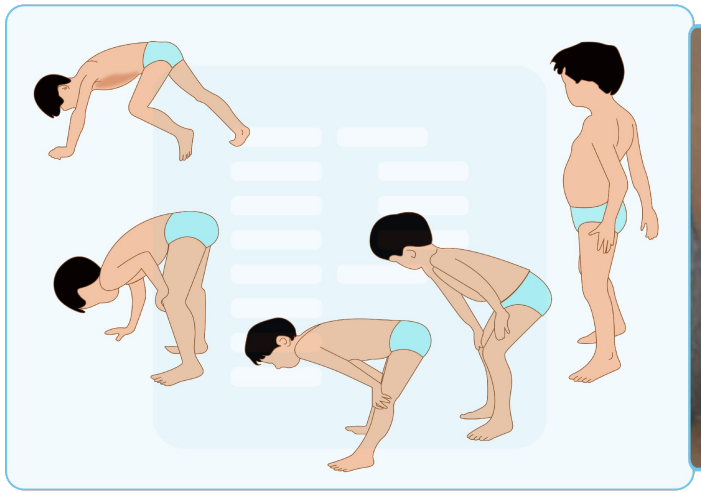
T and E PEDIATRICS



1. Which of the following is the most common epilepsy in children?

MC Type of seizure in child

a. Febrile seizures

b. Benign epilepsy with Centrotemporal spikes — Focal seizures, AREA

c. Absence seizures

d. Subtle seizures — Neonate

MC seizures in children	Febrile seizures
MC epilepsy in children	Rolandic epilepsy Benign " c centrotemporal sei
MC seizures in neonate	SUBTLE SEIZURES → HIE, Hypoglycemia, ↓Ca → phenobarbitone
3/sec spike and slow wave pattern on EEG ↳ Absence	seizures +
Hypsarrhythmia on EEG in infant showing myoclonic jerks involving the trunk →	grossly chaotic pattern WEST SYN / salaam seizures inj ACTH (Vigabatrin)

2. Correct intervention for breast feeding jaundice?

a. Increase frequency of breast-feeding
b. Stop breast-feeding and start formula feeds for one week
c. Use Bili-blanket at home and call daily for follow up
d. Phototherapy in NICU and take consent for exchange transfusion

BREAST feeding ↓	BREAST Milk jaundice
inadequate feeding	PREGNEDIOL : ⊖ UDPGT
* ↑ ENTERO HEPATIC CIRC^N	↑ Uc Bilirubin
Rx: ↑r feeding	Rx: ↑r feeding

BREASTFEEDING JAUNDICE VS BREAST JAUNDICE

Breastfeeding Jaundice	Breast Milk Jaundice
Early (Day 2–5)	Late (Day 5–7; peaks 10–14 days, can persist weeks)
Inadequate milk intake → dehydration & delayed meconium → ↑ enterohepatic circulation	Factor in breast milk (β-glucuronidase, free faity acids, pregnane diol) → inhibits bilirubin conjugation & ↑ enterohepatic circulation
May be dehydrated, poor feeding	Thriving, well-nourished, otherwise healthy
Unconjugated, moderate rise	Unconjugated, may be prolonged but not harmful
↑ Frequency & effectiveness of breastfeeding; ensure proper latch; hydration	Continue breastfeeding (do NOT stop), reassure parents; monitor bilirubin; phototherapy if threshold crossed
"Feeding problem"	"Milk composition issue"

* MCC of Conj bilirubin = Biliary atresia 2
nappy stain: ↓ urine

* MCC of pathological J = Rh incompatibility

* MCC of KERNICTERUS | Bilirubin encepth
↳ CRIGGLER
NAJAR syn
UDPGT ⊖

Putamen
athetoid cerebral palsy

3. A 6-month-old child with weight of 6 kg is brought to PHC in an unconscious state. Mother says that he has been having watery loose motions since last night and she has stopped counting after 10 episodes. On examination the child is listless, femoral pulses are thready and skin pinch is delayed to 5 seconds. Calculate the initial correction that will be given to this infant?

a. Ringer lactate 180 ml over 1 hour
b. Ringer lactate 180 ml over 30 minutes
c. Ringer lactate 600 ml over 3 hours
d. Ringer lactate 600 ml over 6 hours

Total CORRECTION

AGE c severe dehyN

30ml/kg = 180 ml RL OVER 1 HOUR

70ml/kg = 420 ml RL OVER 5 HOUR

SEVERE dehyN

* - iv RL 180 ml OVER 1 HOUR | < 1 yr = 6 HOUR
  - iv RL 420 ml OVER 5 HOUR

IV RL 180 ml OVER 1/2 HOUR | > 1yr
IV RL 420 ml OVER 2 1/2 HOUR | 3 HOUR

* Intra-Osseus = IVF — BMA needle = TIBIA

[< 7 yrs]

SOME dehyN

ORS

6mth ⇒ 6kg × 75 ml/kg = 450ml OVER 4 HOUR

Na = 75meq
sugar = 75meq

SGLT 1

No dehyN

Home made fluids > ORS ad libitum

- Rice water
- 8tsp sugar, 1tsp salt
  1L WATER

Shelf life = < 24 HOURS

Zinc: 10 mg < 6 mth | 2 wks
20 mg > 6 mths

all cases

AGE → ↑ immunity ↓ severity of illn
(repair) ++ ⇒ TURNOVER epithelial cells of gut

* REHYDRATION: Na = 45 meq/
PEM gd IV

SEVERE dehyN (most reliable)

PEM gd IV loose fold of skin

6kg, 2yrs → 12kg (age x 2 + 8) ✓✓

- FEMORAL pulses: THREADY
- ~~Skin pinch > 3sec~~
- Excessive THIRST
- PURGE Rate > 5 loose stool / hr

OBTUNDATION, PULSES (femoral) feeble / THREADY → SHOCK

SEIZURES

Skin PINCH delayed > 3sec * [not reliable for PEM]

SEVERE dehyN

4. A 4 kg male baby is born to primigravida with gestational diabetes mellitus using a ventouse. He has macrosomia with hair on the pinna and has vigorous cry. Which of the following is correct about this baby?

a. Low insulin * high insulin
b. ~~High~~ blood sugar low sugar
c. High Haematocrit
d. ~~Low~~ cortisol (STRESS HORMONE) High

Hematocrit
⇒ 3 x Hb
* (N) adults = 45 %
* neonate = 55 %

5. Congenital malformations develop in developing fetuses. Which of these is the most common one seen?

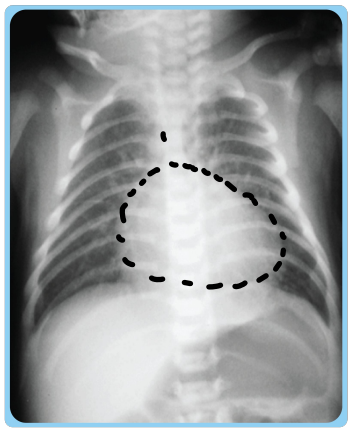
a. Ventricular septal defect, peri-membranous type 80%.
b. Ventricular septal defect, muscular type 20%.
c. Congenital adrenal hyperplasia, salt wasting type
d. Cleft lip and cleft palate

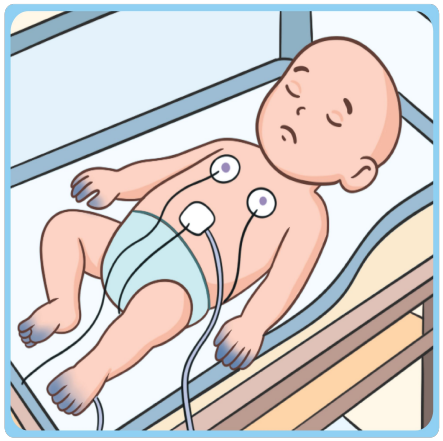
* MC congenital ♡ disease = VSD = PERIMEMBN
* MC congenital Maym = CRANIOFACIAL DYSMORPHISM

CENTRAL CYANOSIS

6. Mother in your OPD tells that her newborn born at home on day 1 is having poor attachment to breast and she is not able to breastfeed. On examination the child has dusky blue discoloration of lips and fingertips. O2 was started but cyanosis is persisting. CXR is shown below. Diagnosis is?

a. Transposition of great arteries
b. Tetralogy of Fallot
c. Eisenmenger complex
d. Tracheo-esophageal fistula

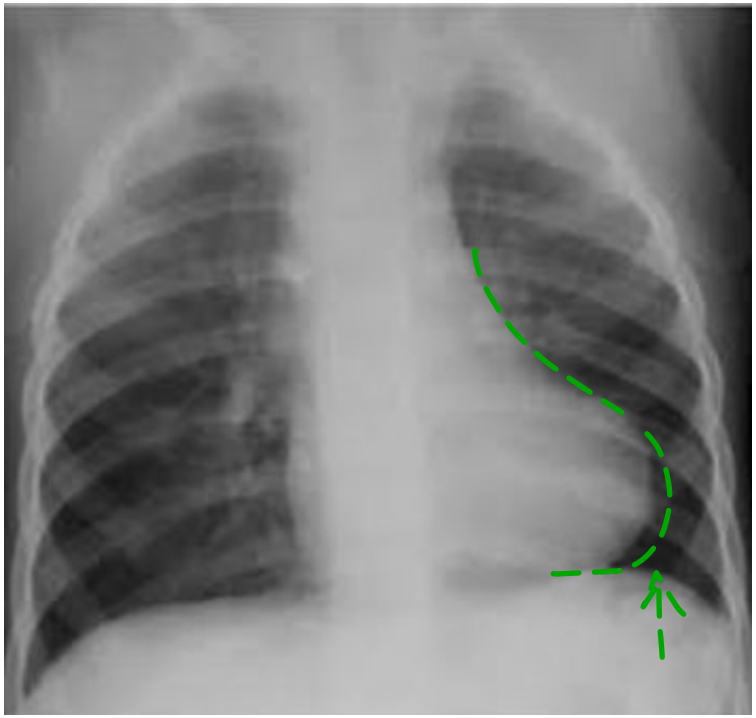




BOOT SHAPED ♥

SHUNT REVERSAL
L→R, R→L

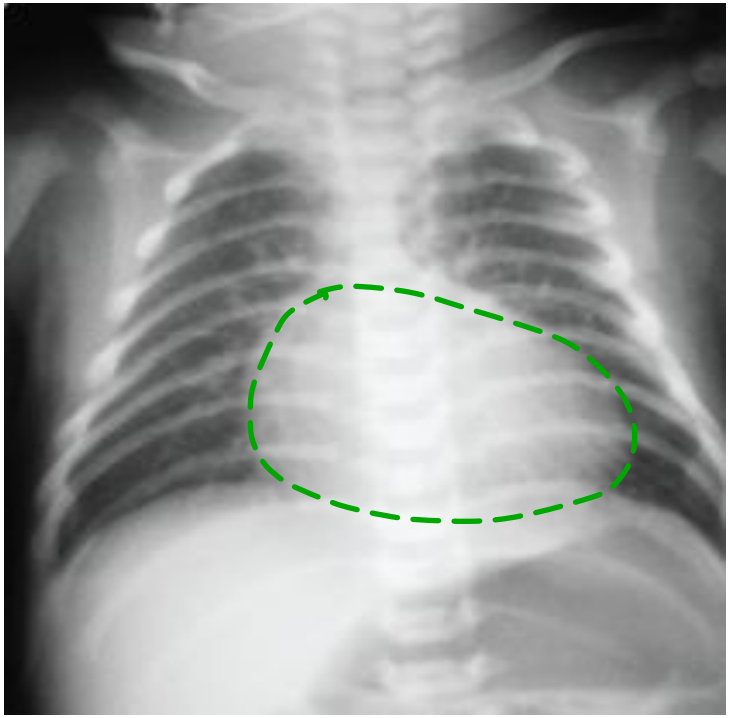
* DROOLING of saliva
* CHOKING episodes



ToF

1. Pulmonic stenosis
2. VSD R→L
3. RVH concentric
4. Over-riding Aorta

POF 5. ASD R→L



TGA

* PA ⇔ LV
* Aorta ⇔ RV

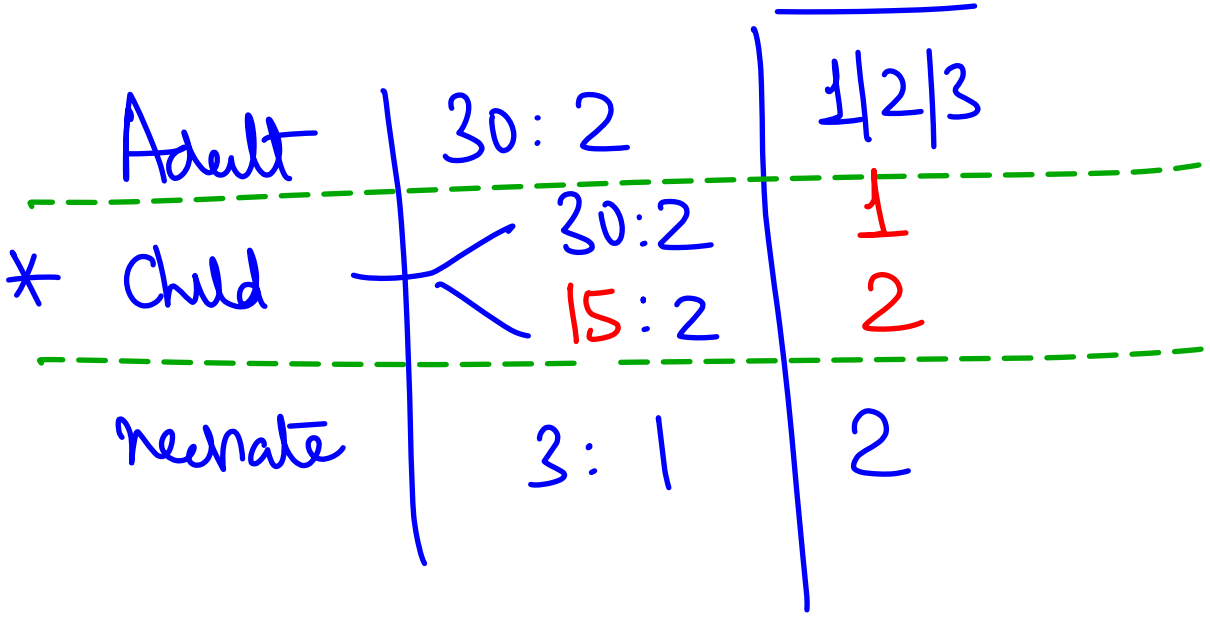
Central cyanosis

day 0

7. A 4-year-old child is brought unconscious and unresponsive after electrocution to CHC. You start giving CPR to this child. What is the ratio of chest compressions: rescue breaths when you are the only health care provider available on duty?

a. 3:1
b. 15:2
c. 30:2
d. 2:15

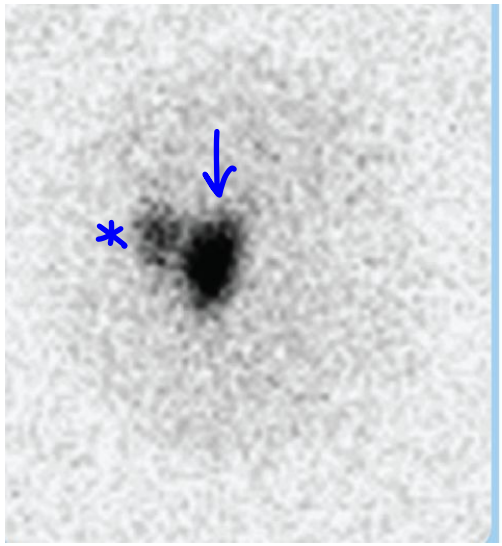
neonate → 2 Rescuers

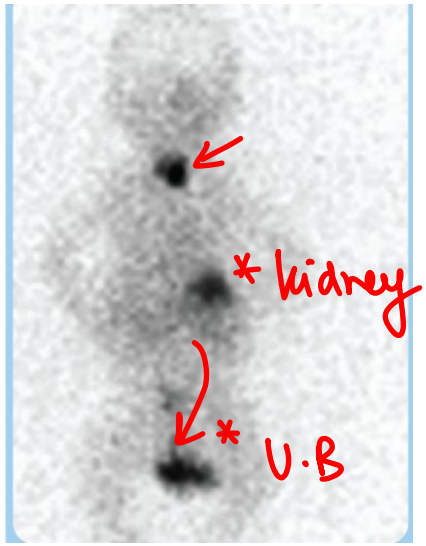


- If two rescuers are present (health-care providers): ratio is 15:2 (Compressions: breaths).
- If only one rescuer is present (layperson or health-care provider alone): ratio is 30:2 (same as adults).
- For newborn resuscitation in delivery room: ratio is 3:1.

8. Leading cause of congenital hypothyroidism?

a. Thyroid dysgenesis
b. Thyroid dyshormonogenesis
c. Iodine deficiency
d. Cretinism





t½ = 8 days

RAIU

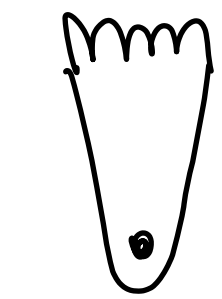
I-131 = THERAPEUTIC

I-132 = diagnostic

I-123 Shrtr t½

9. Dried blood spot from heel prick for diagnosis of congenital hypothyroidism is done at which time frame?

a. Within 24 hours of life
b. 24-48 hours of life
c. > 72 hours of life
d. > 4 weeks of life



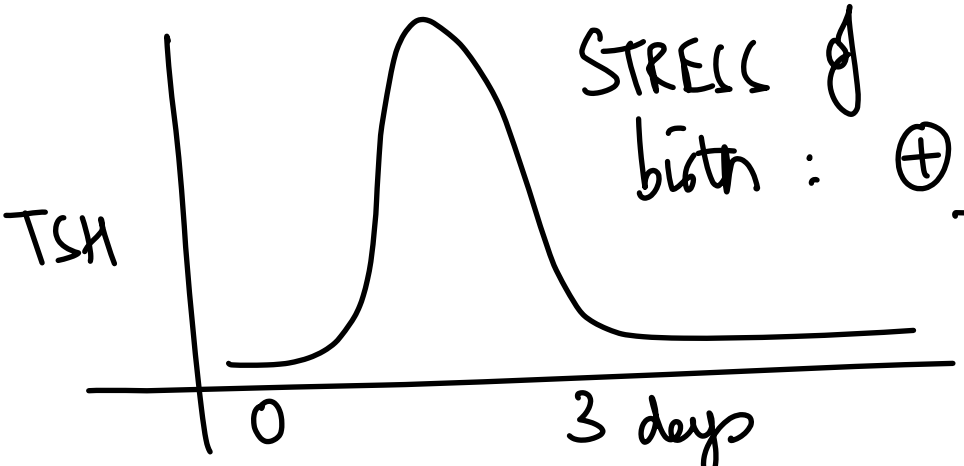
$T_4 \downarrow T_3 \downarrow$

TSH ↑ *

* PKU

* CAH

(N) delivery (N) neonate



STRESS of birth : ⊕ false elevation of TSH

10. 2-year-old child is admitted for work up of weight loss and recurrent pneumonia episodes. He also has greasy stools and is born to consanguineous marriage. Sputum culture shows Burkholderia cepacia. Which of the following test is best to confirm the diagnosis of this patient?

a. DNA sequencing
b. Fecal elastase levels
c. Sweat chloride levels
d. Urinary chloride levels

AR
CFTR #
R. pneumonie + Steatorrhee

- BARRIER
- GITELMAN

* initial/screening

11. Which of the following is not a feature of simple febrile convulsions?

a. Occurs within 24 hours of fever ✓
b. IV diazepam for prevention of episodes
c. No post ictal deficit ✓
d. Single episodes per febrile episode ✓

→ 1° :- oral clobazam | diazepam + PCM

→ Rx :- intranasal midazolam / Rectal diazepam

Acom
sinusitis

FEVER x 6 HRS
Single episode of
SEIZURE
nuchal Rigidity ±

? febrile seizure

FEVER ~ 2 days
SEIZURE ≤
Nuchal Rigidity ±

? Meningitis

12. During post-round you notice a swelling on the head of a neonate born early morning to a vaginal delivery aided by a ventouse. You reassure the mother about self-resolution of this swelling. Diagnosis is?

* ventouse

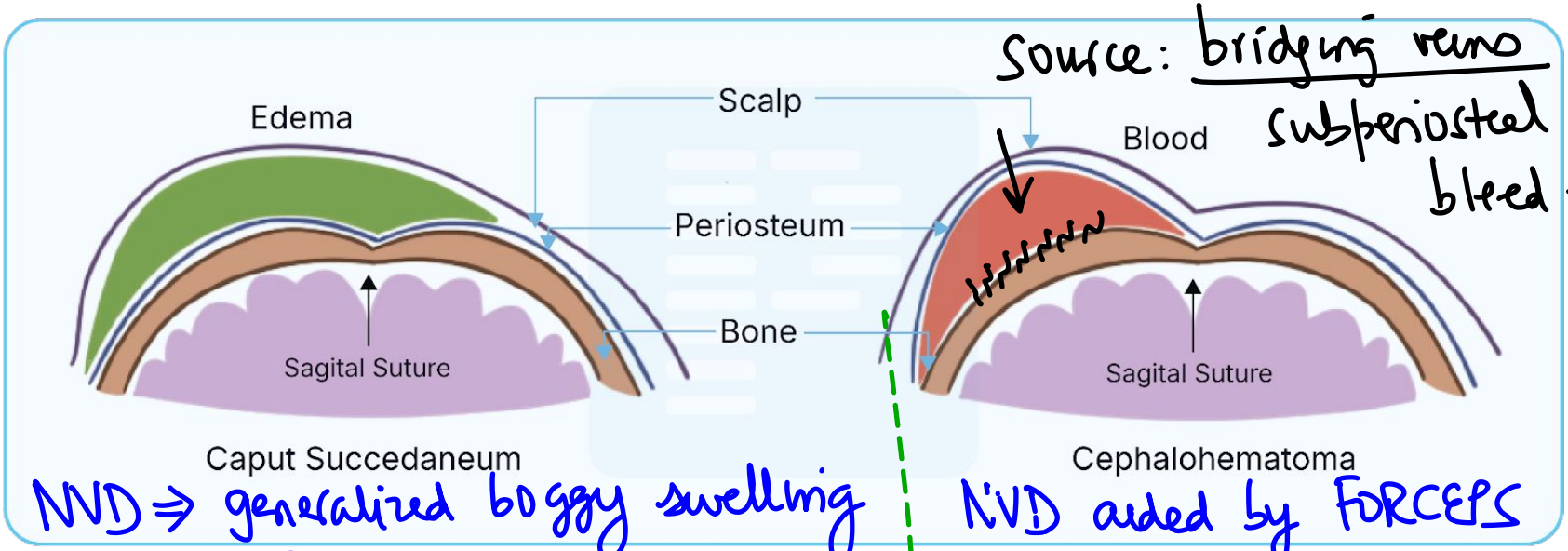
FRICTION: PELVIS vs fetal head

a. Caput succedaneum

b. Chignon — SUCTION CUP MARK

c. Cephahematoma — > 24 HOURS

d. Moulding — OVER-RIDING SUTURES



Source: bridging veins
subperiosteal bleed +

NVD ⇒ generalized boggy swelling

Why?: FRICTION

Resolution < 24 HOURS

NVD aided by FORCEPS

localized bleeding

appear: > 24 HOURS

Resolution Time = 5-7 wks

Complication: prolongation of physiological Jaundice

PT

13. A premature 32-week boy born with a weight of 1.4 kg is having a shrill cry. On examination an asymmetric moro reflex with bulging anterior fontanelle is seen. Which of the following investigations should be done on this child on first priority?

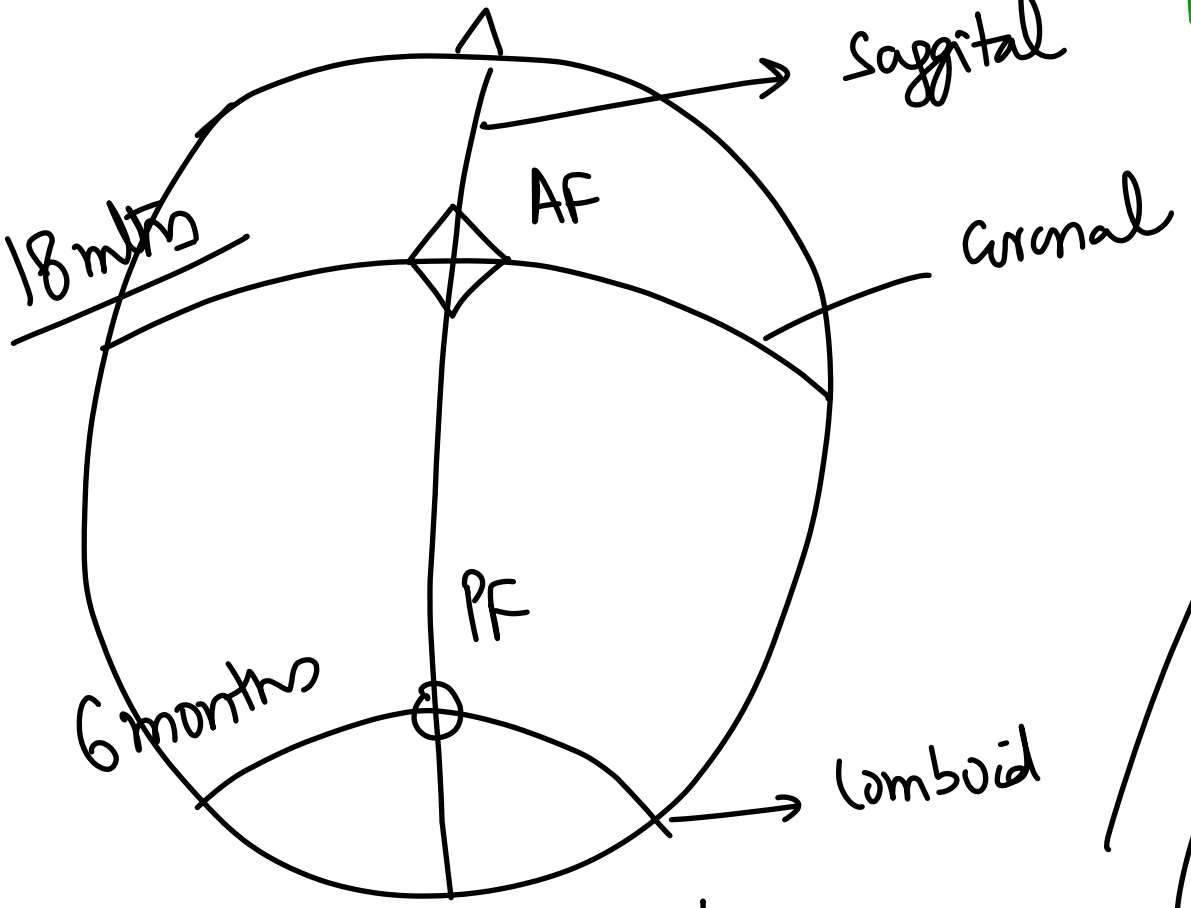
a. Lumbar puncture
b. X ray clavicle with shoulder +/-
c. Ultrasound skull ++
d. Capillary blood sugar

RAISED ICP : CI

Birth injury

* # clavicle, humerus
** Bulging AF : IVH

SUNKEN AF = dehyN



6 F

1. AF
2. PF
3. 2 behind mastoid
4. 2 squamo-parietal jt

Closed at birth

* AF: delayed closure ⇒ vit D_3 ↓
  bulging ⇒ IVH, ↑ICP
  SUNKEN ⇒ dehyN
* PF: delayed closure ⇒ T_4 ↓ *

14. Which of the following can a three old child perform?

a. Skipping → 5yr

b. Copies a triangle → 5yr

c. Hop on one foot → 4yr

d. Tell name and gender

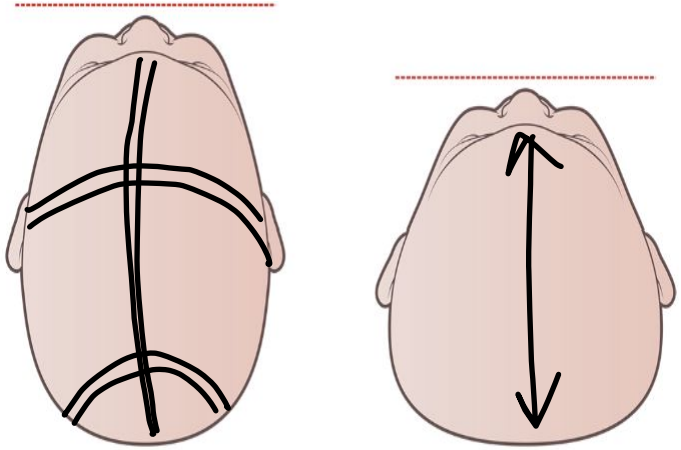
15. Which of the following is seen in Down syndrome?

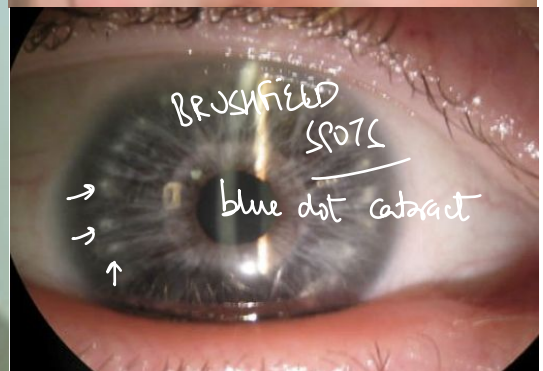
a. Craniosynostosis ← PREMATURE SUTURAL ↓ FUSION → Brachycephaly

b. Increased bone age

c. Progeria — accelerated ageing

d. ~~High~~ Low IQ





* TRISOMY 21 ⇒ ASD
  - endocardial cushion defect
  - AV canal defect
  - O. primum defect

46 XX | 46 XY + TURNER phenotype

* NOONAN syn ⇒ pulmonic stenosis
* TURNER syn ⇒ BAV > CoA
* WILLIAM syn ⇒ supravalvular AS

16. A 6-month child is having tet spells. CXR is shown below. Which is correct about first line management of this presentation?

a. Alprostadil infusion ← TOF
b. Knee chest position
c. Indomethacin P·D·A : PT
d. Blalock Taussig shunt

Cry: lips: blue → black
HYPERCYANOTIC spells

- knee Chest position: ↑TPR : R→L ↓
  PRPNL, morphine

SGA

17. 2 kg term small for gestational age neonate is having icterus on day 1 of life involving palms and soles. Total serum bilirubin is 20 mg/dl, unconjugated Bilirubin 18 mg/dl. Which of the following investigations should be done first to identify the cause?

a. TORCH

b. G6PD assay

c. Apt test for swallowed maternal blood

d. Maternal and baby group

Pathological Jaundice

* Rh incompatibility

FETUS: B+

Mother: B-

P_2: IgG YY against B+

CROSS placenta

Hemolysis in fetus Hb↓

* IMMUNOGENIC HYDROPS FETALIS CHF

18. Leading cause of conjugated hyperbilirubinemia in children?

a. Biliary atresia
b. Breast milk jaundice
c. Breast feeding jaundice
d. Rh incompatibility

Jaundice : 7 days of life
nappy staining
Mustard yellow urine

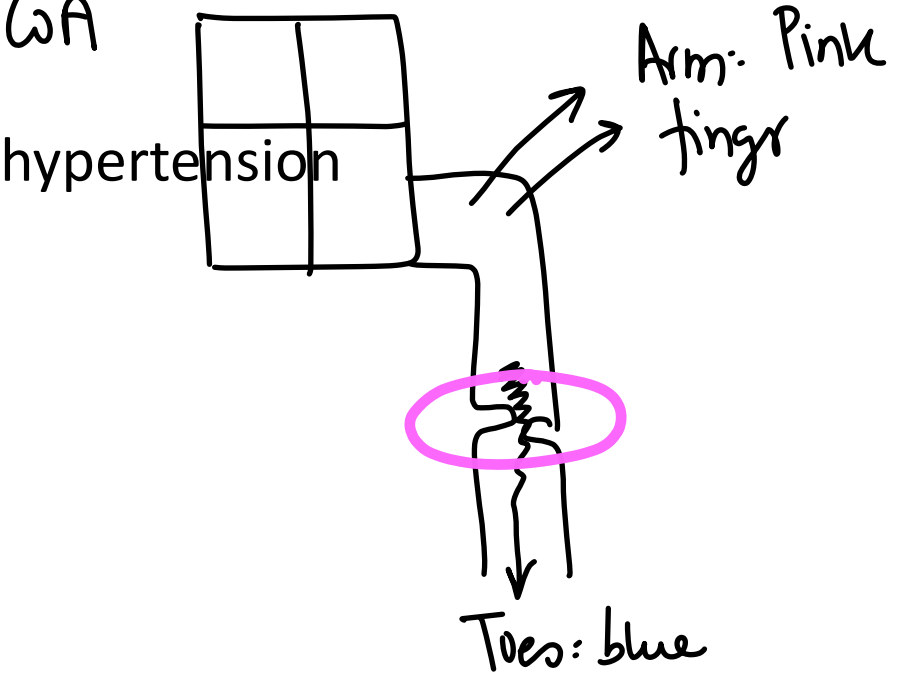
* USG : initial Δ
* HIDA : IOC
* Rx : KASAI procedure
PORTOENTEROSTOMY
< 6 mth of age

differential cyanosis

19. A short stature girl is brought to OPD with complaints of dusky blue colour of her toes. On examination she has a webbing of neck and low hair line. Nipples are hypoplastic and the carrying angle at the elbow is increased. Radio-femoral delay is present. Karyotyping reveals 45XO. Which of the following cardiovascular conditions is responsible for this presentation?

a. Bicuspid aortic valve
b. Coarctation of aorta
c. Persistent pulmonary artery hypertension
d. Mitral valve Prolapse

TURNER syn



20. A 25-year-old lady on lithium was conceived accidentally. Which of the following heart valves is likely to be malformed?

a. Tricuspid
b. Pulmonic
c. Aortic
d. Mitral

Ebstein anomaly

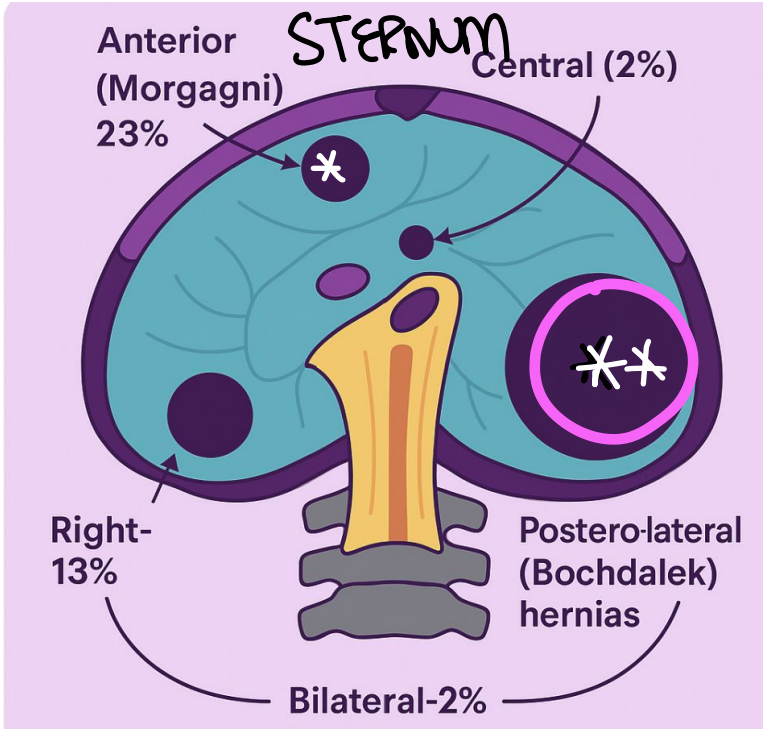
* TR, TS

21. Neonate is having respiratory distress on day 1 of life. On examination, scaphoid abdomen is noted. CXR shows apparent dextrocardia and dilated bowel loops on the left side of the chest. Which of the following is correct about this presentation?

Congenital diaphr. HERNIA: left

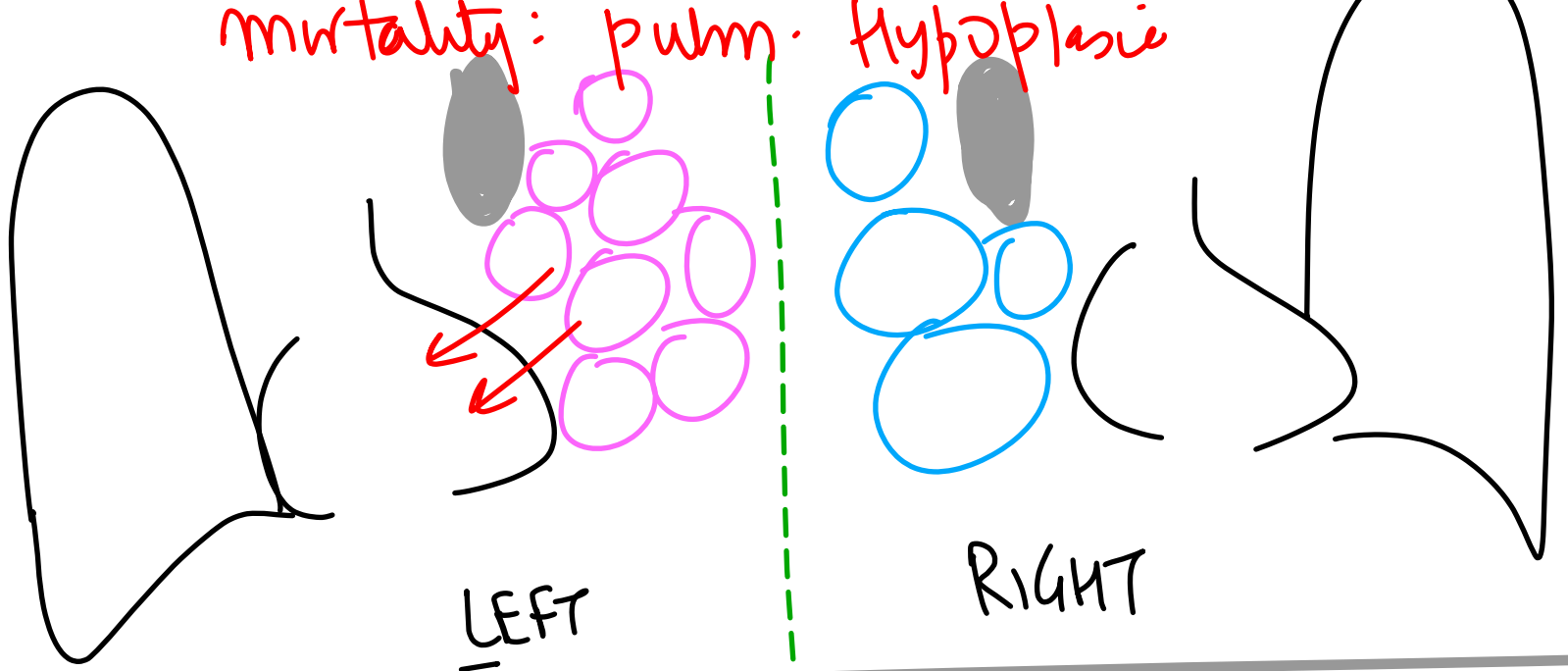
morgagni

a. MC viscus is transverse colon
b. Defect between sternal and costal margins of diaphragm
c. Occurs due to persistent pleuroperitoneal canal
d. Anteriorly placed herniation of bowel contents into chest wall



a, b, d: MORGAGNI

mortality: pulm. hypoplasie



LEFT

RIGHT

BOCHDALEK

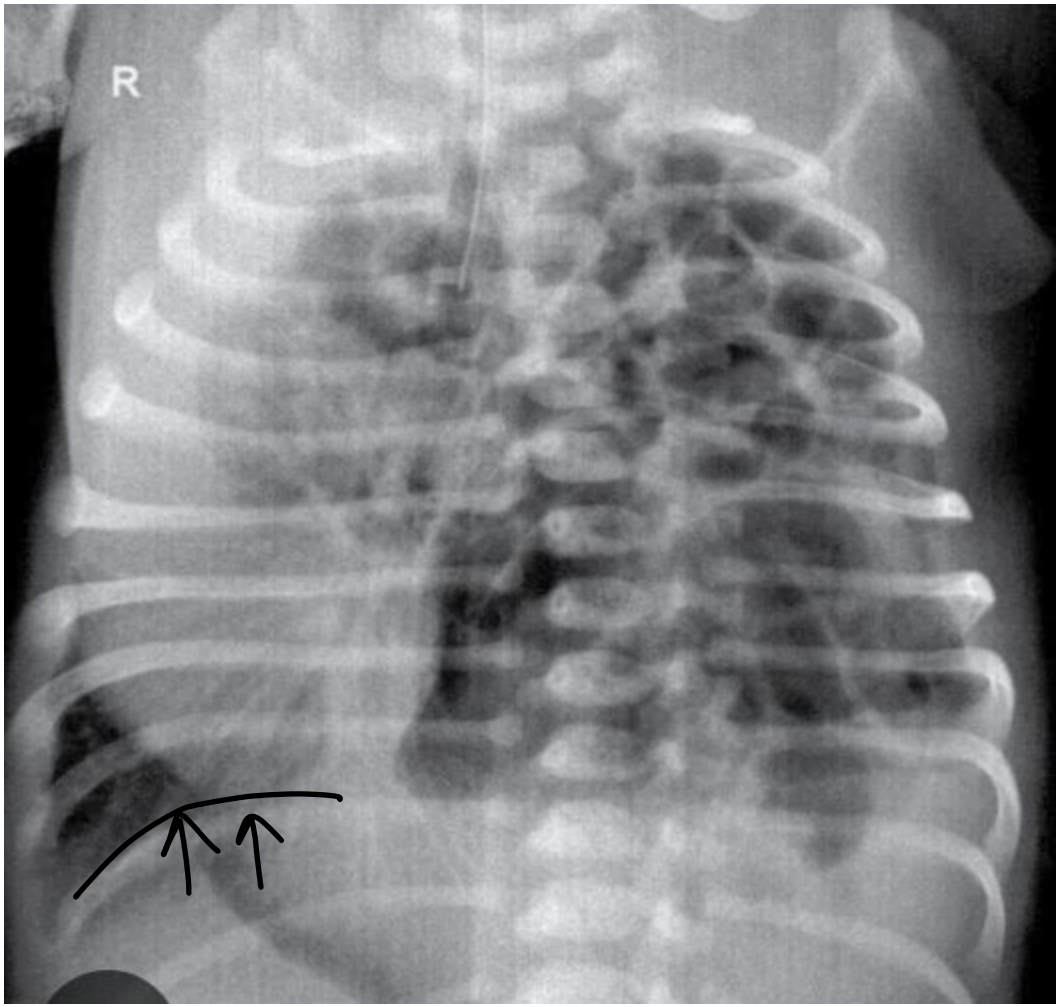
MORGAGNI

POSTERIOR

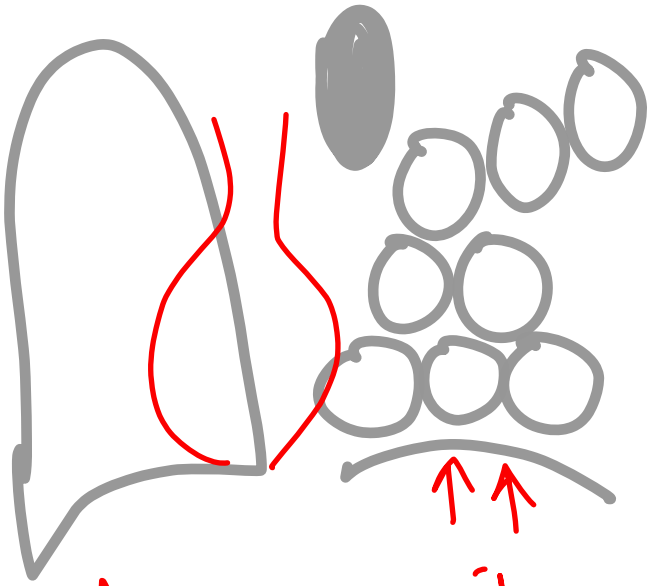
PERSISTENCE of pleuroperitoneal canal

ANTERIORLY

defect in sterno costal attachments diaphr



Bochdalek



+ [cystic Adenomatoid malformation

* SCAPHOID Abdomen
* CYANOSIS at birth on crying
* CXR: app. dextrocardia
bowel loop

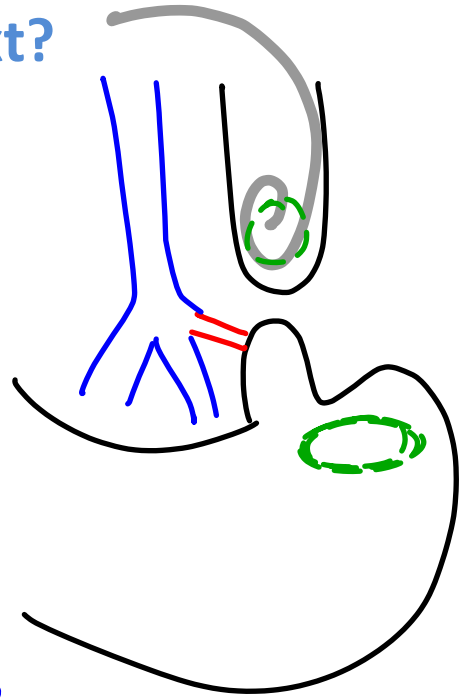
R.D ++: neonate/infant

? CDH

T.E. FISTULA

22. Neonate born at 38 weeks of gestation, in the first few hours of life develops frothing, bubbling and drooling of saliva. Mother says she noticed regurgitation of initial feeds with choking and cyanosis when feeding was done in presence of medical staff. Which of the following investigations should be done next?

a. CXR with NG tube in situ
b. Barium swallow
c. Endoscopy
d. Barium enema



* IOC TEF → Endoscopy methylene blue: fistula

23. Term neonate on day 1 develops bilious vomiting without abdominal distention. X-ray Abdomen is shown below. Best intervention is

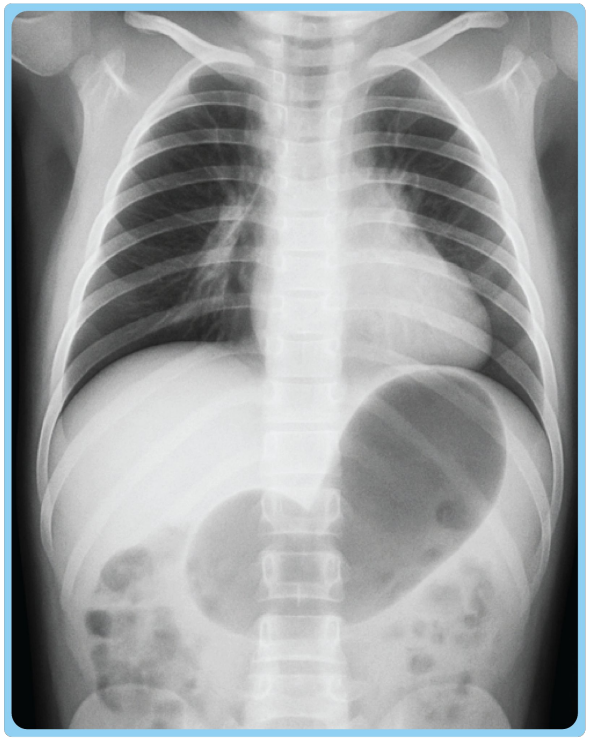
a. Wait and watch

b. Diamond shaped duodeno-duodenostomy

c. Gastrojejunostomy

d. Duodenojejunostomy

Δ: duodenal atresia



double bubble app

TERM

24. A 38-week neonate is brought with gross abdominal distention on day 3 of life. On enquiry mother says that meconium has been passed. Digital rectal examination shows empty rectum followed by passage of toothpaste like stool. Which of the following testing should be done to confirm the diagnosis?

HIRSCHSPRUNG DISEASE *

a. Barium enema
b. Air enema
c. Rectal suction biopsy
d. Ano-rectal manometry

Aganglionosis = Recto-sigmoid Junction

Rx:- DUHAMEL | SVAVE

25. A 34-week-old preterm girl child delivered at home was started on cow milk feeds by grandmother as mother was admitted due to puerperal sepsis. She develops hematochezia and is brought to hospital with abdominal distention. Clinical diagnosis is?

a. Volvulus of stomach — vomiting

b. Intussusception — cry, Red currant jelly stool, 9mths

c. Necrotising enterocolitis

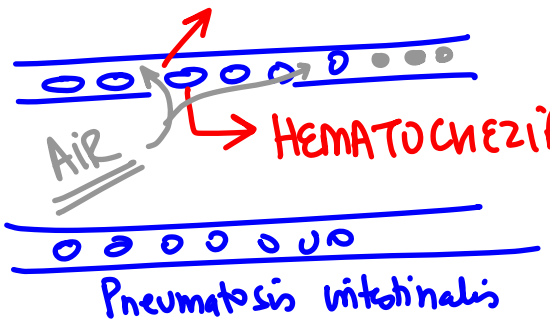
d. IHPS — vomiting

↳ lactoglobulin #, PRETERM

↳ Bell's staging

↳ Pneumoperitoneum

PORTAL vein gas

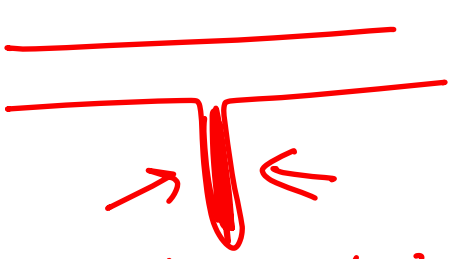


children

HEMATOCHEZIA

MCC:

1. Rectal Polyp
2. Meckel's D : 2 feet from ileocaecal jt
3. (CONSTIPATION)
   ANAL FISCURE
4. INTUSSUSCEPTION



Symptoms : CRY, lump in RIF ±
Red currant jelly stool
Air enema

RV vaccine

5. PT: Cow Milk : NEC

26. A 4-year-old child presents with swelling all over the body. Work up shows proteinuria > 40 mg /m2 BSA with hypoalbuminemia. KFT is normal. C3 levels are normal. USG shows normal size kidneys. What is best treatment for this case

a. Steroids plus spironolactone
b. Steroids plus hydrochlorothiazide
c. Steroids plus ACEI
d. Steroids plus cyclophosphamide

Minimal change disease

K ↓

* MASSIVE proteinuria
* S. albumin ↓
* edema

STEROID Responsive nephrotic syn

Rx: Spironolactone + prednisone

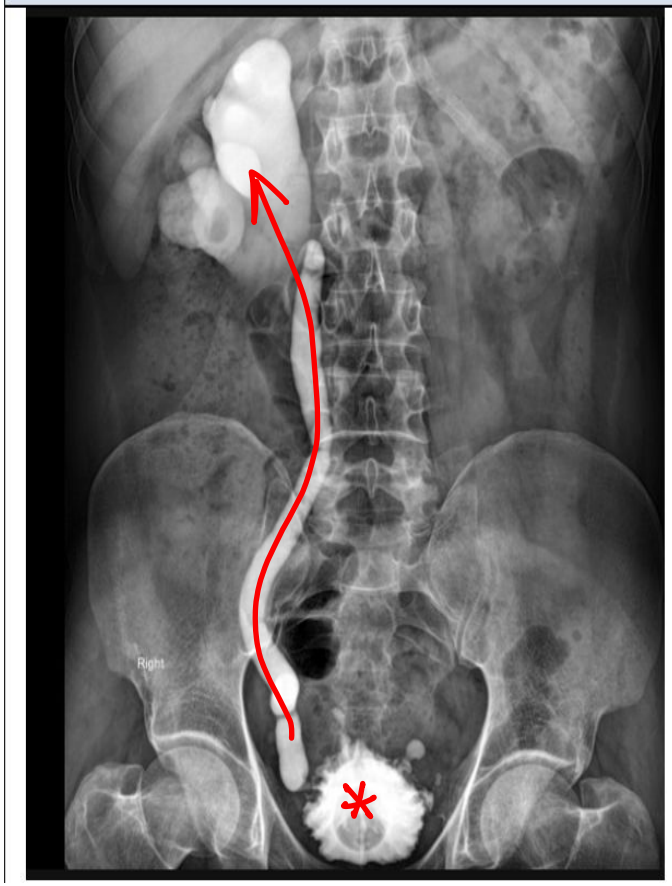
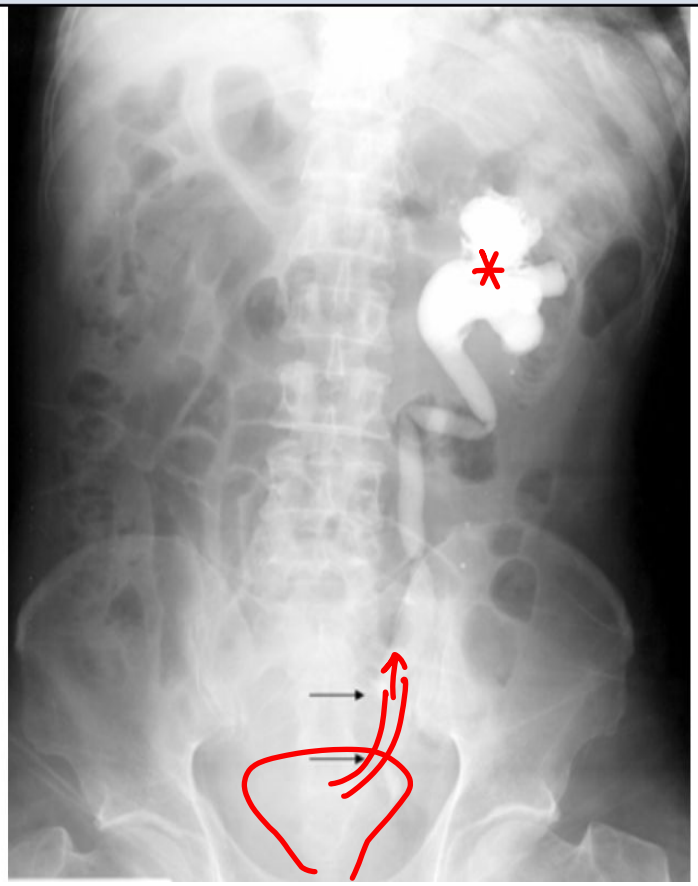
27. The 5-year-old girl is having fever, abdominal pain and dysuria. Following work up was done by consultant and he is asking you to identify the investigation performed

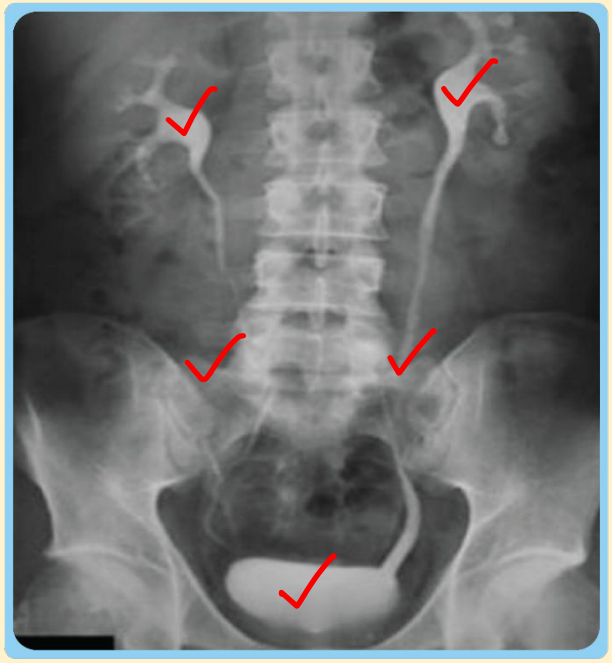
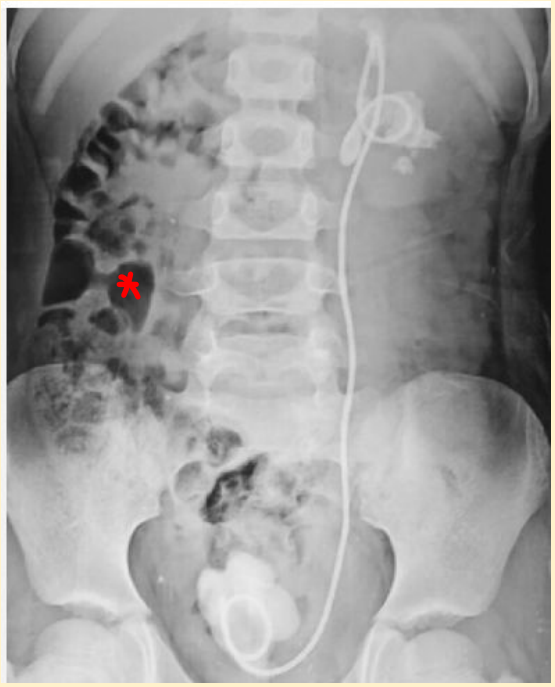
a. Intravenous pyelography
b. Retrograde pyelography
c. Voiding cystourethrography
d. DTPA scan

nuclear scan

UTi

Christmas TREE app

VCUG	Retrograde pyelography
	

IVP	DJ stent
	

ambigous genitlie

28. Mother brings her 5-year-old girl child due to peculiar appearance of genitals. You notice clitoral hypertrophy with labia minora fusion and hyperpigmentation around genitals. USG shows uterus with ovaries. Karyotyping reveals 46 XX Which of the following is the first differential diagnosis?

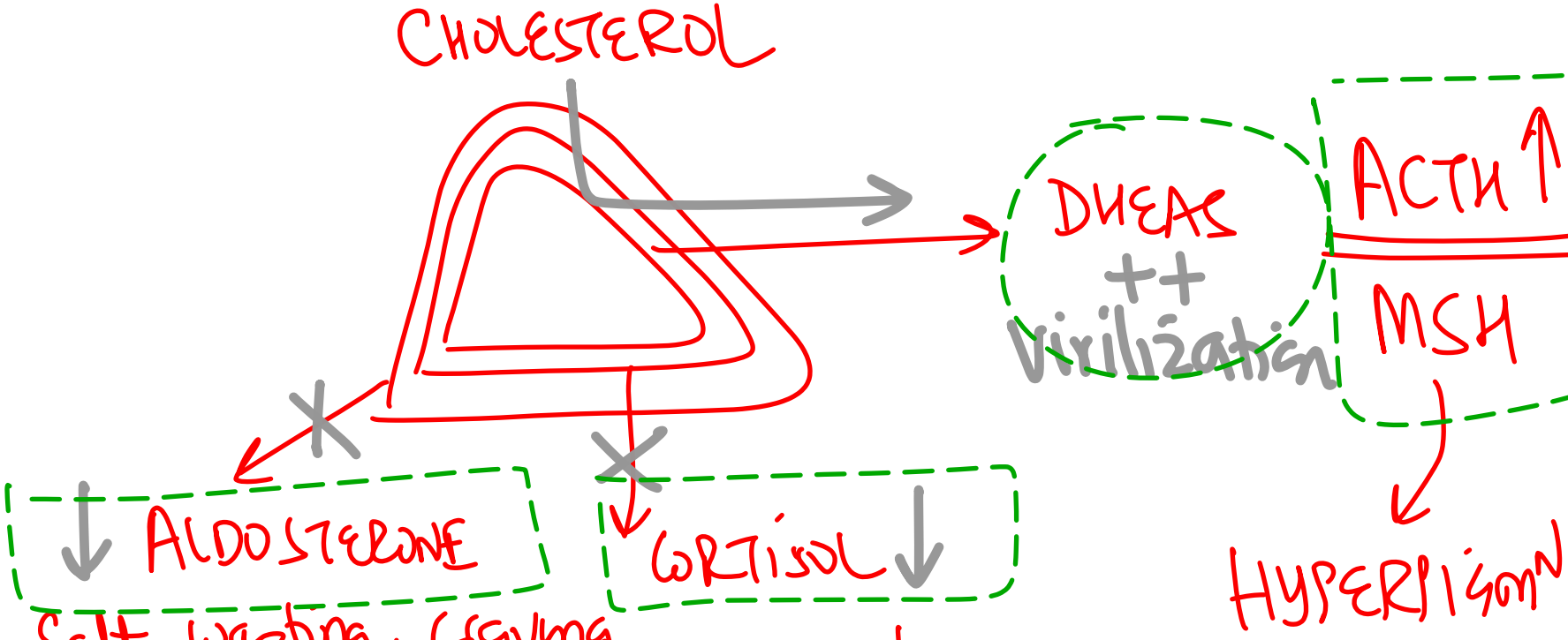
a. Testicular feminization syndrome
b. True hermaphrodite
c. Turner syndrome
d. Congenital adrenal hyperplasia

♀ : DHEAS ↑

CAH

21 Hydroxylase ⊖

↓ aldosterone ↓ cortisol ↑ DHEAS



29. A 2-year-old boy is brought for a poor urinary stream. On examination external urinary meatus is normal. Per abdomen shows a dilated urinary bladder. First differential diagnosis is?

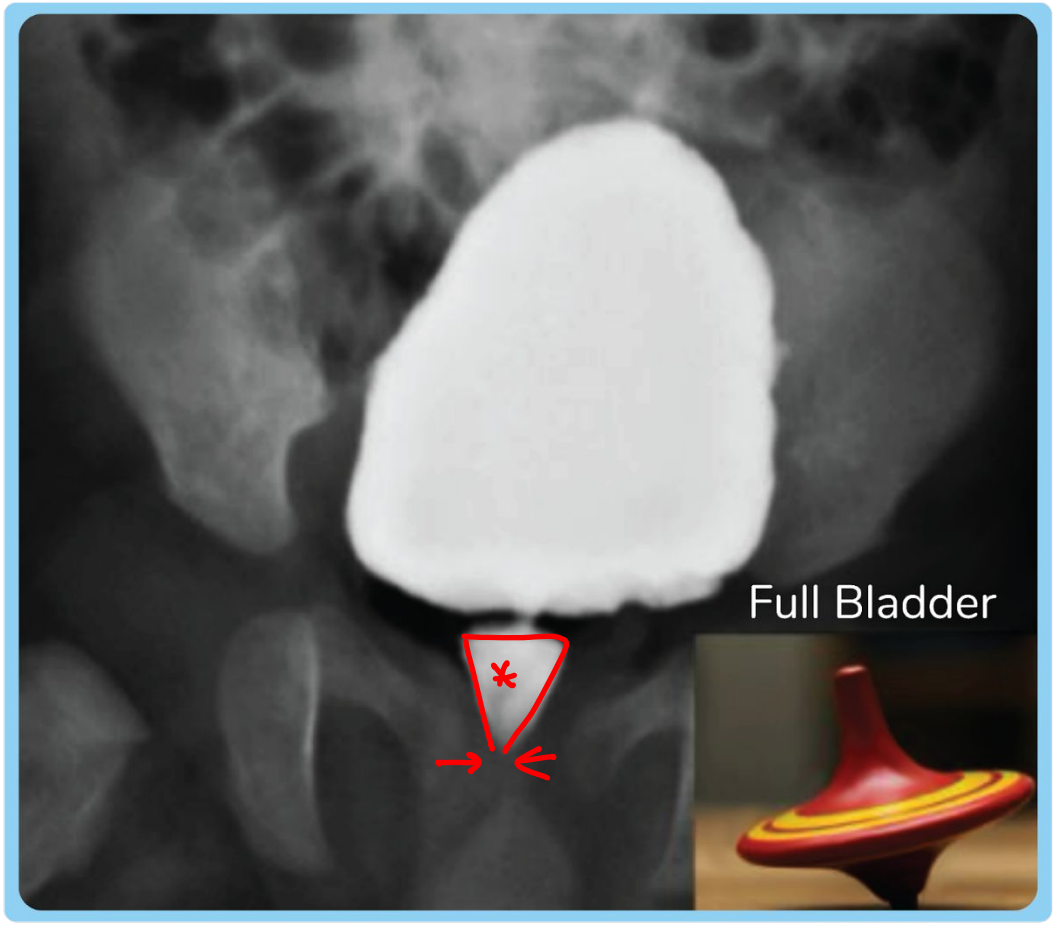
a. Posterior urethral valve

b. Phimosis

c. Paraphimosis

d. Hypospadias

MEATUS OPENS UNDERSURFACE of PENIS



Spinning Top of Proximal URETHRA

VCUG

PUV *

30. Which of the following is the cause of death in case of measles?

RUBEOLA

a. Secondary skin infections

b. Hetchl pneumonia

c. SSPE

d. Reye syndrome

INTERSTITIAL Pneumonie
giant cell pneumonie

V2 + Aspirin → Hepatic - encephalopathy

31. Earliest manifestation of neonatal syphilis is?

a. Snuffles
b. Hutchison teeth
c. Mulberry molars
d. Saddle nose

late syphilis

* marwahmedicine@gmail.com

32. Microcephaly and periventricular calcification is seen in which of the following?

a. CMV
b. Toxoplasmosis
c. HSV
d. Syphilis

INTRACEREBRAL Calcification

Microcephaly in CMV = due to global neurodevelopmental arrest + neuronal loss (primary brain growth failure)

Calcification are sequelae, not the cause of microcephaly.

33. 2-year-old is diagnosed to have an abdominal mass. USG shows mass origination from the left supra-renal gland. Testing shows 24-hour urinary VMA levels to be elevated. Diagnosis is

Vanyle mandelic acid

a. Wilm tumor
b. Neuroblastoma
c. Hepatoblastoma
d. ARPKD

N-myc, ch1 #

* Adults | IN = 24 hr urinary VMA = pheochrom^N

34. Which of the following is not seen in marasmus?

a. Monkey facies ✓
b. Baggy pants ✓
c. Pitting oedema KWASHIORKOR
d. Early recovery and less prone to infections ✓

* kwashiorkor ⇒ PROTEIN intake ↓ Caloric ↓
flag sign, pedal edema, Hepatomegaly
flaky paint dermatosis
APATHETIC child, INFECTIONS +
TUBE FEEDING

35. Severe acute malnutrition is defined as MAC less than?

a. < 10.5 cm

b. < 11.5 cm

c. <12.5 cm

d. <13.5 cm

36. Ideal temperature of neonatal resuscitation room should be?

a. 36.5 to 37.5 C

b. 32- 35 C

c. 28-32 C

d. 26-28 C

37. Ideal route of drug administration in neonatal resuscitation is?

a. Umbilical vein
b. Umbilical artery
c. Subclavian vein
d. Internal jugular vein

Adrenaline IV
(1:10,000)

lump, blue, No cry

1. B & M x 30 sec
2. B & T x 30 sec] 3:1
3. Chest compression
4. IV Adrenaline

38. Bag and mask ventilation is contraindicated in all *except*?

a. Meconium aspiration syndrome ✓

b. Diaphragmatic hernia — Stomach distention

c. Tracheoesophageal fistula ✓

d. Hypoxic ischemic encephalopathy

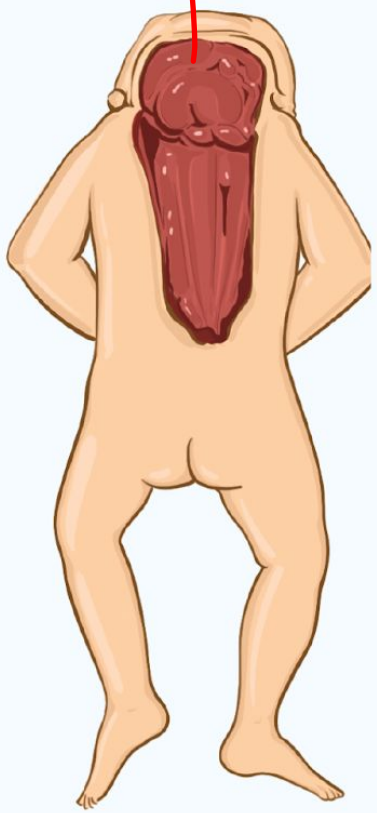
Air passes preferentially into stomach via fistula → gastric distension, worsens respiratory compromise in TEF

39. Which of the following is not a neural tube defect?

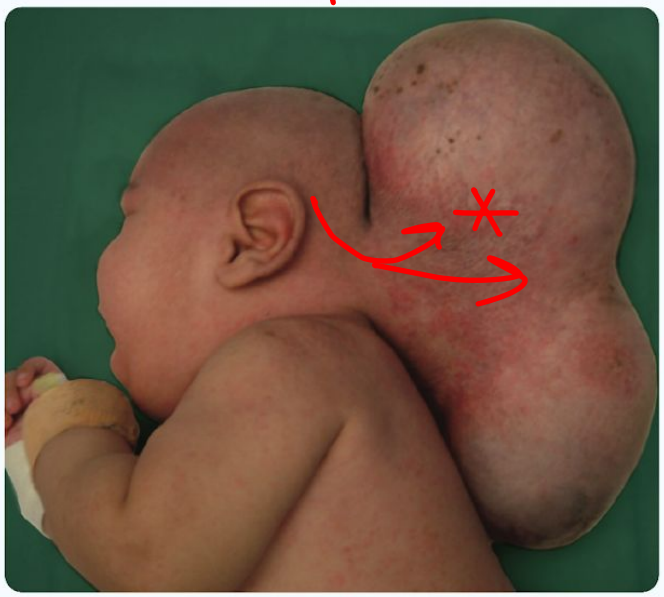
a. Sacral agenesis
b. Sacrococcygeal teratoma
c. Craniorachischisis
d. Spina bifida occulta

CRANIORACCHISIS

Anencephaly



Encephalocele



Myelomeningocele ⇒ D-L Area

40. A 2-day-old female neonate presents with a large mass arising from the sacrococcygeal region. The swelling is predominantly external, well-circumscribed, and non-tender. The ultrasound abdomen shows no significant intra-pelvic extension. Serum alpha-fetoprotein is elevated. Which of the following is the most appropriate management?

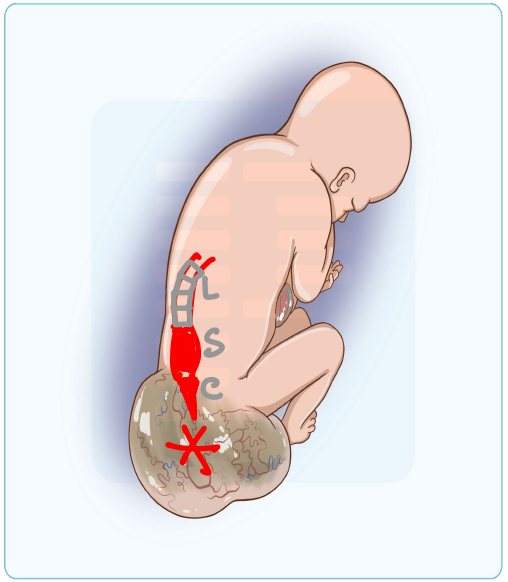
SACROCOCCYGEAL TERATOMA

a. Excision of the mass alone

b. Excision of the mass with coccygectomy

c. Observation till 6 months of age

d. Chemotherapy followed by surgery



- Sacrococcygeal teratoma is the most common neonatal tumour, usually seen in girls.
- Associated with elevated AFP. Definitive management = complete surgical excision along with coccygectomy to reduce recurrence risk (since coccyx contains totipotent cells).

41. A 12-month-old child is brought with mother reporting difficulty in crawling. You notice that the child does commando crawling. He was born a preterm child and has global developmental delay. Diagnosis is?

HMD: $\downarrow O_2$
PERIVENTRICULAR
damage: cystic spinal
#

a. Spastic diplegia
b. Spastic quadriplegia
c. Spastic hemiplegia
d. Atonic cerebral palsy

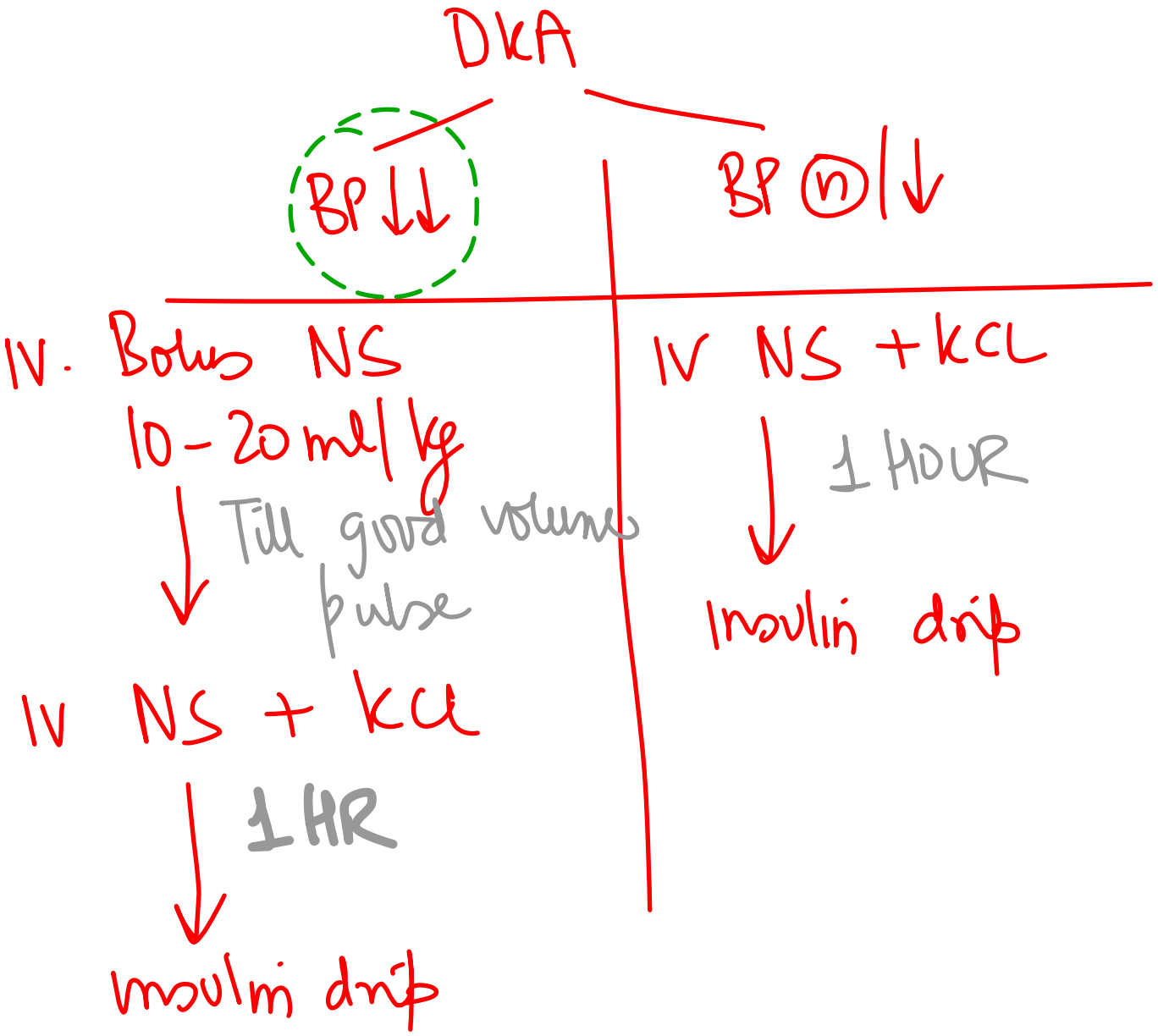
SHOCK

42. An 8-year-old child is brought into an unconscious state. He had been complaining of abdominal epigastric pain for the last 2 days with multiple episodes of vomiting. On examination pulse is thready, BP is not recordable. Venous blood gas sample shows pH: 7.3, pC02= 30 mm Hg, HCO3=15 meq/L and RBS is 400 mg/dl. Urine ketostix is 4+. Which of the following is the next best step intervention as per ISPAD guidelines?

M. Acidosis

DKA

a. Insulin bolus followed by insulin infusion
b. Normal saline 0.9% over 1 hour followed by insulin infusion
c. Normal saline 0.9% boluses @20 ml per Kg followed by normal saline 0.9% infusion for 1 hours
d. Perform ABG as VBG is not reliable for diagnosis of metabolic acidosis


DKA
BP ↓↓
BP ⓝ/↓
IV. Bolus NS
10-20 ml/kg
Till good volume pulse
IV NS + KCL
1 HR
Insulin drip
IV NS + KCL
1 HOUR
Insulin drip

43. Which of the following should be given for management of hidden hunger in Indian population?

MICRONUTRIENT

a. Iron
b. Proteins like eggs and chicken
c. Carbohydrates with low glycaemic index
d. Carbohydrates with high glycaemic index

- 2 in 1 salt
- dewarming
- IRON Tablets + vit C

44. A 2-year-old child weighing 10 kg develops acute gastroenteritis with some dehydration. How much ORT should be given to this patient?

a. 300 ml over first 4 hours + 10 ml / kg/ Stool

b. 700 ml over first 4 hours + 10 ml / kg/ Stool

c. 750 ml over first 4 hours + 10 ml / Kg/ Stool

d. 1000 ml over first 4 hours +10 ml /kg/ stool

45. Leading cause of delayed closure of anterior fontanelle is?

a. Hypothyroidism
b. Rickets
c. Hypogonadism
d. Kwashiorkor

* NUTRITIONAL RICKETS

46. You are examining an 8-month-old infant in a well-baby clinic. You notice widening of wrist joint with frontal bossing. In work up: X-Ray of wrist joint is shown below, serum calcium is low, serum phosphate is low and SAP is elevated. Which of the following is correct about the management?

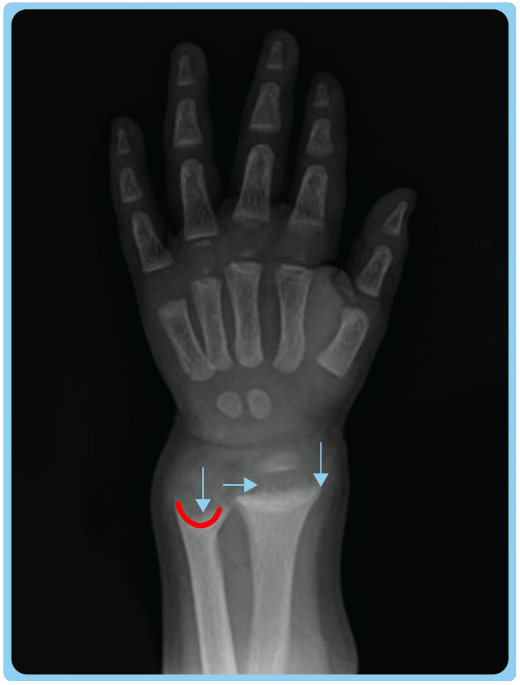
a. 6,000 IU of vitamin D3 with supplemental calcium daily for 10 days

b. 60,000 IU of vitamin D3 with supplemental calcium daily for 10 days

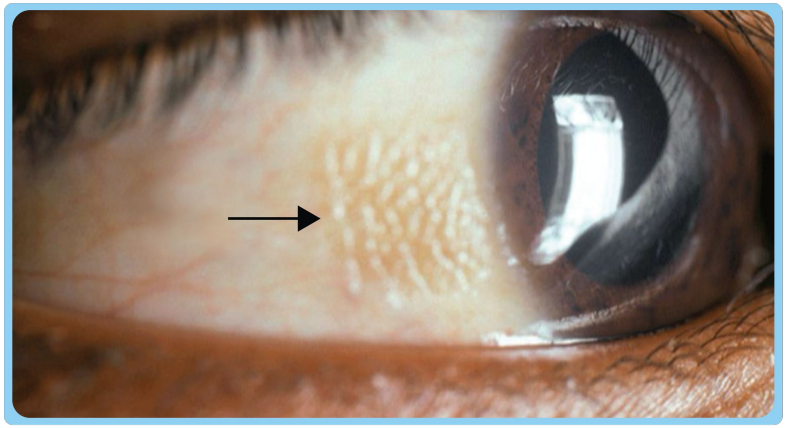
6 lec IU

c. 200,000 IU of vitamin D3 with supplemental calcium daily for 10 days

d. 600,000 IU of vitamin D3 with supplemental calcium daily for 10 days



47. A 2-year-old child is brought by mother saying that the child cries a lot at night. You notice the following eye findings. Which is correct management?



BITOT SPOTS

a. 2 Lac IU oral vitamin A single dose

b. 2 Lac IU of Oral Vitamin A daily every 6 months till the age of 5 years → PROPHYLAXIS

c. 2 Lac IU of Oral Vitamin A on day 0,1, 14

d. 2 Lac IU of Oral Vitamin A on day 0, 1,14,28

48. 3-year-old child presents with high grade fever for 1 day with dysphagia, drooling of saliva and muffled voice. On examination the child has adopted a sniffing position and stridor is heard. X-ray of neck is shown below. Which of the following should not be done in this case?

Acute epiglottis

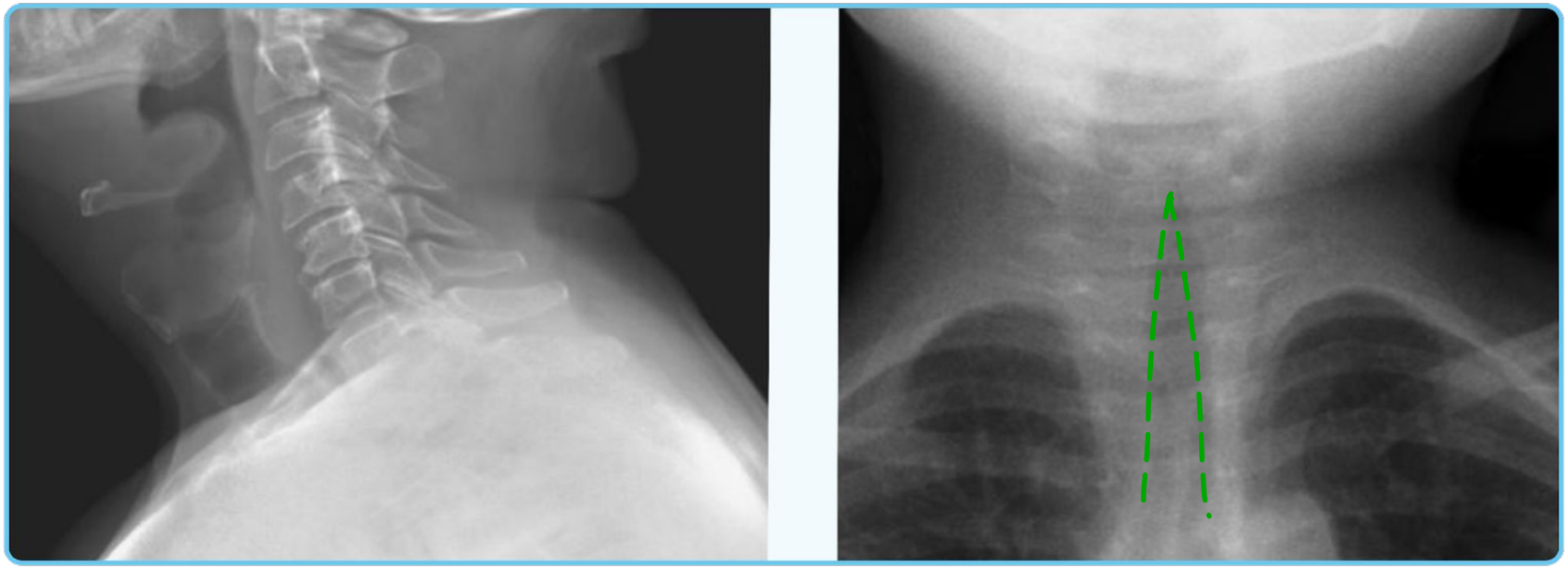
a. Start oxygen ✓
b. IV ceftriaxone ✓
c. Throat examination with indirect laryngoscopy
d. Avoid sedation ✓

THUMB SIGN

Trigger laryngospasm

acute epiglottis

L.T.B.N CROUP



THUMB SIGN

* Steeple sign

49. Which of the following is correct management of acute rheumatic carditis?

a. Aspirin
b. Steroids
c. Injection benzathine penicillin → 1° of RF
d. Lasix with digoxin

RF: Arthritis : Aspirin
Carditis : STEROIDS

1° RF → Inj Benzathine penicillin I.M EVERY 4 wks
secondary prophylaxis

MS: PMBV
MR: Valvuloplasty

50. Definition of hypoxic ischemic encephalopathy is

a. Apgar score of > 7 at > 5 min
b. Apgar score of < 7 at > 5 min ⇒ Indication for NN Resus
c. Apgar score of < 5 at > 5 min
d. Apgar score of > 3 at > 5 min

51. Leading cause of immunogenic hydrops fetalis

a. Alpha thalassemia
b. Beta thalassemia
c. Rh incompatibility
d. Twin to twin transfusion

52. Advanced bone age is seen in which of the following?

a. Congenital adrenal hyperplasia
b. Hypothyroidism ✓
c. Hypopituitarism ✓
d. Testicular tumor

GH ↑
T4 T3 ↑
Testosterone ↑
DHEAS ↑

delayed Bone age

Hypopituitarism
Hypothyroidism
Hypogonadism

53. A full-term newborn is evaluated at 1 minute of life. The following observations are made:

Heart rate: 120/min

Respiratory effort: slow, irregular

Muscle tone: some flexion of extremities

Reflex irritability: No response

Colour: body pink, extremities blue

What is the APGAR score of this newborn?

a. 3
b. 5
c. 7
d. 9

Apgar Scoring System

Indicator		0 Points	1 Point	2 Points
A	Activity (muscle tone)	Absent	Flexed limbs	Active
P	Pulse	Absent	< 100 BPM	> 100 BPM
G	Grimace (reflex irritability)	Floppy	Minimal response to stimulation	Prompt response to stimulation
A	Appearance (skin color)	Blue Pale	Pink body Blue extremeties	Pink
R	Respiration	Absent	Slow and irregular	Vigorous cry

54. A Child can play vocal tennis and fixate on an object in midline at which age in months?

a. 3
b. 4
c. 5
d. 6

55. A 2-year-old child presents with developmental delay, seizures, hypopigmented skin and a mousy odor to urine. Which enzyme deficiency is responsible?

a. Homogentisate oxidase
b. Phenylalanine hydroxylase
c. Branched chain α-ketoacid dehydrogenase
d. Tyrosinase

phenylpyruvic acid ++
phenylacetate ++

Phenyalnine
+ ⊖
↓
Tyrosine
↓
Melanin

56. A 6-year-old boy presents with massive splenomegaly, anemia, and bone pain. Bone marrow aspirate shows macrophages with a "crumpled tissue paper" cytoplasm. This condition is most commonly due to mutation in which gene located on which chromosome?

GAUCHER disease
glucocerebrosidase activity ↓

a. GBA gene on chromosome 1q21
b. GLA gene on chromosome Xq22
c. SMPD1 gene on chromosome 11p15
d. GALC gene on chromosome 14q31

galactosidase : FABRY : XLR

- **GLA gene** → located on **Xq22** → encodes **α-galactosidase A** → defect causes **Fabry disease** (X-linked)

57. A 6-month-old infant presents with hypoglycemia, hepatomegaly, and lactic acidosis. Which test is diagnostic for confirming Von Gierke disease?

a. Peripheral blood G6PD assay

b. Buffy coat G6PD assay

c. Molecular sequencing

d. FISH

- Nowadays, molecular genetic testing (G6PC gene mutation analysis on chromosome 17q21) has largely replaced invasive biopsy.G6P assay requires a liver biopsy (because the enzyme is located in the endoplasmic reticulum of hepatocytes and renal tubular cells)

58. Which of the following is NOT a sign of correct attachment of baby to the breast?

a. Baby's chin touches the breast
b. Mouth is wide open
c. Lower lip is turned outward
d. More areola visible below than above the mouth

59. In boys the first visible sign of puberty is

a. Penile enlargement
b. Testis enlargement
c. Pubic hair
d. Deeping of voice

60. In which neural tube defect, surgical repair is feasible and can increase survival?

a. Cranioschisis
b. Anencephaly
c. Meningocele
d. Spina bifida occulta

61. A Child is admitted with a diagnosis of TB meningitis. Which of the following is not correct about this condition?

a. Give mannitol to reduce vasogenic cerebral oedema
b. Sutural diastasis
c. SIADH ✓
d. Basal exudates ✓

Hydrocephalus

Rx ATT + dexamethasone

Vasogenic * CEREBRAL Oedema

62. Ejection systolic murmur with wide fixed split S2 is seen in which of the following congenital heart disease

a. ASD
b. VSD
c. PDA
d. TOF

→ WIDE VARIABLE split

S_2 — ASD = WIDE split S_2 (Fixed)
VSD = WIDE split S_2 (Variable)
TOF : A_2 ~~P~~ : single S_2
pulmonic stenosis

63. Leading cause of short stature is?

a. Achondroplasia
b. Hypopituitarism
c. Constitutional delay in growth
d. Caries spine

TB

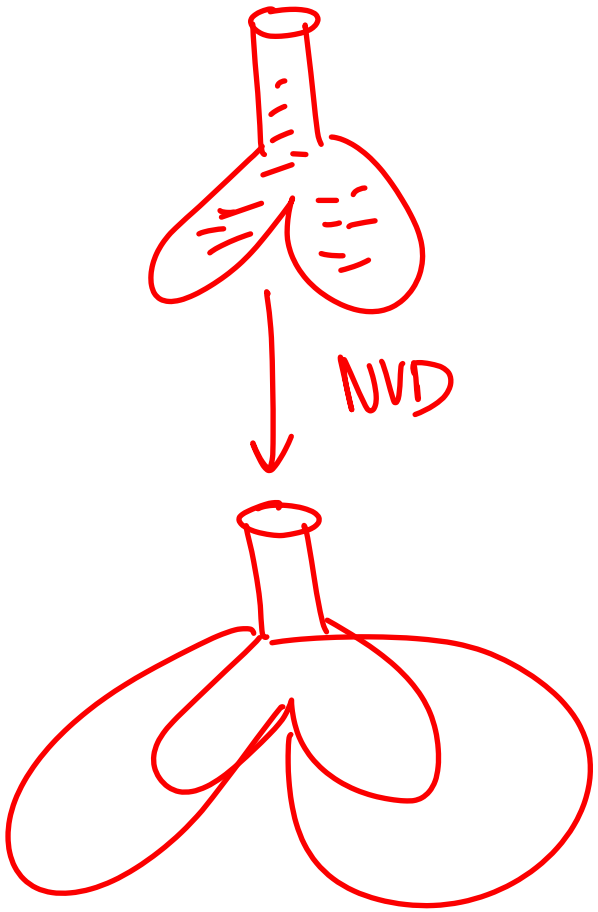
64. The leading cause of respiratory distress in a baby born by LSCS 1 hour ago is?

a. Hyaline membrane disease PRE-TERM: SURFACTANT ↓

b. TTNB TERM, LSCS

c. MAS POST TERM

d. Congenital diaphragmatic hernia

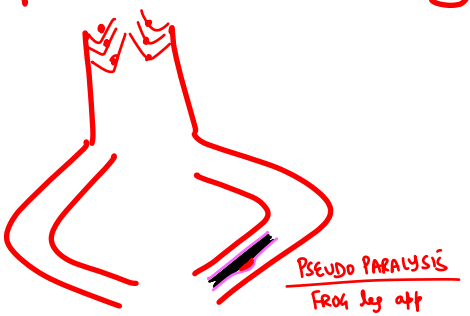


65. A 2-year-old exclusively breast-fed child is brought to hospital with following chest wall deformities and inability to walk. X ray of extremities is shown. Diagnosis is

X Ray knee
FRANKEL line

a. PEM
b. Vitamin D3 deficiency
c. Vitamin C deficiency
d. Calcium deficiency

RACHITIC ROSARY
SCORBUTIC ROSARY



PSEUDO PARALYSIS
From leg pain
SUBPERIOSTEAL Bleeding

66. The following changes are seen in

Zinc deficiency

* PERIORAL
* PERI-ANAL
RASH

a. Impetigo HONEY CRUST APP
b. Hand foot mouth disease BLISTERS SOLES/PALMS
c. Acrodermatitis enterohepatica
d. Dengue Rash SADDLE BACK FEVER *

67. A Child presents with fever and following lesions. Likely a causative agent is?

HAND FOOT MOUTH disease

COXSACKIE A

a. Enterovirus
b. Dengue virus
c. Coxsackie B virus → MYOCARDITIS, PLEURITIS
d. Rickettsiae

Coxasackie A	**Coxsackie B**
Herpangina	Pleurodynia (“Devil’s grip”)
Hand -Foot -Mouth Disease (HFMD)	Myocarditis, pericarditis
Acute hemorrhagic conjunctivitis	Aseptic meningitis, Pancreatitis

68. A Child from Kashmir is brought with complaints of fever, headache and rash on the entire body including palms and soles. On examination hepatosplenomegaly is present. Welix-felix reaction is positive. Diagnosis is?

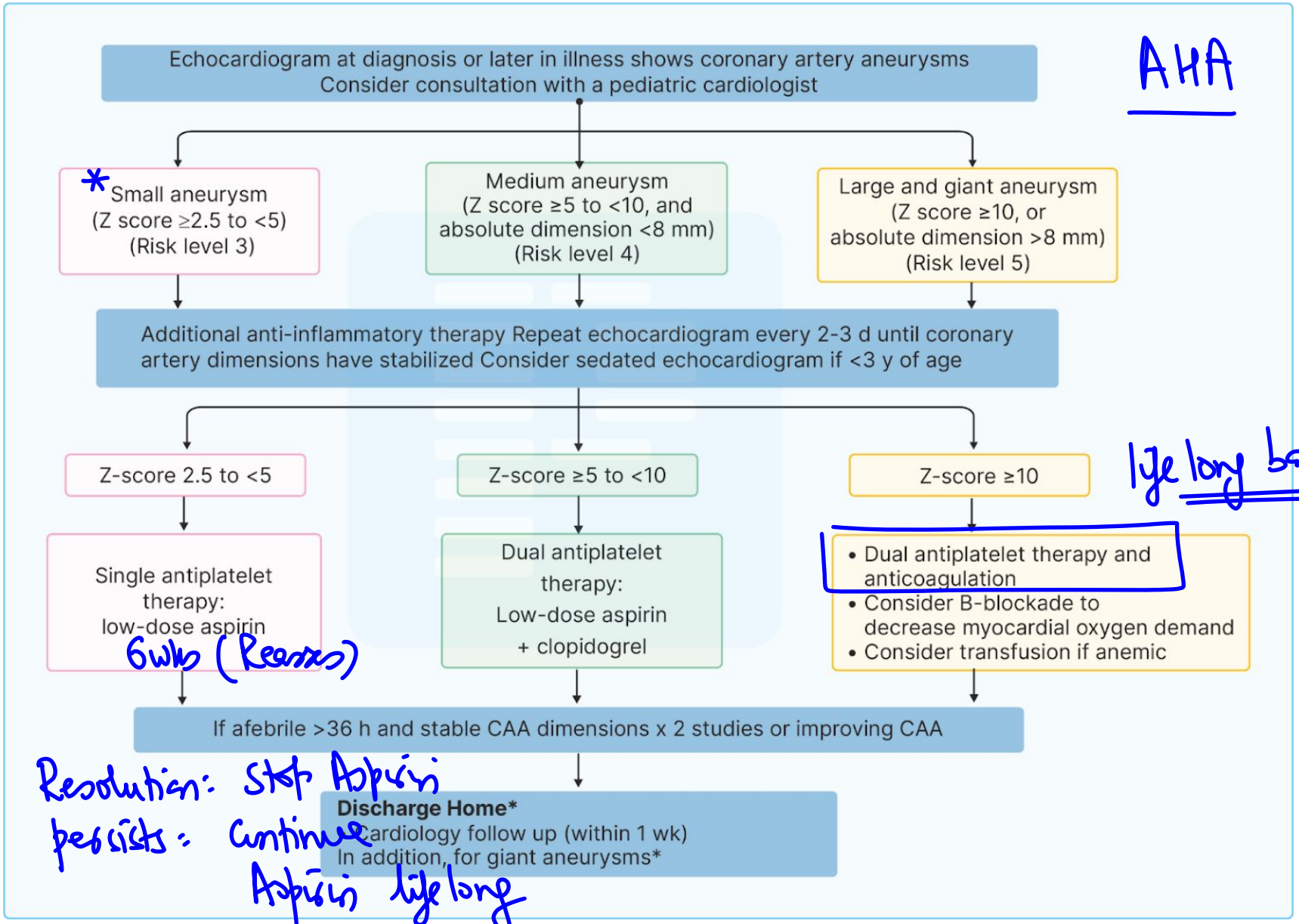
a. Measles
b. Chicken pox
c. Rickettsia
d. Scabies

- Measles: Rash spreads cephalocaudal, usually spares palms/ soles, Koplik spots instead
- chickenpox: vesicular rash in crops, Centripetal distribution, not typically palms/ soles
- Scabies: Intense itching, burrows, not febrile illness with systemic features.

69. A patient with Kawasaki disease is having large coronary artery aneurysms. Which is correct about its management?

a. Aspirin for 6 weeks
b. Aspirin plus clopidogrel for 6 weeks
c. Aspirin plus steroids for 6 weeks
d. Aspirin life long

IVIG
+
Aspirin | DAPT


Echocardiogram at diagnosis or later in illness shows coronary artery aneurysms
Consider consultation with a pediatric cardiologist
AHA
*Small aneurysm
(Z score ≥2.5 to <5)
(Risk level 3)
Medium aneurysm
(Z score ≥5 to <10, and
absolute dimension <8 mm)
(Risk level 4)
Large and giant aneurysm
(Z score ≥10, or
absolute dimension >8 mm)
(Risk level 5)
Additional anti-inflammatory therapy Repeat echocardiogram every 2-3 d until coronary artery dimensions have stabilized Consider sedated echocardiogram if <3 y of age
Z-score 2.5 to <5
Z-score ≥5 to <10
Z-score ≥10
life long basis
Single antiplatelet therapy:
low-dose aspirin
6wks (Reassess)
Dual antiplatelet therapy:
Low-dose aspirin
+ clopidogrel
• Dual antiplatelet therapy and anticoagulation
• Consider B-blockade to decrease myocardial oxygen demand
• Consider transfusion if anemic
If afebrile >36 h and stable CAA dimensions x 2 studies or improving CAA
Resolution: Stop Aspirin
persists: continue Aspirin lifelong
Discharge Home*
Cardiology follow up (within 1 wk)
In addition, for giant aneurysms*

SSSS : S.AUREUS

70. This child is admitted to ICU with high grade fever and extensive skin desquamation as shown in the image. What is the cause?

RITTER disease

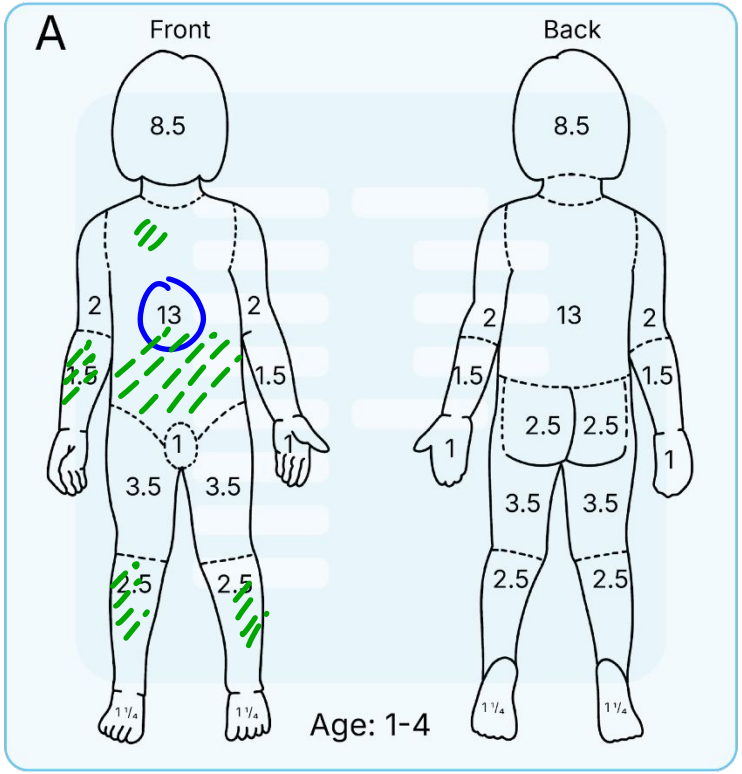
a. Staph aureus
b. Varicella zoster
c. Herpes simplex
d. Klebsiella

Reiter syn

Chlamydia

CANT SEE, PEE, WALK

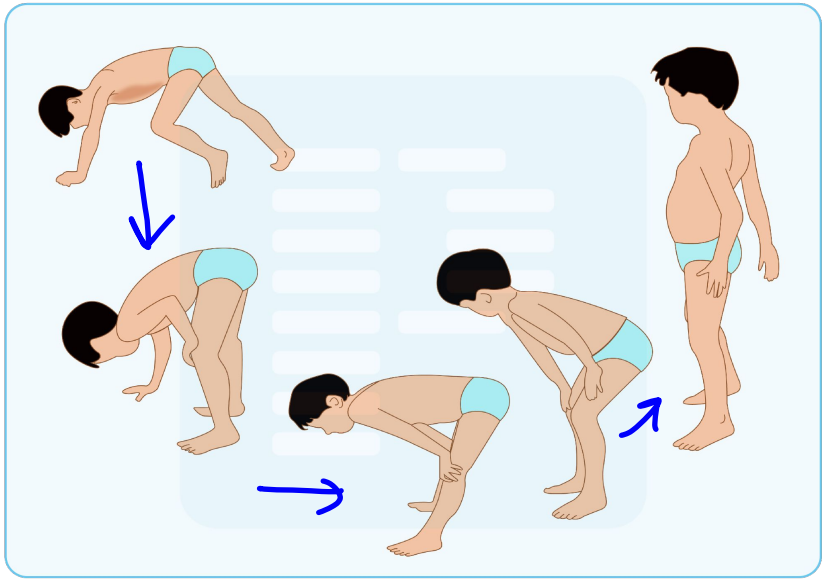
- Anterior trunk (chest + abdomen): - 18%
- Anterior surface of both thighs (partly visible): 9-10%
- Anterior surface of one leg/ foot (right foot clearly affected): -4-5%
- Total Burn surface area (TBSA): = 30-33%

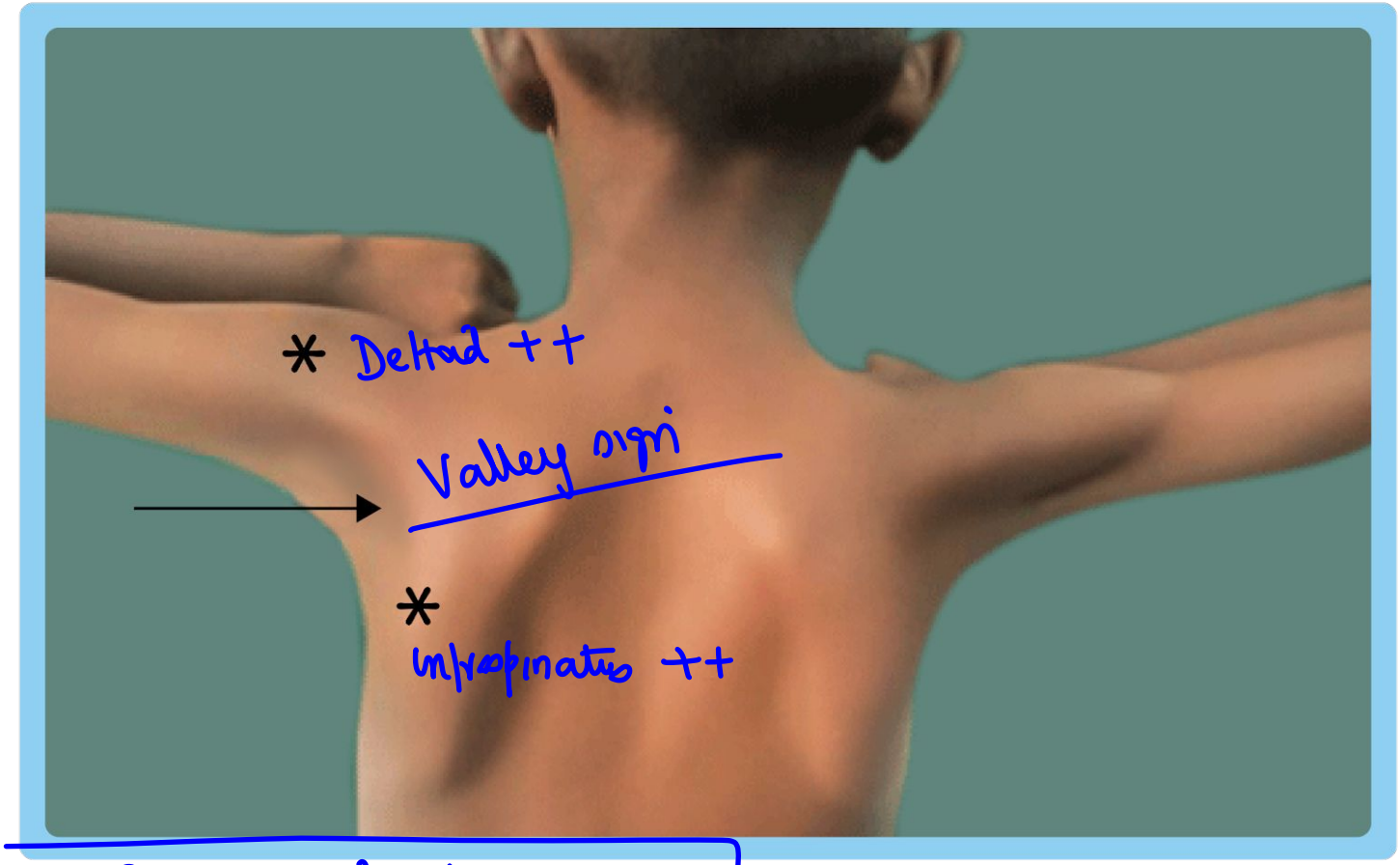


71. The following sign is seen in?

GOWER SIGN : DMD

a. Xp21 mutation
b. Channelopathy
c. Laminopathy
d. F 508 mutation





* PseudoH of calf muscles
* Valley sign

72. A 10-year-old child was having multiple vomiting episodes after consuming mithai (milk- products) at a school function. He was given injection metoclopramide 10 mg following which he developed the bizarre postures of face like sustained grimacing and eye deviation. What should be the line of treatment?

EPS: dystonia

↓ Ach

dopamine ↑

a. Reassure and send home with ORS and domperidone
b. Admit and give i.m Promethazine
c. Admit and give IV Ringer lactate
d. Admit and give IV Hydrocortisone

Classic case of acute dystonia due to metoclopramide (a dopamine antagonist).
Symptoms: sustained grimacing, oculogyric crisis (eye deviation), facial dystonia.
Management: Give an anticholinergic or antihistamine with anticholinergic properties (e.g., promethazine IM, benztropine, diphenhydramine).

XLD

73. Girl child is brought with complaints of loss of purposeful hand movements, hand washing movements and developmental regression. Work up shows MECP2 mutation. Diagnosis is

Rett

a. ADHD
b. Rett syndrome
c. OCD
d. Hysteria

74. A 5-year-old child being worked up for weight loss and iron deficiency is found to have scalloped duodenal mucosa. Small intestinal mucosal biopsy shows villous atrophy. Which of the following food items can be given to this child?

a. Sooji ✓ wheat

b. Oats

c. Maida wheat

d. Bajra

Celiac sprue *

75. A 10-year-old child with progressive pallor is brought to hospital. On examination you notice petechiae around ankles and purpura on buttocks and thighs. Per abdomen examination is normal and no bony tenderness is noted. Work up show Hb 9 gm%, TLC 8000/cu.mm and platelet count is 30,000/ cu.mm. Bone marrow shows normocellular marrow with megakaryocyte hyperplasia. Diagnosis is

a. Acute Leukaemia

b. Immune thrombocytopenia

c. Henoch Scholein purpura

d. Thalassemia trait