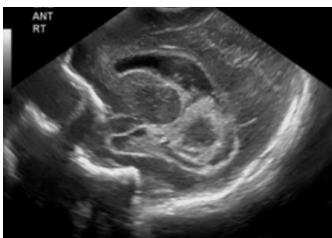


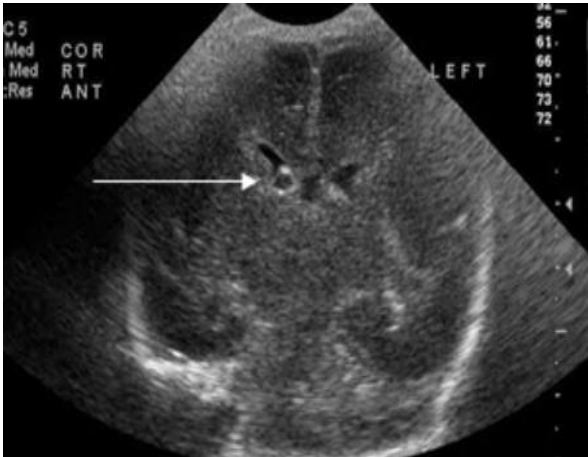
**NATIONAL NEONATOLOGY FORUM**  
**NNF FELLOWSHIP EXAM**  
**THEORY 2 – MCQ**  
**22<sup>nd</sup> JULY 2021**

1. A 21-day-old male infant presents with history of recurrent oral thrush and eczematous skin rash. The WBC counts are persistently low with normal morphology. Nitroblue tetrazolium test is negative. The most likely diagnosis is
  - A. Severe combine immunodeficiency
  - B. Chronic Granulomatous Disease
  - C. Leukocyte Adhesion Defect
  - D. Chediak Higashi syndrome
  
2. Biphasic stridor occurs in all EXCEPT
  - A. Vocal cord paralysis
  - B. Subglottic stenosis
  - C. Tracheomalacia
  - D. Laryngeal web
  
3. Cerebral blood flow decreases with all EXCEPT
  - A. Decrease pCO<sub>2</sub>
  - B. Increase pO<sub>2</sub>
  - C. Increase serum glucose
  - D. Increase fetal Hb
  
4. Ptosis is caused by damage to which cranial N
  - A. II
  - B. III
  - C. IV
  - D. V
  
5. A 26 day old preterm infant is receiving expressed breast milk. Mother is a strict vegetarian and refused adding any Vitamin supplement to the milk. The bone profile test obtained on the infant showed Ca 8.5, Phos 3.4 Alk Phos 1200. The most likely cause for this finding is
  - A. Vitamin D deficiency
  - B. Osteopenia of prematurity
  - C. Transient hypoparathyroidism
  - D. Normal labs for the age
  
6. The pathology shown could be cause by all EXCEPT



- A. Fluctuating BP
  - B. Decrease cerebral venous pressure
  - C. Use of HCO<sub>3</sub>
  - D. High Protein C
7. A 3-day-old male infant is noted to have poor feeding & hypotonia. The birth history was significant for difficult labor with Apgar of 3/7. He is mildly tachypneic and CXR showed slightly enlarged cardiac silhouette. The serum glucose is 12 mg/dl and urine is positive for ketones. The most likely diagnosis is
- A. Glycogen storage disease type II
  - B. Zellweger syndrome
  - C. Leigh syndrome
  - D. Primary carnitine deficiency
8. In infants who are born with meconium-stained fluid, the tracheal suctioning should be done if :
- A. Thick meconium in liquor
  - B. Poor respiratory efforts
  - C. Poor muscle tone
  - D. None of the above
9. The walking reflex normally disappears by **what post natal age**( months):
- A. 3
  - B. 5
  - C. 7
  - D. 9
10. A 29 weeks male baby weighing 890 grams was born to a mother with severe Pre Eclampsia. The Doppler was suggestive of Reduced End Diastolic Flow in umbilical artery. On day 9 of life this baby presents with temperature instability, apnoea, abdominal cellulitis, Hypotension and intramural gas in intestinal wall in abdominal x ray. What is the stage of NEC in this baby?
- A. Stage II A
  - B. Stage II B
  - C. Stage III A
  - D. Stage III B
11. Female baby presented on day 2 of life with infantile spasm and her MRI revealed cerebral cortical polymicrogyria and neuronal heterotopia and agenesis of Corpus callosum. Her likely diagnosis is:
- A. Septo-optic dysplasia
  - B. Aicardi syndrome
  - C. Dandy Walker malformation
  - D. Walker warburg syndrome

12. This Cranial US is taken on a 26 week 6 day old baby. The infant is on breast milk feeds and has normal growth parameters. The finding (arrow) is most likely suggestive of
- A. Choroid plexus cyst
  - B. Foreign body
  - C. Congenital CMV
  - D. Congenital Toxoplasmosis



13. Baby born at 40 weeks' gestation following vacuum extraction has a swelling over her scalp. The swelling is boggy and soft predominantly over the left parietal region, but extending across to the right parietal region, and also down behind the left ear. The pinna of the left ear is slightly pushed forward by the swelling. Of the following, the most likely diagnosis in this infant is:
- A. Caput succedaneum
  - B. Cephalohematoma
  - C. Subdural hematoma
  - D. Subgaleal hemorrhage
14. The rate of bilirubin production can be assessed by measuring rate of production of:
- A. Carbon monoxide
  - B. Carbon dioxide
  - C. Carbon
  - D. Oxygen
15. Following are responsible for chronic intra-uterine infections, Except:
- A. Toxoplasma gondii
  - B. Treponema pallidum
  - C. Cyto megalovirus
  - D. Herpes simplex

16. At what age ECF equal ICF
- A. 14 days
  - B. 4 weeks
  - C. 2 months
  - D. 6 months
17. The movements of fetus are first felt by mother( Quickening) at what gestation(wks):
- A. 8-15
  - B. 16-25
  - C. 26-30
  - D. 30-26
18. All are example of parametric test EXCEPT
- A. Student t test
  - B. ANOVA
  - C. Mann-Whitney
  - D. Chi-square
19. You are taking care of a neonate who is recovering from RDS. His Na is 131, Urine Osm is 540 and serum Osm is 265. The best action would be to
- A. Obtain creatinine and BUN
  - B. Calculate FeNa
  - C. Restrict fluids
  - D. Supplement Na deficit
20. Neonatal cholestasis can be caused by all of the following except
- A. Sepsis
  - B. Choledochal Cyst
  - C. Neonatal hepatitis
  - D. Crigler Najjar syndrome
21. You are asked to counsel a woman who is planning to have another baby after her first baby was born with spina bifida. Which one of the following preconception management options is most likely to reduce the risk in any subsequent pregnancy?
- A. Thiamine
  - B. Folic acid
  - C. Ultrasound screening
  - D. Vitamin B12

22. A term IUGR baby at birth was noted to have petechial rash, hepatosplenomegaly and a PDA. The most likely diagnosis in this baby is
- A. Inborn error of metabolism
  - B. Neonatal sepsis
  - C. Congenital rubella syndrome
  - D. Kernicterus
23. Secondary surfactant deficiency occurs in
- A. Pneumonia
  - B. MAS
  - C. Birth asphyxia
  - D. All the above
24. The mother of a 2 week old infant reports that her baby sleeps most of the day, she has to awaken her every 4 hours to feed and the infant has persistently hard stool . On examination, HR 100/m and temp. is 35.5 C, baby is still jaundiced and has a distended abdomen. What is the most appropriate diagnostic test?
- A. Screening tests for Inborn error of metabolism
  - B. Sepsis screen and blood culture.
  - C. Total and direct serum bilirubin
  - D. T4 and TSH
25. Positive Wright stain for neutrophils with negative Gram stain is suggestive of
- A. Benign pustular melonosis
  - B. Erythema toxicum
  - C. Milia
  - D. Staphalococcal scalded skin syndrome
26. A term male baby is treated for PPHN with iNO, 15 ppm. His sats are 88-92% on the right arm. His Hb is 14 and he is G6PD deficient. His MetHb level done to monitor iNO therapy is 9%. His ABG showed a PaO<sub>2</sub> of 190 on 50% O<sub>2</sub>. The best way to manage his desturation is to
- A. Give methylene blue
  - B. Decrease iNO
  - C. Decrease O<sub>2</sub>
  - D. Obtain Echo

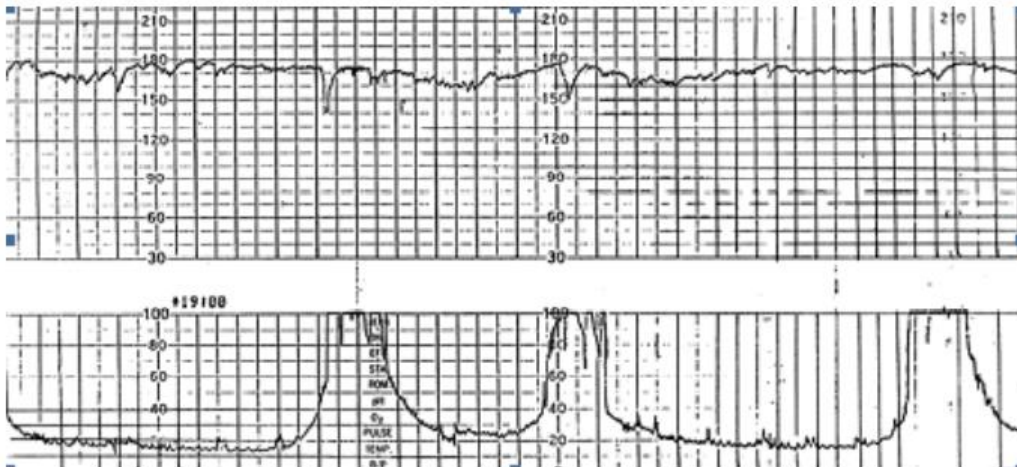
27. This condition is highly associated with

- A. VSD
- B. Microdeletion
- C. Mental retardation
- D. Thrombocytopenia

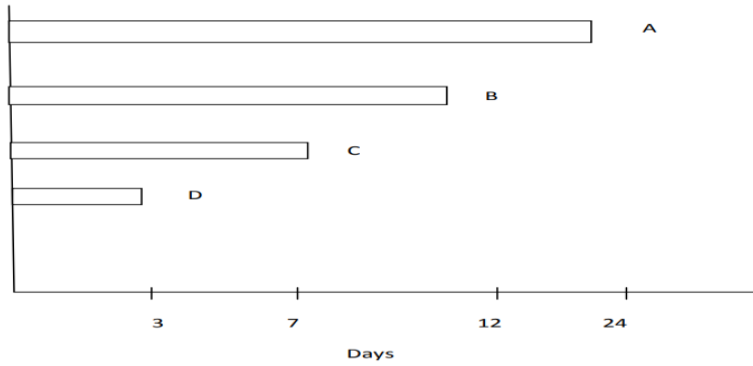


28. The strip shown above could be caused by all EXCEPT

- A. Fetal anemia
- B. Maternal anemia
- C. Maternal fever
- D. MgSO<sub>4</sub> treatment



29. Match the time of presentation



1. TGA
2. HLHS
3. Co Aorta
4. VSD

- A. A-4 B-3 C-2 D-1  
B. C-2 B-1 D-3 A-4  
C. B-2 C-3 A-1 D-4  
D. A-1 B-2 C-3 D-4

30. In transport of neonate with duct dependent congenital heart disease

- A. Milrinone initiated before transfer
- B. Sildenafil initiated before transfer
- C. Prostaglandin initiated before transfer
- D. None of above

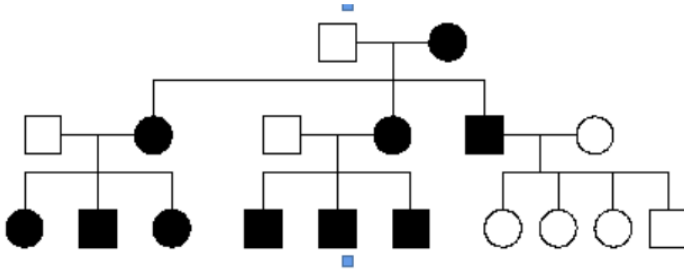
31. Causes of microcephaly in neonates are all the following, except:

- A. Porencephaly
- B. Hydranencephaly
- C. Osteopetrosis
- D. Trisomy 18

32. The factors which affect the interpretation of an arterial blood gas are

- A. Air bubble in the arterial sample
- B. Venous admixture
- C. Excess heparin
- D. All the above

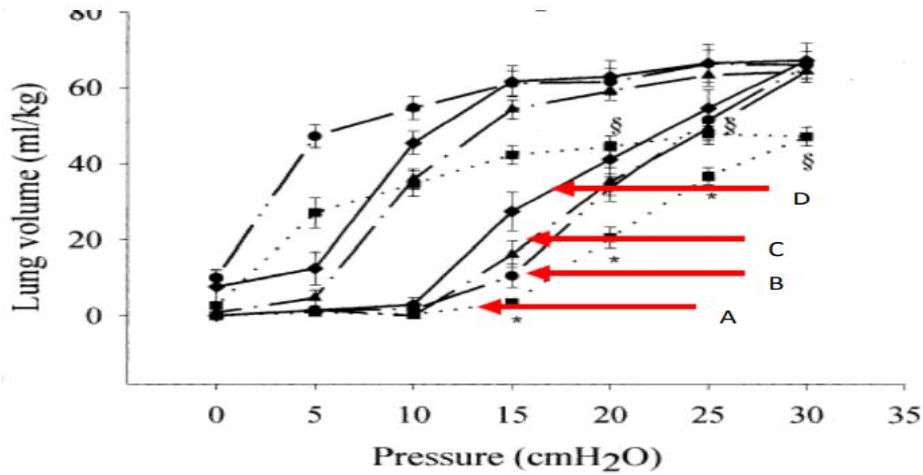
33. This pedigree is characteristic of



- A. Autosomal dominant inheritance
- B. X-linked dominant inheritance
- C. Mitochondrial inheritance
- D. X-linked recessive inheritance

34. The total work of breathing would be highest for

- A. P-V loop A
- B. P-V loop B
- C. P-V loop C
- D. P-V loop D



35. Following clinical features suggest diagnosis of PPHN ,EXCEPT:

- A. Lability
- B. Response to NO
- C. SpO<sub>2</sub> difference of 10% between right upper limb and lower limb
- D. BP difference of 10mmg of Hg right upper limb and lower limb



36. A term infant undergoes echocardiography after birth due to a murmur. Numerous small cardiac tumours are identified throughout the heart. Which genetic disease is likely?
- A. Sturge -Weber syndrome
  - B. Williams syndrome
  - C. Tuberous sclerosis
  - D. Hunter syndrome
37. Which of the following is **INCORRECT** about acute management of Supraventricular Tachycardia (SVT) in neonates:
- A. Vagal manoeuvres are first-line treatment to break an episode of hemodynamically stable SVT
  - B. Ice slurry to the patient's forehead, eyes, and nose-bridge for 10–20 seconds can be applied and may be repeated
  - C. Slow infusion of Adenosine at 0.1 mg/kg, over one hour should be given if vagal manoeuvres fail
  - D. Synchronized DC cardioversion may be required for hemodynamically unstable SVT
38. Which of the following congenital heart conditions diagnosed in a neonate is NOT an indication for starting Prostaglandin E1 infusion?
- A. Tricuspid atresia
  - B. Truncus arteriosus
  - C. Transposition of great vessels with intact ventricular septum
  - D. Coarctation of aorta
39. Which of the following statements is **INCORRECT** about Intralipid (IL) infusion in neonates :
- A. Main source of IL is soybean oil
  - B. 20% solution has higher ratio of phospholipids to triglycerides than 10% solution
  - C. Can be infused via a peripheral vein
  - E. IL should not be frozen
40. Which of the following conditions is NOT a cause of conjugated hyperbilirubinemia?
- A. Dubin –Johnson syndrome
  - B. Gilbert's syndrome
  - C. Inspissated bile syndrome
  - D. Zellweger syndrome

41. Which is most consistent with pyloric stenosis?
- A. Hypochloremic acidosis
  - B. Hypochloremic alkalosis
  - C. Hyperchloremic acidosis
  - D. Hyperchloremic alkalosis
42. All the following parts of the brain are typically affected in bilirubin toxicity except the:
- A. Hippocampus
  - B. Cranial nerve nuclei
  - C. Cerebral cortex
  - D. Basal ganglia
43. Which of the following is INCORRECT about Tracheoesophageal Fistula (TEF) ?
- A. Develops around eleventh week of gestation as a result of abnormal division of dorsal and ventral foregut
  - B. Up to 70% may have at least one other congenital anomaly
  - C. Distal fistula may present with significant abdominal distention
  - D. Gasless abdomen is suggestive of isolated esophageal atresia
44. A neonate admitted with refractory hypocalcemia, also has severe lymphopenia and bifid uvula. Probable genetic diagnosis is
- A. 7q11.2 deletion
  - B. 22q11.2 deletion
  - C. TBCE gene mutation
  - D. 15q13.3 deletion
45. Which of the following can cause nonimmune hydrops fetalis-?
- A. Rh isoimmunization
  - B. Osteogenesis imperfecta
  - C. Both A & B
  - D. None of the above

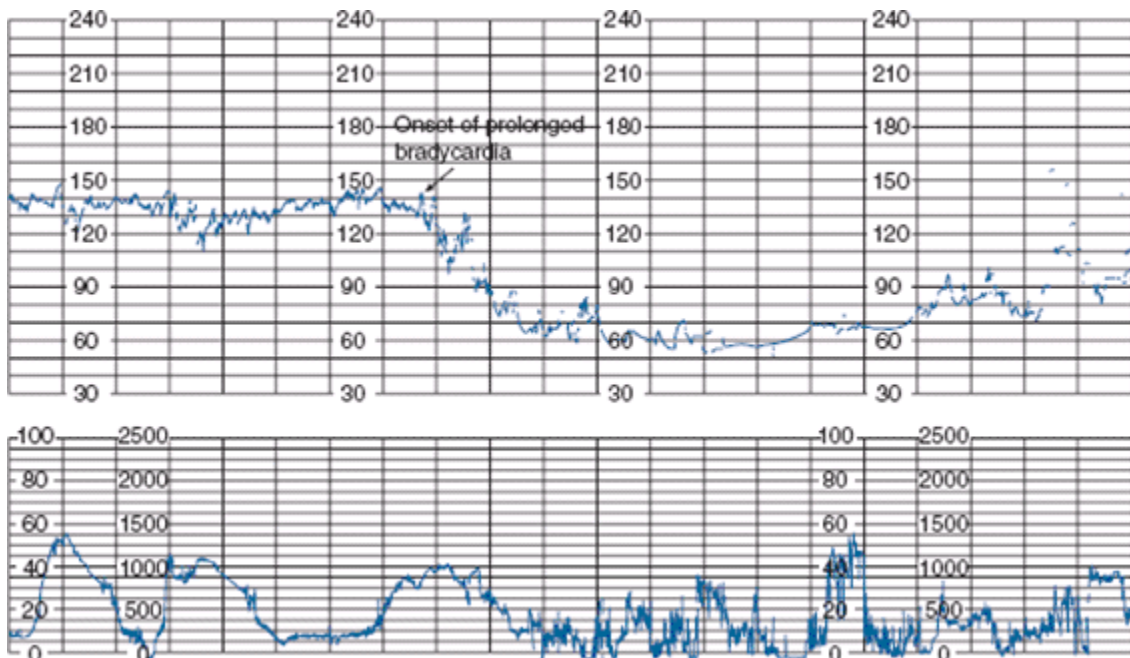
46. Which of the following is untrue about red reflex-?

- A. Use a direct ophthalmoscope.
- B. Power of an indirect ophthalmoscope should be set at '0'
- C. The grey color in a red reflex is abnormal.
- D. Red reflex can reveal problem in vitreous

47. Which of the following statement is the updated 2020 neonatal resuscitation recommendation

- A. The heart rate response to chest compressions and medications should be monitored electrocardiographically.
- B. If the response to chest compressions is poor, it may be reasonable to provide epinephrine, preferably via the intravenous route.
- C. If all these steps of resuscitation are effectively completed and there is no heart rate response by 20 minutes, redirection of care should be discussed with the team and family.
- D. All of the above

48. A mother presents to her local hospital at 39 weeks complaining of mild lower abdominal pain and reduced fetal movements since the night before. Her pulse and blood pressure are normal and the fundal height is consistent with the gestational age. She is having contractions. A cardiotocograph (CTG) is performed and shows the following:



Which of the following statement is true?

- A. This is a non-reassuring CTG and shows a fetal bradycardia. The baby should be delivered urgently.
  - B. The baseline is 160 bpm with prolonged decelerations.
  - C. This is a reassuring CTG because the baseline rate recovers and the mother should be allowed home after a few hours.
  - D. The CTG shows very little beat-to-beat variability and should be repeated in 30 minutes.
49. You receive an emergency call to the delivery room. On arrival, you find an extreme preterm male infant – 23 weeks gestation, birthweight 500 g, receiving positive-pressure ventilation via a T-piece in 70% oxygen. The saturations are 90% and the baby is now 10 minutes old. Which one of the following is the most appropriate next step in the management of this baby?
- A. Immediately cease resuscitation attempts and allow baby to die peacefully.
  - B. Tell parents the diagnosis and seek their wishes with regards to ongoing resuscitation.
  - C. Continue full resuscitation, stabilize the baby and admit to the nursery.
  - D. Continue respiratory support but do not intubate the baby, even if indicated.
50. You are about to transfer a ventilated 34-week male infant with respiratory distress syndrome (RDS) by aeroplane to a neonatal intensive care unit. He has been given one dose of surfactant and is currently ventilated on SIMV with a back-up rate of 40, pressures 22/6, and Fio<sub>2</sub> 25%. His oxygen saturations on pulse oximetry are 95%. His Paco<sub>2</sub> prior to departure is 42 mmHg (5.6 kPa). The aeroplane has a pressurized cabin (equivalent to 5000 feet or 1500 m). As the aircraft climbs to 20 000 feet (6000 m) you notice his oxygen saturations slowly drop into the mid 80s. Which one of the following is the most appropriate next step?
- A. Increase the inspired oxygen concentration.
  - B. Increase the peak inspiratory pressure (PIP).
  - C. Increase the peak end inspiratory pressure (PEEP).
  - D. Increase the respiratory rate.
51. Which one of the following is true of thermoregulation in the newborn?
- A. The normal newborn baby has a core temperature of 36–36.5°C.
  - B. Babies should be placed in a thermoneutral environment to promote energy conservation and growth.
  - C. Shivering is an effective treatment for hypoxic–ischemic brain injury.
  - D. Babies placed naked against their mother's chest will lose heat by radiation and conduction.
52. A 29-week gestation infant, intubated since birth for moderate respiratory distress syndrome, has been steadily improving and is now 12 hours old. The baby was given a loading dose of caffeine at 8 hours of age. The baby is vigorous, well perfused and passing urine. Blood pressure is within

normal limits. The level of ventilatory support has been progressively weaned and is currently as follows: Mode: synchronized intermittent positive pressure ventilation (SIPPV) (assist control); fractional inspired oxygen concentration (Fio<sub>2</sub>) 0.21; peak inspiratory pressure (PIP) 12 cmH<sub>2</sub>O; positive end-expiratory pressure (PEEP) 5 cmH<sub>2</sub>O; set ventilator rate 30 breaths per minute; inspiratory time (IT) 0.35 second; baby's spontaneous breathing rate 50 breaths per minute. The most recent arterial blood gas is as follows: pH 7.43 [7.34–7.43]; P<sub>a</sub>CO<sub>2</sub> 31 mmHg [31–42]; P<sub>a</sub>O<sub>2</sub> 68 mmHg [45–60]; bicarbonate 23 mmol l<sup>-1</sup> [20–26]; base excess 1.6 [-5.0–5.0]. Which one of the following would be the most appropriate next step?

- A. A Extubate to nasal continuous positive airways pressure (CPAP).
- B. Decrease PEEP by 1 cmH<sub>2</sub>O.
- C. Increase PIP to 13 cmH<sub>2</sub>O.
- D. Decrease set ventilator rate to 20 breaths per minute.

53. The core temperature maintained during therapeutic hypothermia treatment is

- A. 33 to 34 °C
- B. 34 to 35 °C
- C. 32 to 33 °C
- D. None of the above

54. The Combined APGAR score ranges from

- A. 0 to 10
- B. 0 to 8
- C. 0 to 17
- D. 0 to 18

55. All the following are bad prognostic indicators for survival in case of CDH except?

- A. Abnormal microarray or findings suggestive of a fetal syndrome
- B. Liver herniation
- C. O/E LHR 36 to 45 %
- D. Low absolute fetal lung volume

56. Which of the following are characteristics of infantile hypertrophic pyloric stenosis on ultrasonography?

- A. Target sign
- B. Pyloric muscle thickness >4mm
- C. None of the above
- D. All of the above

57. What is the recommended percentage of relative humidity for humidification for ventilator circuits?
- A. 85%
  - B. 50%
  - C. 100%
  - D. 90%
58. Which of the following condition has short time constant?
- A. RDS
  - B. Growing preterm with BPD
  - C. Meconium aspiration syndrome
  - D. B and C
59. Which of the following is the sign of gas trapping and inadvertent PEEP?
- A. Flattened diaphragm
  - B. Cardiovascular compromise
  - C. Decreased chest wall movement during assistant ventilation
  - D. All of the above
60. Blink reflex develops by what Gestation age?
- A. 26wks
  - B. 28wks
  - C. 32wks
  - D. 38wks
61. Differential cyanosis is seen in all the following conditions except
- A. Coarctation of aorta
  - B. Interrupted aortic arch
  - C. PPHN
  - D. TAPVC
62. In phototherapy, what is the maximum light absorption of bilirubin ?
- A. 420 to 470nm
  - B. 380 to 500 nm
  - C. 240 to 680 nm
  - D. 260 to 680nm
63. Of the following, caffeine exerts most of its effects by,
- A. Antagonism of prostaglandin activity
  - B. Blockage of adenosine receptors
  - C. Enhancement of catecholamine secretion

D. Stimulation of phosphodiesterase

64. The most common congenital heart disease associated with Congenital Diaphragmatic Hernia is,

- A. Aortic arch obstruction
- B. TAPVC
- C. TGA
- D. VSD

65. Infants at risk of hyperinsulinemic hypoglycaemia include all the following except,

- A. Infants of diabetic mother
- B. Infants with galactosemia
- C. Infants with leucine sensitivity with hyperammonemia
- D. Infants with Beckwith – Wiedemann syndrome

66. The blue berry muffin appearance in infants with TORCH infection is likely due to

- A. Dermal erythropoiesis
- B. Palpable purpura
- C. Metastatic hepatic tissue
- D. Viral Lesions

67. Most common fracture during the birth related injury?

- A. Humerus
- B. Femur
- C. Radius
- D. Clavicle

68. Most accurate USG predictor for gestational assessment in the first trimester is:

- A. BPD
- B. Crown to rump length
- C. Femur length
- D. Humerus length

69. Which maternal endocrine disorder is associated with caudal regression syndrome?

- A. Hypothyroidism
- B. Diabetes
- C. Hypopituitarism
- D. None of the above

70. What are the components of neonatal skin condition score
- A. Dryness, erythema, breakdown
  - B. Dryness, edema, breakdown
  - C. Erythema, breakdown and extravasation
  - D. Erythema, blisters and dryness
71. As per 'HOME BASED New born care' guidelines, up to what post age the ASHA worker should visit and review the baby?
- A. 6 weeks
  - B. 4 weeks
  - C. 8 weeks
  - D. 10 weeks
72. Which of the following drugs would you use to manage an infant of diabetic mother with symptomatic hypertrophic cardiomyopathy showing marked hypertrophy of interventricular septum on echocardiography?
- A. Dobutamine
  - B. Dopamine
  - C. Propranolol
  - D. Adrenaline
73. Regarding ultrasound scans of the neonatal head all of the following are true except
- A Periventricular haemorrhages occur in 25% of very low birth weight infants.
  - B Bleeds into the germinal matrix are unlikely to be associated with long term sequelae
  - C Most haemorrhages occur in the first 72 hours of life.
  - D Ischaemic lesions are easily detected in the paraventricular area.
74. All of the following may present as haemolytic disease of the newborn except:
- A Hereditary spherocytosis
  - B Glucose 6 phosphate dehydrogenase deficiency
  - C ABO incompatibility
  - D Vitamin K1 deficiency



75. Concerning blood flow in the fetus which of the following is false:

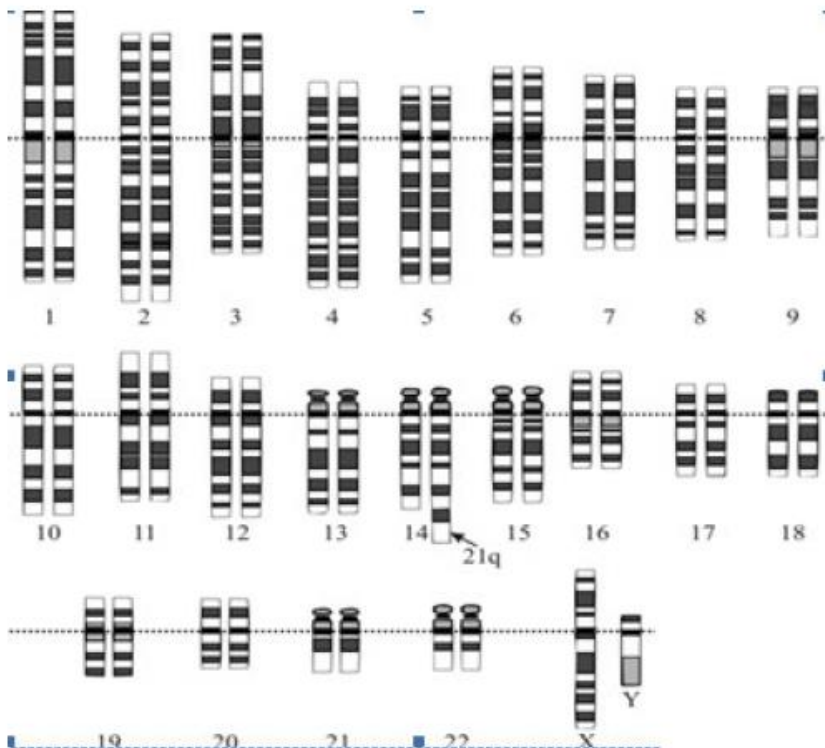
- A Blood flows from right to left through the foramen ovale.
- B Blood in the ascending aorta has a higher oxygen content than in the descending aorta.
- C The ductus arteriosus is closed.
- D The haemoglobin may be 20g/dl.

76. The major problems associated with multiple births does not include:

- A. Increased incidence of APH
- B. Increased incidence of preterm labour
- C. Increased incidence of growth retardation.
- D. Increased incidence of congenital anomalies

77. The male infant had dysmorphic features. The best advice to mom who is 18 year old is

- A. The risk of having the same problem in next pregnancy is < 5%
- B. Because of her age she is very less likely to have abnormal chromosomes
- C. Father should be tested for karyotype
- D. This infant will need correction glasses early in life



78. The best fit for three compartment pharmacokinetic model is

- A. Vancomycin given IV
- B. Surfactant given via ETT
- C. Drug transport across placenta
- D. Drug transport across breast tissue

79. The best measure of bilirubin production is

- A. HbCO measurement
- B. ETCO measurement
- C. Serum bilirubin
- D. LFTs

80. Cerebral blood flow decreases with all EXCEPT

- A. Decrease pCO<sub>2</sub>
- B. Increase serum glucose
- C. Increase fetal Hb
- D. Polycythemia

81. Syndrome of inappropriate antidiuretic hormone (SIADH) is characterized by all EXCEPT

- A. Low urine output
- B. Low Na excretion
- C. High Urine Osm
- D. Low plasma Osm

82. Hydrops fetalis is caused by intrauterine infection with all except:

- A. Syphilis
- B. Listeria
- C. Parvovirus
- D. Toxoplasma

83. A 1.2 kg preterm infant is edematous on examination. The serum Na is 126 & creatinine is 1.4 mg/dl. Urine output for 24 hr is 180 ml. The urine Na is 40 and creatinine is 14mg/dl. The creatinine clearance would be
- A. 0.2 ml/min
  - B. 0.5 ml/min
  - C. 1 ml/min
  - D. 1.2 ml/min
84. Human mature human milk as compared to mature cow milk is deficient in
- A. Vitamin B
  - B. Vitamin A
  - C. Vitamin E
  - D. Vitamin C
85. A 26 day old preterm infant is receiving expressed breast milk. Mom is a strict vegetarian and refused adding any Vitamin supplement to the milk. The bone profile test obtained on the infant showed Ca 8.5, Phos 3.4 Alk Phos 1200. The most likely cause for this finding is
- A. Vitamin D deficiency
  - B. Osteopenia of prematurity
  - C. Transient hypoparathyroidism
  - D. Iatrogenic hypophosphatemia
86. The following are true of infants with a single umbilical artery except:
- A. The incidence is 1:100.
  - B. Congenital anomalies are found in about 1/3 of cases.
  - C. There is an association with trisomy 18.
  - D. Associated defects may be subtle.
87. Premature infants are prone to apnea. The main reason is
- A. Preterm infants have more quiet sleep than REM sleep
  - B. Hering-Breuer deflation reflex is more prominent during REM sleep
  - C. Preterm infants have blunted response to CO<sub>2</sub>
  - D. GER is the most common cause of apnea in preterm infants

88. A 6-day-old female infant presents to the NICU with jaundice. She was delivered at term after an uncomplicated pregnancy, with a birth weight of 2.8 kg. The parents are first-degree cousins, and the family history is unremarkable. The baby is being breastfed. The prenatal history is not well-known. Physical examination reveals an a hypoactive, jaundiced male infant whose axillary temperature is 97.2°F (36.2°C), heart rate is 156 beats/min, respiratory rate is 35 breaths/min, and blood pressure 60/35 mm Hg. His weight is 2.9 kg (10th percentile), length is 50 cm (50<sup>th</sup> percentile), and head circumference 35 cm (50th percentile). Examination of his eyes reveals yellow sclera, and the entire body is icteric. Cardiovascular examination reveals a regular heart rate and rhythm, with no murmurs. The lungs are clear auscultation bilaterally. His liver is palpable 4 cm below the costal margin. Findings on the remainder of the physical examination are normal. Laboratory results are as follows: serum total bilirubin, 24 mg/dL with a direct bilirubin of 3 mg/dL ; serum aspartate aminotransferase, 38 U/L; alanine aminotransferase, 19 U/L; gamma glutamyl transferase, 144 U/L; alkaline phosphatase (AF), 520 U/L , creatinine, 0.4 mg/dL ; urea, sodium, 149 mEq/L, potassium, 4.6 mEq/L, and negative C-reactive protein. A complete blood Count demonstrates hemoglobin, 18 g/dL; hematocrit, 48; white blood cell count, 10 x 10<sup>3</sup>/mCL (10 x 10<sup>9</sup>/L) with a normal differential count; and platelet count, 224 x 10<sup>3</sup>/mCL (224 x 10<sup>9</sup>/L). The most important investigation at this point is

- A. Serum alpha 1 antitrypsin level
- B. Urine reducing substance
- C. X-ray of knee joint
- D. Abdominal US

89. Pediatrician attending a full term spontaneously vaginally delivered baby is unable to assign the gender to the baby. Which of the following conditions should prompt evaluation for disorders of sex differentiation?

- A. Unilateral palpable testes
- B. Presence of Vulval Odema
- C. Severe hypospadias
- D. Severe hypospadias with cryptorchidism

90. Fetal alcohol syndrome is characterized by all except:

- A. Fetal anomalies in 10% of severe alcohol exposure
- B. Intra-uterine growth retardation
- C. Altered dermatoglyphics
- D. Atrial septal defect

91. Recognized benefits of breastfeeding include all except

- A. Diminished risk of food allergy in later life
- B. Decreased risk of NEC
- C. Lesser risk of viral gastroenteritis during infancy
- D. Lesser risk of haemorrhagic disease of newborn

92. Which of the following statements is FALSE with regard to breastfeeding versus formula feeding?
- A. Lactation helps the mother lose weight acquired in pregnancy.
  - B. Lactational amenorrhoea is a form of contraception.
  - C. Breast feeding increased the risk of premenopausal breast cancer
  - D. Oxytocin release during breastfeeding contracts the uterus and helps its involution.
93. Which one of the following practices may INCREASE the risk of complications arising when using parenteral nutrition?
- A. Prophylactic antifungals.
  - B. Prophylactic antibiotics.
  - C. Administration via a peripherally inserted central catheter (PICC).
  - D. Prophylactic insulin infusion.
94. What is the name given to the hypothesis that shows a relationship between small birth weight and the subsequent risk of type 2 diabetes, insulin resistance, hypertension, cardiovascular disease and stroke?
- A. Barker hypothesis.
  - B. Meow hypothesis.
  - C. Lyon hypothesis.
  - D. Moo hypothesis.
95. 26 weeks baby weighing 850 gm is at day 2 of life on TPN with 12.5 % dextrose infusion at 3.5 ml/hour. Calculate GIR?
- A. 9.5 mg/kg/min
  - B. 8.5 mg/kg/min
  - C. 7.5 mg/kg/min
  - D. 6.5mg/kg/min
96. RDA for vitamin D in Preterms ?
- A. 200-400 IU/day
  - B. 400-800 IU/day
  - C. 800-1000 IU/day
  - D. None of the above

97. All are benefits of MEN except:

- A. Improved levels of gut hormones
- B. Less feeding intolerance
- C. Less incidence of ROP and BPD
- D. Improved weight gain

98. An increase of 0.1 pH unit in serum results in approximately \_\_\_\_\_ mEq/L fall in serum K concentration due to an intracellular shift of K ions

- A. 0.5
- B. 0.6
- C. 0.7
- D. 0.8

99. Various mutations such as SUR1 and Kir6.2 are associated with which of these conditions in neonates?

- A. Hypocalcemia
- B. Hypoglycemia
- C. Hypothermia
- D. RDS

100. All of these are absolute contraindications to breastfeeding except?

- A. Galactosemias
- B. Active tuberculosis
- C. HBsAg Positive mother
- D. HIV Positive mother