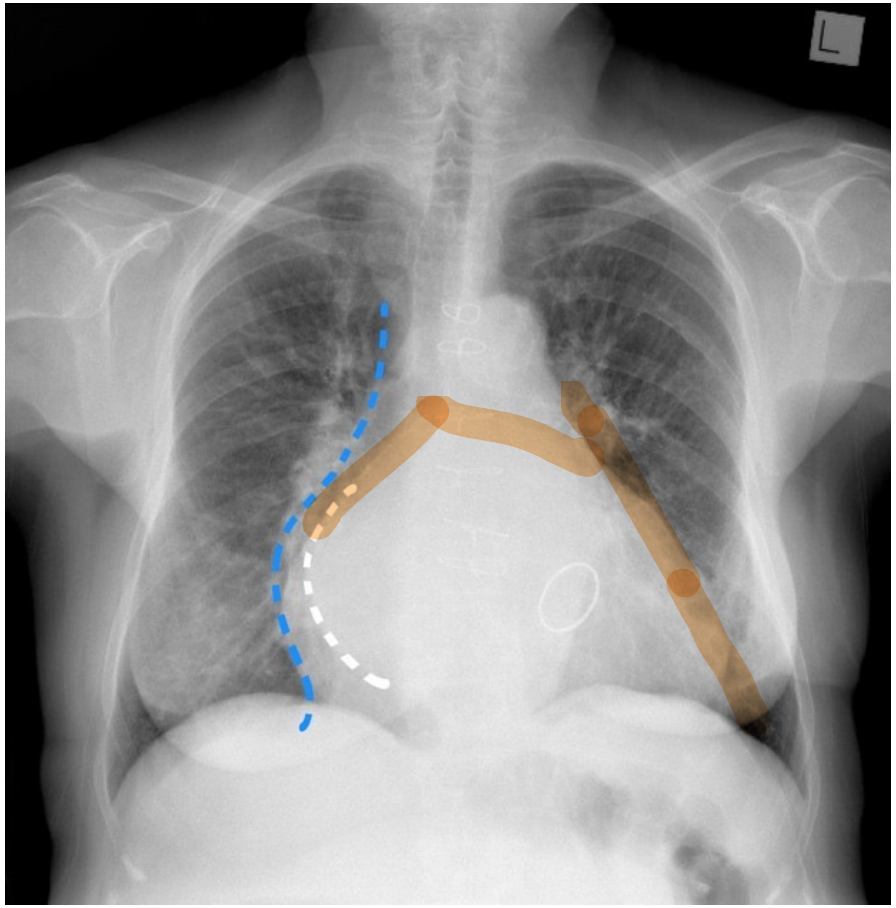
B. Straightening of the left heart border

C. Posterior displacement of the oesophagus on barium swallow

D. Splaying of carina /Lt main bronchus lifted up

E. RLN – Ortner's Sx





39. All are true regarding familial short stature, except:

A. Bone age corresponds to chronological age
B. Height velocity is normal
C. Puberty is delayed
D. Final height is low but normal for target height

Feature	Constitutional growth delay	Familial short stature
Height	Short	Short
Height velocity	Normal	Normal
Family history	Delayed puberty	Short stature
Bone age	Less than chronological age	Normal
Puberty	Delayed	Normal
Final height	Normal	Low but normal for target height

40. All are true regarding Failure to Thrive (FTT), except: (Gpm)

A. It is a descriptive term rather than a diagnosis ✓
B. Usually refers to weight below 3rd percentile ✓
C. Crossing two major centile lines downward over time is diagnostic
D. It is used for children up to ~~10~~ 5yo years of age ✗

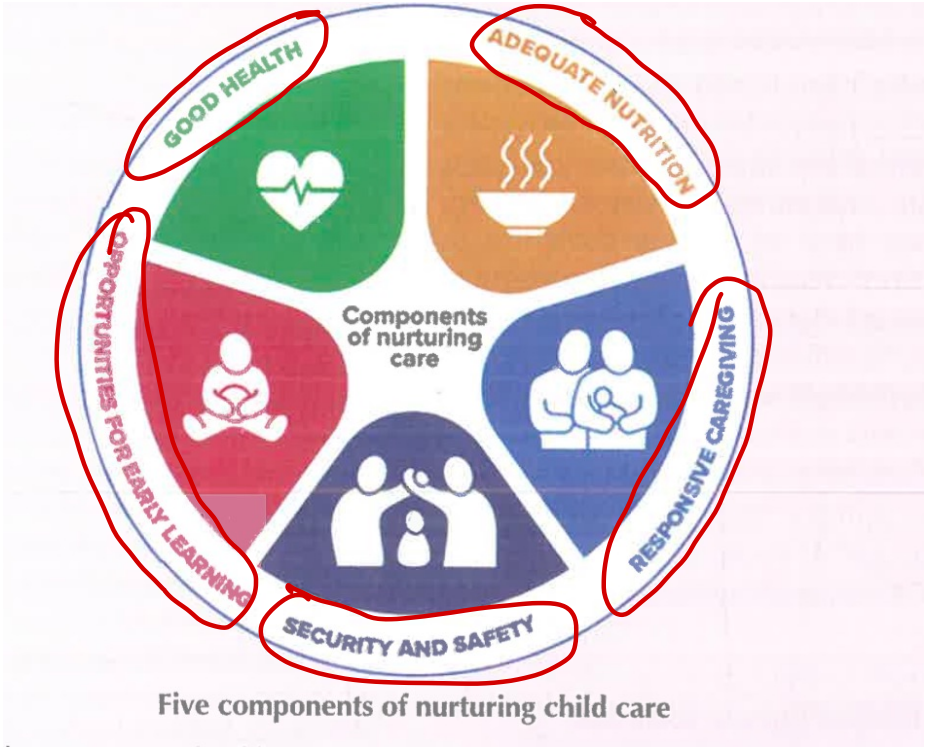
Failure to Thrive

Definition and Epidemiology

Failure to thrive (FTT) is a descriptive term rather than a diagnosis and is used for infants and children up to 5 years of age whose physical growth is significantly less than their peers of the same age and sex. FTT usually refers to weight below the 3rd or 5th centile, failure to gain weight over time, or a change in the rate of growth, such that weight for age or weight for length/ height has crossed two major centiles, e.g. 50th to 10th, over a period of time. The prevalence of FTT varies according to the population sampled.

41. All are components of nurturing child care, except:

A. Good health
B. Adequate nutrition
C. Responsive caregiving
D. Economic security



Five components of nurturing child care

42. All of the following are indications for growth hormone therapy, except:

A. Turner syndrome
B. Chronic renal insufficiency
C. Prader–Willi syndrome
D. Familial short stature

Table 18.2: Indications for growth hormone therapy
Growth hormone deficiency in children and adults
Turner syndrome
Chronic renal insufficiency
Prader-Willi syndrome
Small for gestational age who fail to catch-up in growth by 2–3 years of age
SHOX gene mutations and Leri-Weill dyschondrosteosis
Noonan syndrome
Idiopathic short stature

43. All of the following are seen in congenital hypothyroidism, except:

A. Open posterior fontanel
B. Large tongue
C. Umbilical hernia
D. Myopathy with pseudohypertrophy

acquired

Table 18.6: Clinical features of hypothyroidism

Congenital	*Acquired*
Open posterior fontanel	Myopathy and pseudohypertrophy of limb muscles
Umbilical hernia	Enlarged sella
Delayed neurodevelopment	Pseudotumor cerebri
Large tongue	
Common to both congenital and acquired forms	
Growth retardation	
Sallow edematous facies	Pallor
Delayed skeletal maturation	Hypothermia
Delayed dental development	Rough dry skin
Delayed puberty	Hypotonia
Constipation	Protuberant abdomen

44. All of the following favor jitteriness over seizures, except:

A. Tremors are rhythmic and stimulus-sensitive
B. Absence of eye deviation or autonomic changes
C. Frequency of 7–10 tremors/sec with equal amplitude
D. Presence of fast and slow components

The following features differentiate jitteriness from seizures are:

1. Absence of eye deviation or fixed gaze, heart rate changes.
2. Rhythmic tremors with equal to and fro movements. The frequency is 7 to 10 per second—no fast and slow components. In contrast, a clonic seizure is slower (1–2 per second), and the to and fro movements have rapid and slow components.
3. The tremors are usually stimulus sensitive, precipitated by hunger, crying, or loud noise, and stopped by gentle restraint.

45. A 4-year-old child with difficulty walking, broad-based gait, hyperreflexia, and positive Babinski sign is most likely suffering from:

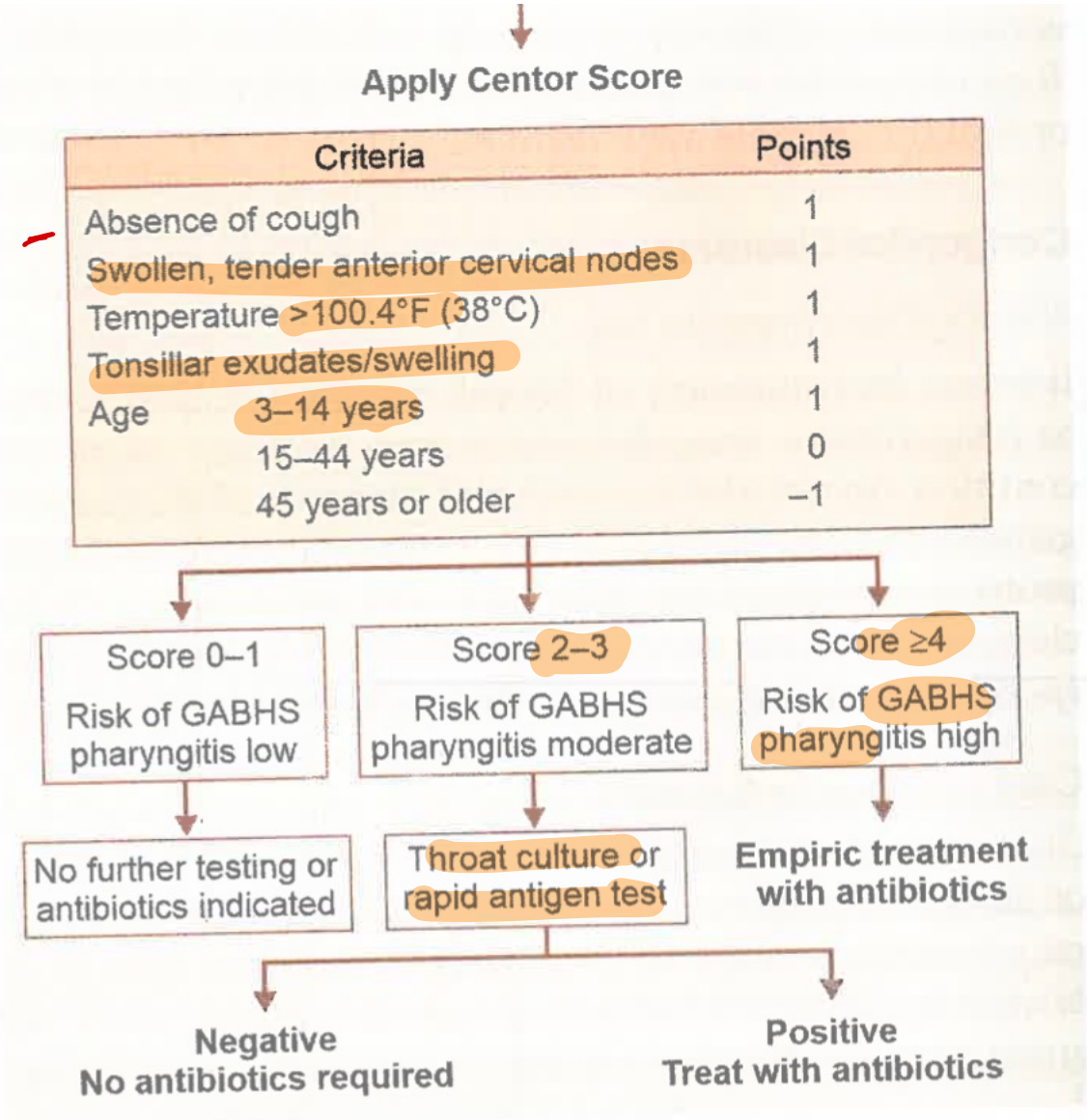
A. Guillain-Barré syndrome
B. Cerebral palsy
C. Acute disseminated encephalomyelitis (ADEM)
D. Spinal cord lesion

46. A 6-week-old infant has poor feeding, failure to thrive, non-bilious, non-projectile vomiting immediately after feeds, and normal bowel movements. Most probable diagnosis:

A. Cow milk protein allergy
B. Gastroesophageal reflux disease
C. Intestinal obstruction
D. Pyloric stenosis

47. All of the following are components of Centor criteria, except:

A. Absence of cough
B. Tender anterior cervical lymphadenopathy
C. Fever >38°C
D. Presence of conjunctivitis


Apply Centor Score
Criteria
Points
Absence of cough
1
Swollen, tender anterior cervical nodes
1
Temperature >100.4°F (38°C)
1
Tonsillar exudates/swelling
1
Age 3–14 years
1
15–44 years
0
45 years or older
–1
Score 0–1
Risk of GABHS pharyngitis low
Score 2–3
Risk of GABHS pharyngitis moderate
Score ≥4
Risk of GABHS pharyngitis high
No further testing or antibiotics indicated
Throat culture or rapid antigen test
Empiric treatment with antibiotics
Negative
No antibiotics required
Positive
Treat with antibiotics

48. All of the following are indications for renal biopsy in acute glomerulonephritis, except:

A. Gross hematuria beyond 3–4 weeks
B. Nephrotic range proteinuria beyond 2 weeks
C. Oliguria with hypertension beyond 7–10 days
D. Presence of edema on day 3

Table 17.6: Indications for kidney biopsy in acute glomerulonephritis (GN)

Systemic features

- Fever, rash, joint pain, pulmonary symptoms, heart disease; history of recurrences
- Absence of serologic evidence of streptococcal infection; normal C3 in acute stage of illness
- Features of both GN and nephrotic syndrome
- High blood urea and creatinine, or anuria requiring dialysis

Delayed resolution

- Oliguria, hypertension, azotemia beyond 7–10 days
- Gross hematuria persisting beyond 3–4 weeks
- Nephrotic range proteinuria beyond 2 weeks
- Low C3 levels beyond 12 weeks

49. All of the following are diagnostic features of Hemophagocytic Lymphohistiocytosis (HLH), except:

A. Fever and splenomegaly
B. Cytopenia in ≥2 lineages
C. Hypertriglyceridemia or hypofibrinogenemia
D. Hypercalcemia

Table 21.26: Diagnostic criteria for HLH

HLH diagnosis established, if one of the two is fulfilled

A molecular diagnosis of HLH (e.g. *PERF, SAP, MUNC* mutations)
OR 5 of the following 8 criteria are fulfilled

- Fever
- Splenomegaly
- Cytopenias in at least two cell lines
  - Hemoglobin <90 g/L
  - Platelets <100 × 10^9/L
  - Neutrophils <1 × 10^9/L
- Hypertriglyceridemia and/or hypofibrinogenemia
  - Fasting triglycerides >3 mmol/L (>265 mg/dL)
  - Fibrinogen <1.5 g/L
- Hemophagocytosis in bone marrow or spleen or lymph nodes
- Low or absent activity of natural killer cells
- Ferritin >500 µg/L
- Soluble CD25 (soluble interleukin-2 receptor) >2400 units/mL

50. A neonate born at 36 weeks of gestation presents with respiratory distress and requires 30% FiO_2. He is otherwise normal. A chest X-ray is shown below. What is the diagnosis?

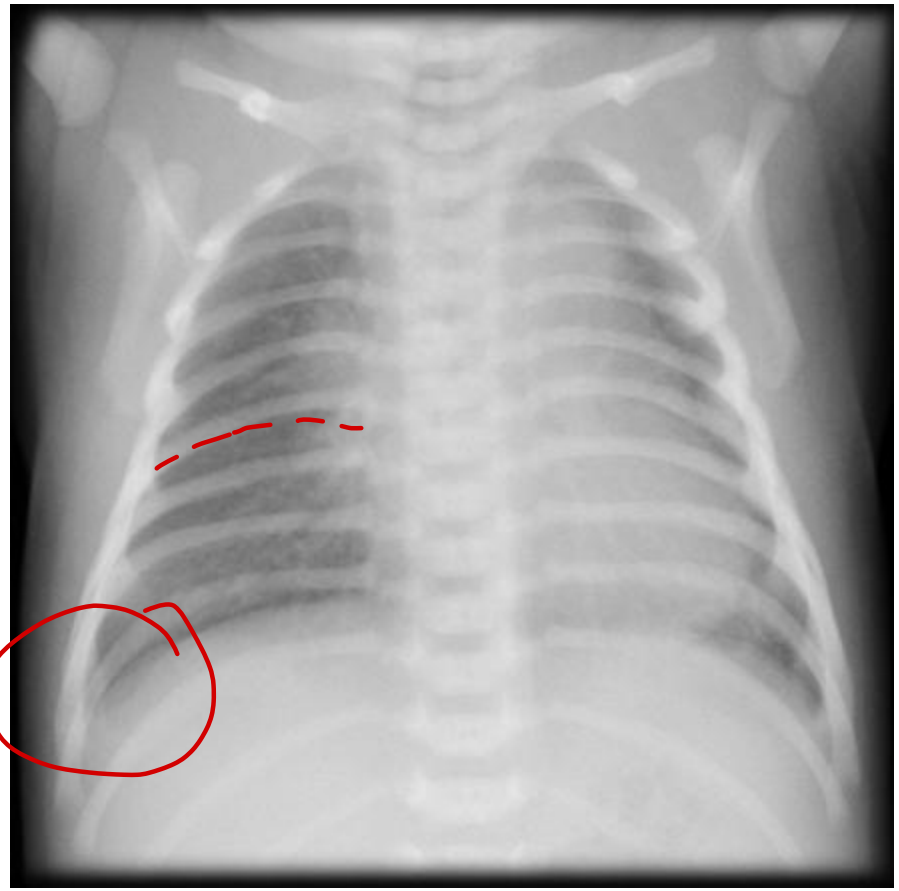
NEET 25

A. Pneumonia ✗✗

B. Meconium aspiration syndrome MSL ✗✗

C. Respiratory distress syndrome ≤ 34wks

D. ~~Transient tachypnea of newborn~~ ✓



51. A neonate screened positive for congenital hypothyroidism has low T_3 and T_4 levels, no radioactive tracer uptake, but a normal thyroid gland on ultrasound. What is the most likely cause?

NEET '25

A. Thyroid agenesis XX
B. Iodine deficiency XX
C. Dyshormonogenesis XX
D. Defect in iodine transport NIS

52. A 7-month-old baby is being given thick homemade cereal as complementary feeding besides breastfeeding. According to IYCF guidelines, what is the most appropriate volume and frequency of feeds in 24 hours?

NEET '25

A. ½–1 katori, 4 times a day

B. ½–1 katori, 6 times a day

C. ½–1 katori, 5 times a day

D. ½–1 katori, 3 times a day

Age	Frequency
6 months	2–3 tablespoons 2 times per day
7–8 months	**½–1 katori** **3 times per day**
9–11 months	3 meals + 1 snack between meals
12–24 months	3 meals + 2 snacks between meals

53. A 2-year-old presents with recurrent seizures. CT imaging is shown. What radiological sign is characteristic?

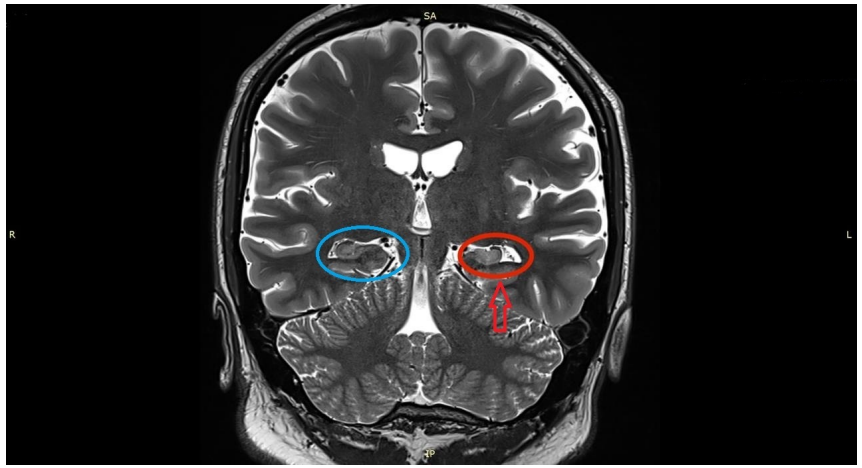
GNAQ

A. Sturge Weber syndrome → tram track Ca++

B. Mesial temporal sclerosis

C. NCC

D. Tuberculomas



54. A 17-year-old boy with delayed puberty is found to have elevated gonadotropins. What is the most probable diagnosis?

NEET 25

A. Malnutrition Lancry

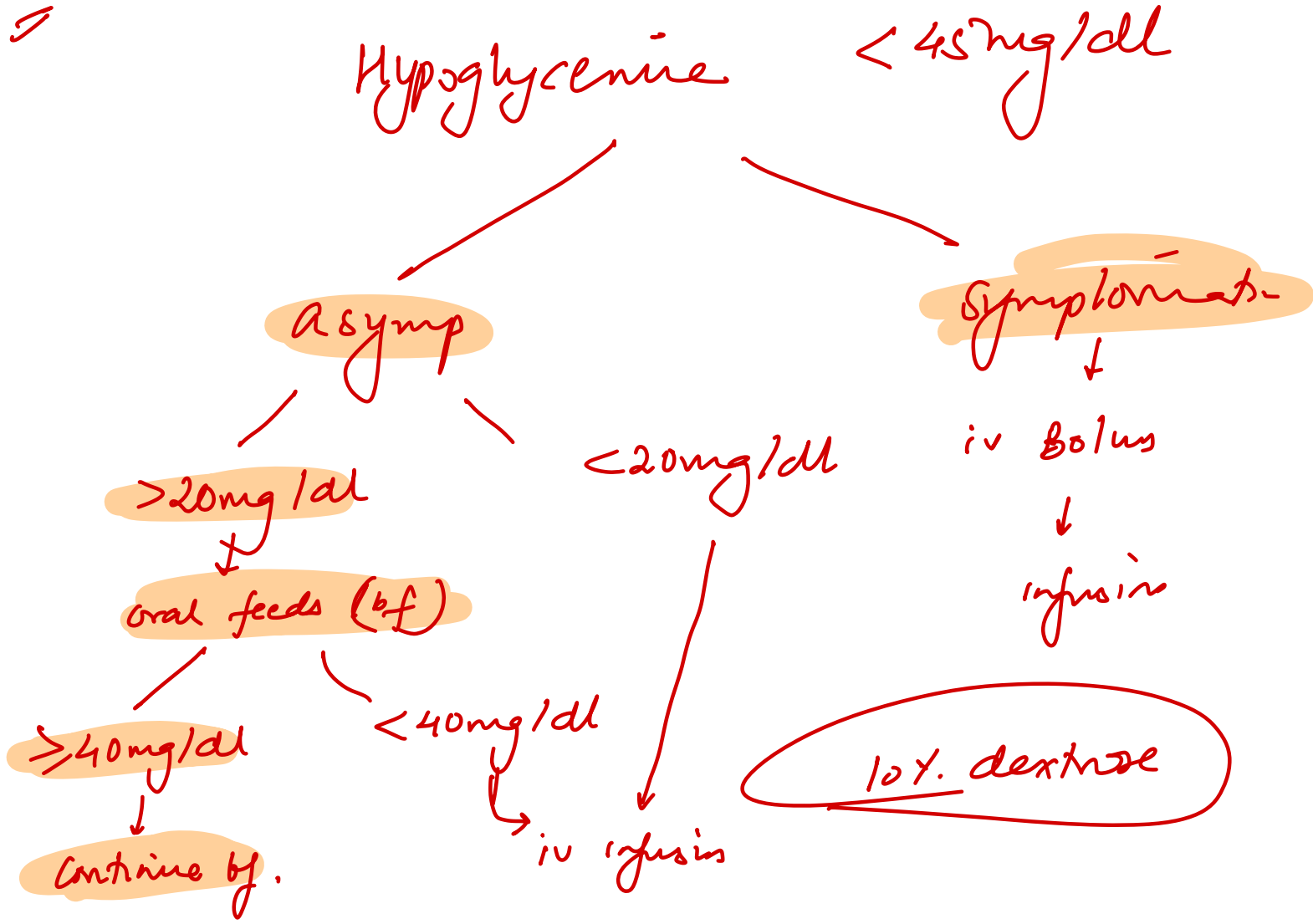
B. Klinefelter's syndrome

C. Kallman's syndrome XX anosmia Lancry

D. Prader-Willi syndrome

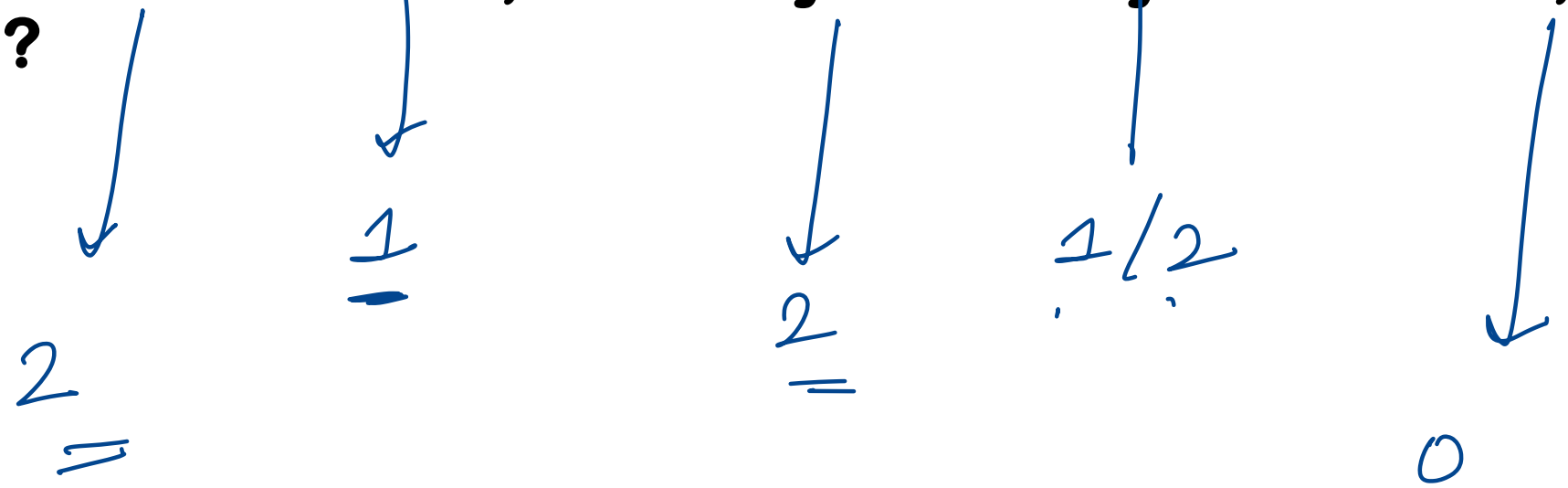
55. A term neonate born to a GDM mother has asymptomatic hypoglycemia. Blood glucose is 25 mg/dL, improves to 45mg/dL after a trial of oral feeds. What is the appropriate next step?

A. Frequent feeding
B. Glucose monitoring only
C. Bolus of 10% dextrose
D. IV glucose infusion



56. Calculate the Downe score of a newborn who has cyanosis which improves on giving oxygen, mild to moderate retractions, grunting heard on naked ear, air entry markedly decreased, RR 40 per minute?

A. 4
B. 5
C. 6
D. 7



57. All of the following statement belongs to 10 steps of successful breastfeeding of the Baby-Friendly Hospital Initiative (BHFI) except:

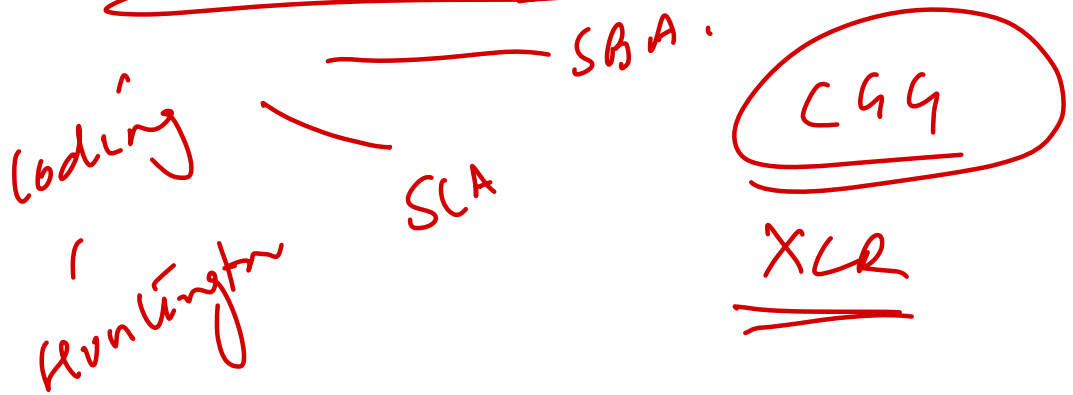
A. Have a written infant feeding policy
B. Help mothers initiate breastfeeding within 2 hours of birth
C. Practice rooming-in
D. Ensure staff is competent and knowledgable

Every facility providing maternity services and care for newborn infants should:

1. **Have a written breastfeeding policy** that is routinely communicated to all health care staff.
2. **Train all health care staff** in the skills necessary to implement this policy.
3. **Inform all pregnant women** about the benefits and management of breastfeeding.
4. **Help mothers initiate breastfeeding within one hour of birth.**
5. **Show mothers how to breastfeed** and how to maintain lactation even if they are separated from their infants.
6. **Give infants no food or drink other than breast milk**, unless **medically indicated**.
7. **Practice rooming-in**—allow mothers and infants to remain together **24 hours a day**.
8. **Encourage breastfeeding on demand.**
9. **Give no pacifiers or artificial nipples** to breastfeeding infants.
10. **Foster the establishment of breastfeeding support groups** and refer mothers to them on discharge from the hospital or birth center.

58. A 14-year-old boy with following features has trinucleotide repeats on genetic testing. Which of the following statements is incorrect about his condition?

A. The larger the triplet repeat expansion, the lesser the intellectual disability
B. The repeats involve CGG sequence
C. Females may also be affected
D. It affects the non-coding region



59. A 4-year-old boy presented with developmental delay, recurrent chest infections and worsening bony pain. Lab features are shown below.

PTH: 105pg/ml (N-10-65pg/ml)

Serum calcium: 9mg/dl

Serum phosphorus: 1mg/dl

He is started on Vit D but isn't improving. The probable diagnosis is:

A. Nutritional rickets

B. X-linked hypophosphatemic rickets

C. Vitamin D dependent rickets type I

D. Vitamin D dependent rickets type II

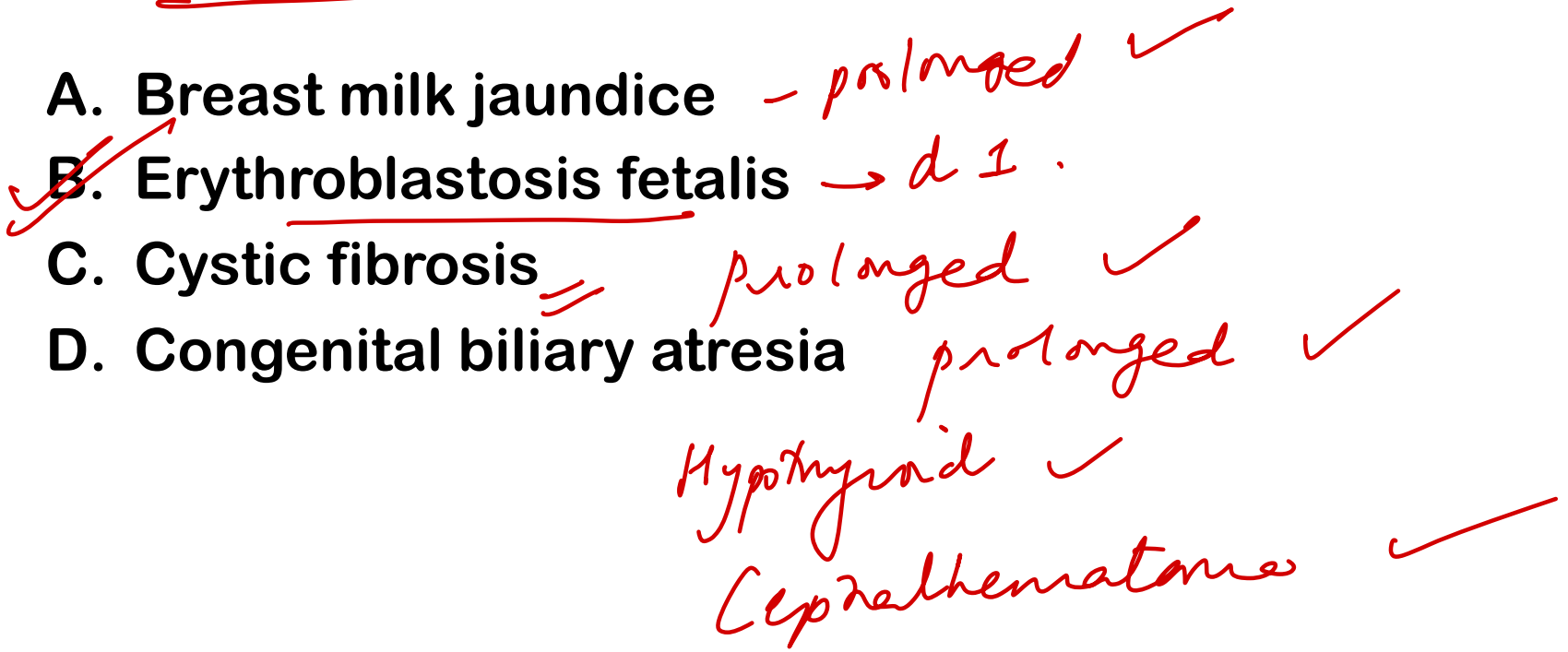
Feature	Nutritional Rickets	Vit D–Dependent Type I	Vit D–Dependent Type II	X-linked Hypophosphatemic Rickets
Ca	↓ – N	↓ – N	↓ – N	N
PO_4	↓	↓	↓	↓
PTH	↑	↑	↑	N → ↑
$1,25(OH)_2D_3$	↓	↓	↑	N
Response to Vit D	good	good	poor	poor
Defect	vit D ↓	1α OH (–)	end organ r.	phosphaturia

FGF 23 ↑

PHEX

60. An 8-day-old neonate presents with jaundice. Which of the following is least likely to be the cause of jaundice after the first week of life?

A. Breast milk jaundice
B. Erythroblastosis fetalis
C. Cystic fibrosis
D. Congenital biliary atresia



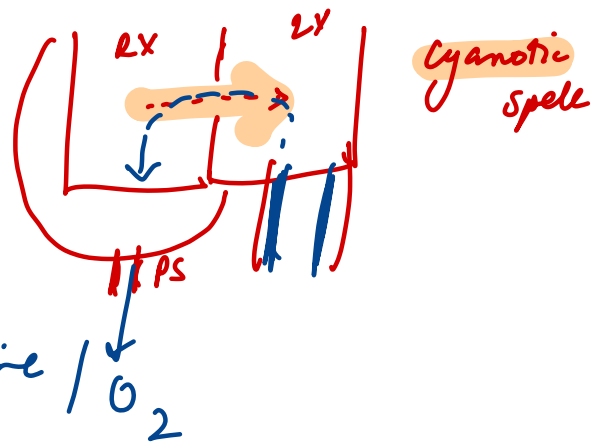
61. A 2-month-old boy is brought to the emergency department for evaluation of cyanosis. He became fussy and sweaty while taking his bottle, and his lips "turned blue" for several minutes during the feeding. The infant has had similar episodes during feeding and crying, but these resolved quickly. The patient was born at 39 weeks gestation, and his birth weight was average for gestational age. His weight gain has been slow, currently at the 5th percentile. On examination, the infant is ill-appearing, agitated, cyanotic, and tachypneic. Cardiac auscultation reveals a grade 2/6 crescendo-decrescendo systolic ejection murmur at the left upper sternal border and a single second heart sound. The patient is placed in a knee-chest position immediately. This maneuver improves the patient's condition predominantly by which of the following mechanisms?

A. Decreased pulmonary vascular resistance

B. Decreased systemic vascular resistance

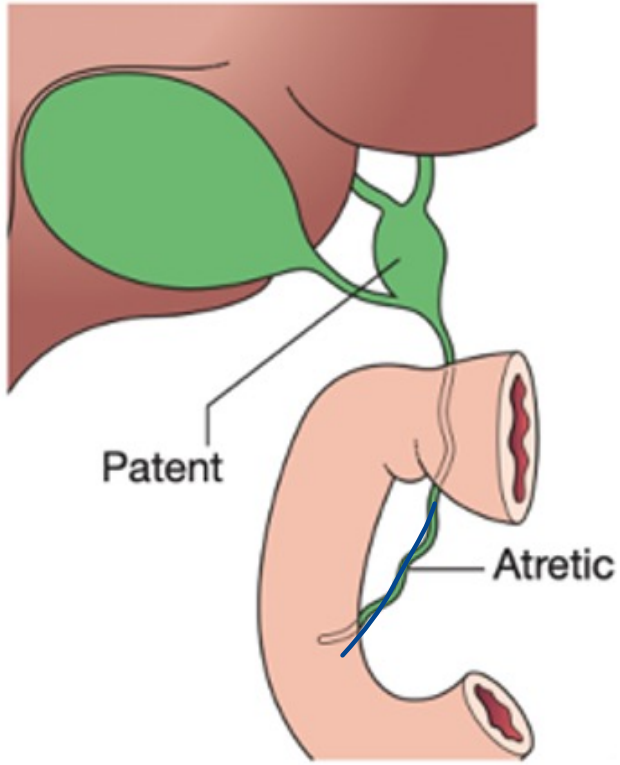
C. Increased systemic vascular resistance

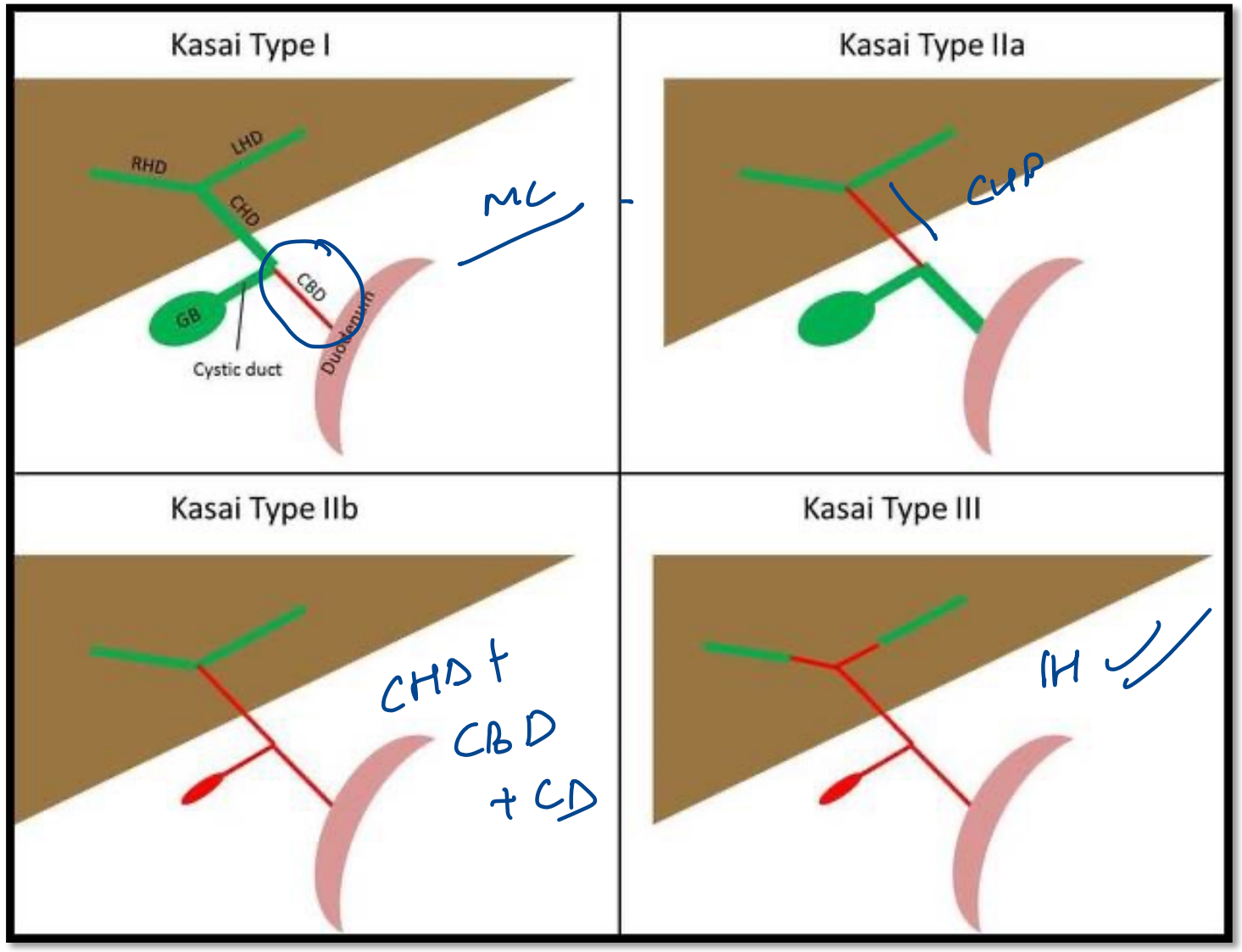
D. Increased systemic venous return



62. What is the Kasai grade of EHBA depicted in the image?

A. Grade 1
B. Grade 2a
C. Grade 2b
D. Grade 3




Kasai Type I
RHD
LHD
CHD
CBD
GB
Cystic duct
Duodenum
Kasai Type IIa
Kasai Type IIb
Kasai Type III

EHBA

63. A 3-month-old baby presents to you with jaundice. USG of the liver shows the following abnormality. What is the best investigation to confirm the diagnosis?

A. Tc99m sulfur colloid scan

B. Intra-operative cholangiography

C. MIBG

D. MRCP

1st — USG — triangular cord / ghost GB

HIDA — non opacified bowel

Bx — fibrosis

Intra op cholangiography — Gold std

64. What is the expected growth velocity in a child after 4 years?

A. 6 cms/year
B. 3 cms/year
C. 8 cms/year
D. 10 cms/year

65. A 4-day-old, full-term boy is brought to the OPD for his first visit after an uncomplicated vaginal delivery. The patient's mother, gravida 1 para 1, has blood type A positive. Birth weight was 3.4 kg and length was 48.5 cm. He has been exclusively breastfed since birth and nurses for 10 minutes on each breast every 4 hours. The infant passed several dark brown, sticky, meconium stools during the first 2 days of life, but his last stool was yesterday and dark green. He has 2 wet diapers each day but has not voided today. The neonate's current weight is 3. He has scleral icterus and jaundice of the face, chest, and abdomen. The rest of his physical examination is normal. Laboratory results are as follows:
Total bilirubin: 14 mg/dL
Direct bilirubin: 0.9 mg/dL
Which of the following is the most likely cause of this infant's hyperbilirubinemia?

A. Alloimmune hemolytic disease → d 1
B. Biliary atresia XX
C. Breast milk jaundice → prolonged
D. Breastfeeding jaundice → 1st wk

6-8 wet diapers

187. Which of the following is not true about breast milk jaundice?

A. Seen in 3-4% of exclusively breastfed children

B. Phototherapy is rarely needed

C. Exclusive breastfeeding with total bilirubin more than 10 mg/dl after 3-4 weeks of birth

D. Conjugated hyperbilirubinemia

66. A 18-year-old boy is brought to the clinic due to fatigue, malaise, fever, and sore throat for the past 6 days. He does not use tobacco, alcohol, or illicit drugs. Temperature is 38.3°C (101°F), blood pressure is 115/70 mmHg, pulse is 90/min, and respirations are 18/min. Physical examination shows pharyngeal hyperaemia with exudates along with cervical and axillary lymphadenopathy. Breath sounds are normal. Mild hepatosplenomegaly is present. Joints have a normal range of motion. There is no skin rash. A rapid streptococcal antigen test is negative. Which of the following is the most appropriate management for this patient?

Infectious mono

A. Administer corticosteroids ✗

B. Initiate antibacterial therapy ✗ amoxicillin → rash

C. Prescribe antiviral treatment ✗

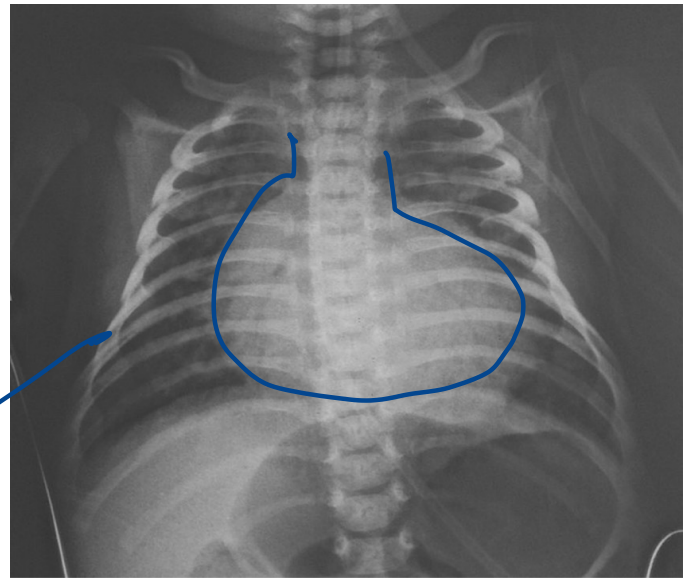
D. Refrain from sports for at least 3-4 weeks

67. A mother of a 2-month-old infant is concerned about her baby's slow weight gain. The baby is exclusively breastfed. The baby passes urine 6-8 times a day. What is the most likely explanation in this case?

A. Lactose intolerance
B. Insufficient intake of hindmilk → FAT + calories
C. Insufficient intake of foremilk → water + prtn / carbs
D. Galactosemia

68. Which of the following, all are findings of the condition in the below chest X-ray except:

A. Ventriculo-arterial discordance
B. Narrow vascular pedicle
C. Septum-dependent
D. Kerley lines



TGA

p. edema
p. veins ↑↑

pleura
PA ↑↑

Egg on string

69. Which of the following is not an indicator of fetal lung maturity?

A. Lecithin-sphingomyelin ratio > 2.0
B. Positive shake test
C. Increased phosphatidyl glycerol
D. Nile blue test showing >50% of blue cells

orange

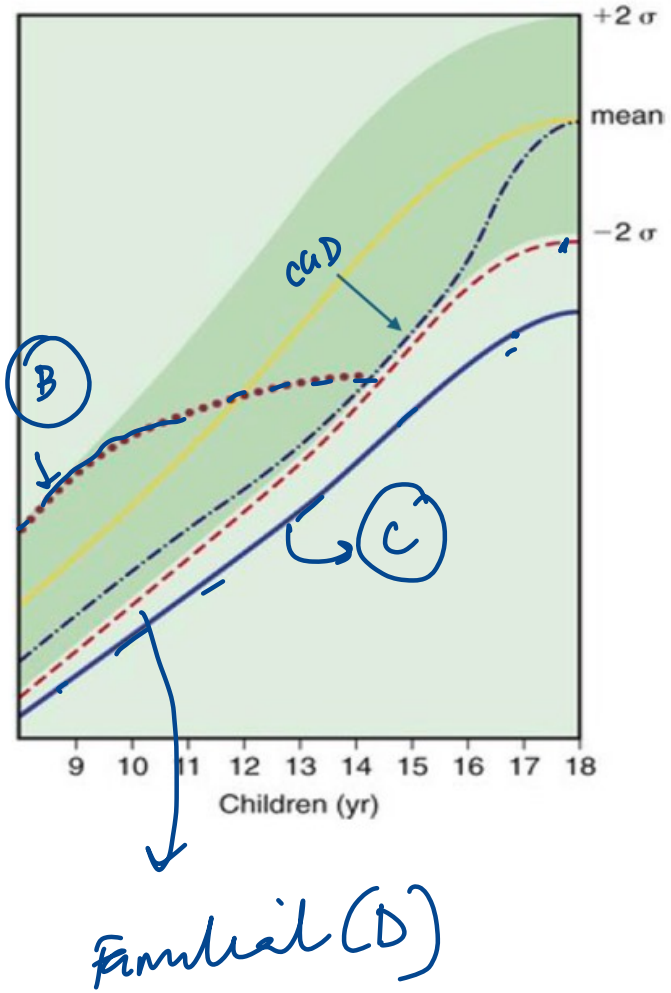
70. Identify the correct cause of the marked graph

A. A child whose bone age is less than the chronological age and the growth velocity is normal.

B. A child with a pituitary tumor presenting with growth hormone deficiency.

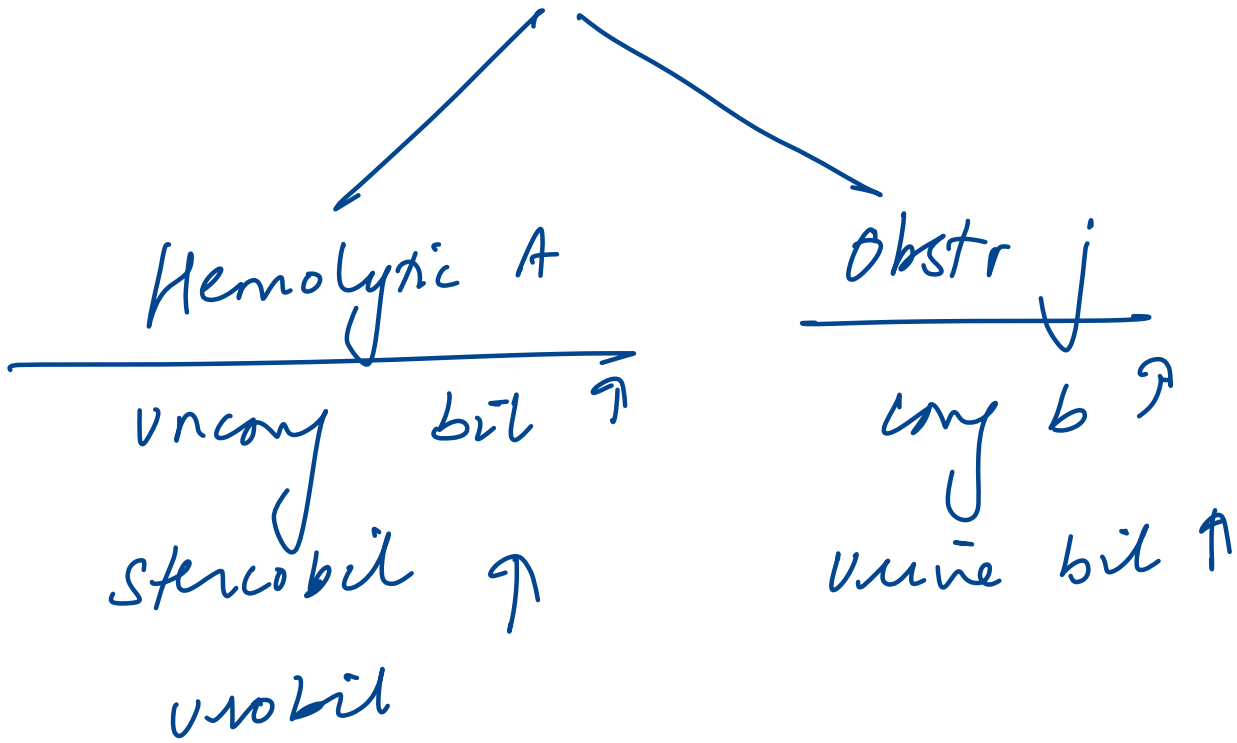
C. A child diagnosed with Down's syndrome.

D. A child with a family history of short stature.



71. Which of the following is least likely regarding Rh incompatibility in a newborn?

A. Increased unconjugated bilirubin
B. Increased fecal urobilinogen
C. Increased urine bilirubin
D. Increased stercobilinogen



72. Which of the following increase the risk of recurrence of febrile seizures?

1. Age < 1 year
2. Fever more than 102 F
3. Duration of fever < 24 h
4. Duration of fever > 48 h

A. 1, 2, 4

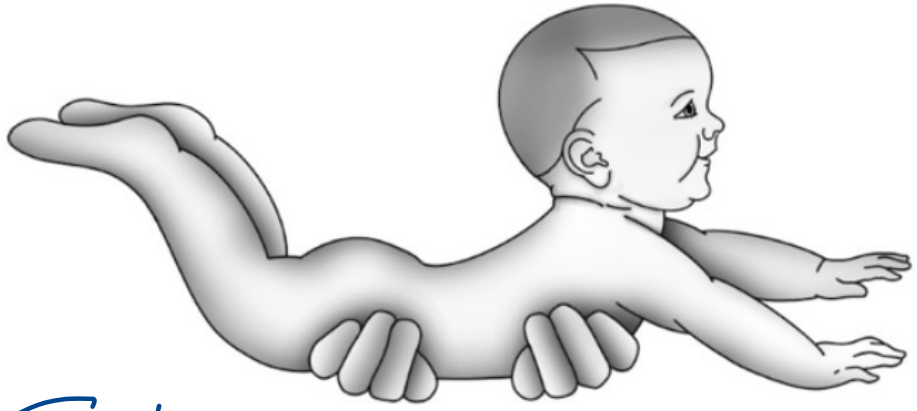
B. 1, 4

C. 1, 3

D. 1, 3, 4

73. Identify this reflex:

A. STNR
B. ASTNR – i/l arm ext
C. Landau reflex
D. Parachute reflex



Landau.

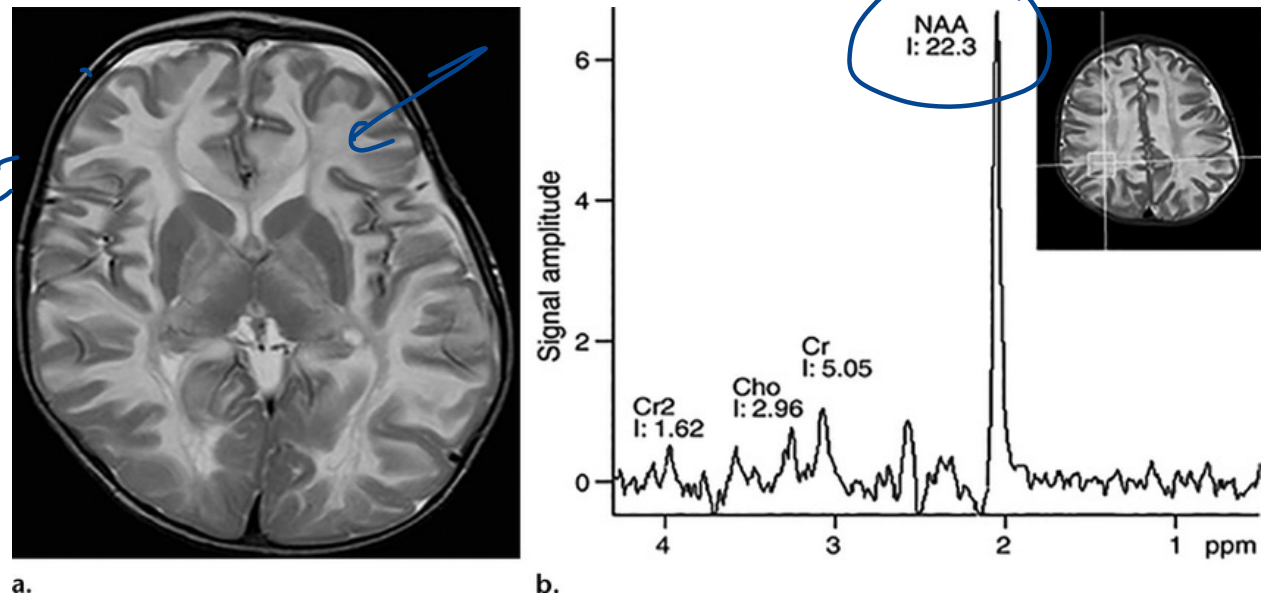
after birth

STNR.

Parachute – ⊗ disapp

74. A 2-year-old child with delayed developmental milestones presents to the OPD. A T2 weighted MRI is performed, and the imaging result is shown. What is the likely diagnosis?

A. Canavan disease
B. Alexander's disease
C. X linked adrenoleukodystrophy
D. Metachromatic leukodystrophy



75. Which of the following is not a feature of cystic fibrosis?

A. Nasal polyposis
B. Biliary atresia
C. Meconium ileus
D. Bleeding diathesis

Table 15.11: Common clinical features of cystic fibrosis (%)

0–2 years	
Meconium ileus	10–15
Obstructive jaundice	
Hypoproteinemia, anemia	
Bleeding diathesis	
Heat prostration, hyponatremia	
Undernutrition	
Steatorrhea	85
Rectal prolapse	20
Bronchitis, bronchiolitis	
Staphylococcal pneumonia	
2–12 years	
Malabsorption	85
Recurrent pneumonia	60
Nasal polyposis	6–36
Intussusception	1–5
>13 years	
Chronic pulmonary disease	70
Clubbing	
Abnormal glucose tolerance	20–30
Diabetes mellitus	7
Chronic intestinal obstruction	10–20
Focal biliary cirrhosis	
Portal hypertension	25
Gallstones	4–14
Azoospermia	98

76. 28-year-old postpartum woman complains of sore nipple. A lactation specialist evaluates and tells the patient that the baby's attachment is poor. All of the following are signs of good attachment during breastfeeding except?

A. Baby's chin is touching the breasts
B. Baby's lower lip is everted
C. Baby's mouth is wide open
D. Lower areola more visible than upper

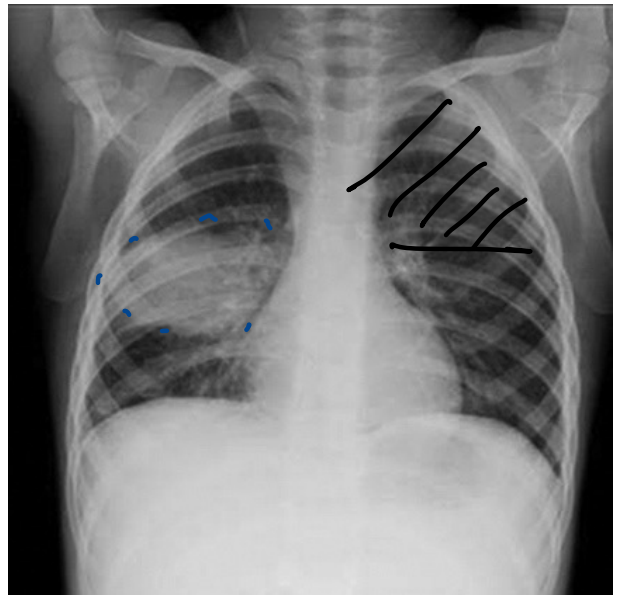
Breast milk deficient in: vit D / K / Fe
Max Breast milk output: 6mon.
Expressed Breast milk:
Room temperature- 8-10hrs
Refrigerator-24hrs
Deep freezer-3months
Complementary feeding: Acceptable, Feasible, Affordable, Sustainable, Safe AFASS

Adequate positioning:
Body well supported
Occiput, shoulder, buttocks in straight line
Entire baby turned towards mother
Abdomen touch-baby-mother

Adequate attachment:
Mouth wide open
Only small part upper areola visible
Lower lip everted
Chin touch mother's breast

77. An 8-year-old child presents with prolonged cough for 7 months, streaky hemoptysis for 1 month and fever for 4 days. Chest X-ray is shown below. What is the diagnosis?

A. Congenital lobar hyperinflation
B. Lung abscess
C. Round pneumonia
D. Congenital thoracic malformation



Canals of Lambert
pores of Kohn

78. Which one among the following has the lowest risk of perinatal transmission?

A. HSV
B. CMV
C. Rubella
D. Hepatitis B

QQ →

vancella : 13-20 wks.

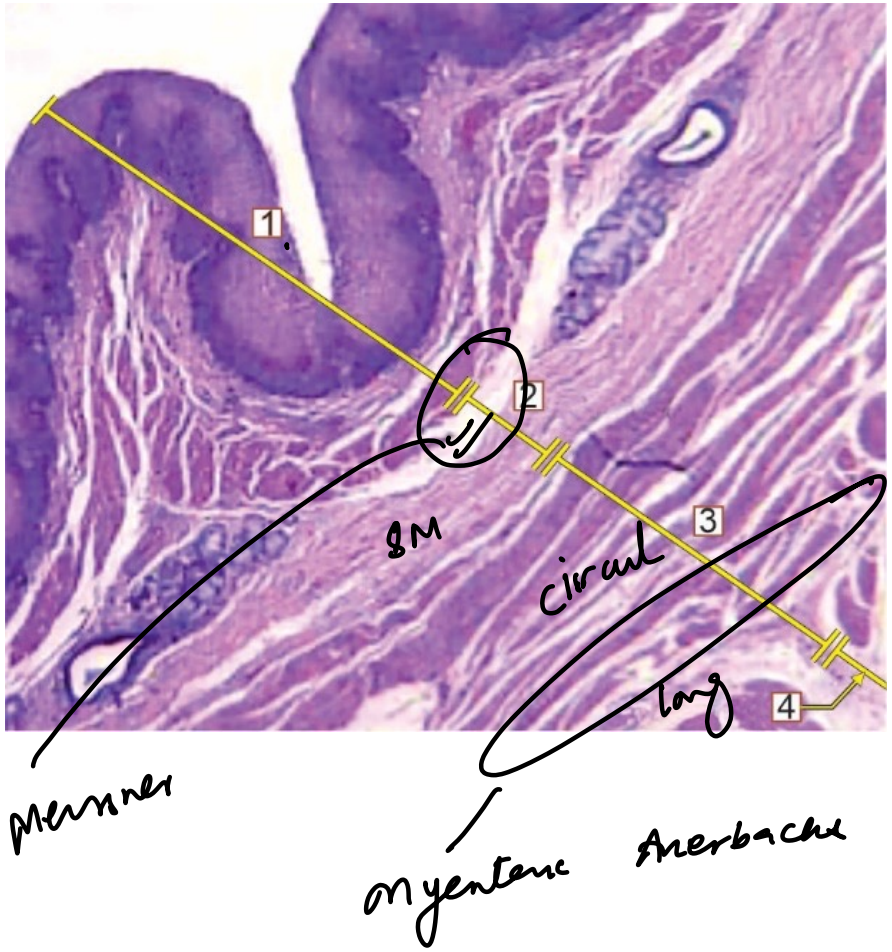
79. Which of the following is a true statement about congenital CMV infection?

A. About 20-30% of the infections are symptomatic (10%)
B. Triad of SNHL, periventricular calcification and enamel hypoplasia
C. Most children asymptomatic at birth can develop conductive hearing loss later in life (SNHL)
D. If mother is IgG positive for CMV, the child is unlikely to develop infection

Urine CMV PCR

80. A 2-day-old child is brought to the OPD. Mother complains that child is not feeding well and has bilious vomiting. The child is diagnosed with congenital megacolon and aganglionic segment of the colon is shown. Which of the following layers are affected in this condition?

A. Layer 1 and 2
B. Layer 2 and 3
C. Layer 3 and 4
D. Layer 1 and 4



Thank You