Test Bank

Subject:

Pediatrics-Final

Collected by:

Dena Kofahi
Dana Hamo
Ibrahim Elhaj

This collection contains all questions relevant to the material we took this year only. We used the slides, syllabus, and our judgement to determine what questions to include. If we were 100% sure a question was related to next year's material, it was not included in this file.

The questions are divided by system (Cardio, Respiratory, etc.). The questions from 2022's exam will be at the start of each section, with "(2022)" written at the end of the question to identify it.

The slides are the designated resource for pediatrics. However, the Nelson's textbook can be helpful for solving, especially for cardio, respiratory, and the seizures lecture in neuro. (Thanks to Omar Neqresh for suggesting it originally)

Any answer highlighted in grey is one we still need to confirm. Any answer bolded and highlighted in **yellow** is an answer that has been changed.

Please do not hesitate to contact us if you have any questions or corrections.

Best of luck ☺

Cardiology

1. All of the following findings are consistent with a large patent ductus arteriosus in a 2-year-old child except: (2022) ***
    a. Blood pressure of 100/45
    b. Displaced apical impulse
    c. Right atrial dilatation on chest X-ray
    d. Left axis deviation on ECG
    e. Bounding pulses

    Answer: C

2. Large VSD in healthy young female, started to cause symptoms after exercise. The mom complains of a sound emitted from her daughter while breathing that increases when crying or after eating. This sound is: (2022)
    a. Grunting
    b. Stridor
    c. Inspiratory wheeze
    d. Expiratory wheeze
    e. Snoring

    Answer: A

3. Cyanotic diseases with continuous murmur presenting early, first step in management: (2022)
    a. Administer PGE1
    b. Intubate

    Answer: A

4. Which of the following statements is true regarding the normal physiology of the heart in utero? (2022) ***
    a. Blood moves from the pulmonary artery to the aorta through the ductus arteriosus
    b. Blood moves from the left to right atrium through the foramen ovale.

    Answer: A

5. Systolic Murmur 3/6 on right upper sternal border, radiating suprasternal. Diagnosis? (2022)
    a. Aortic stenosis
    b. PDA
    c. ASD

    Answer: A

6. All of the following statements about CVS physiology in the first few years of life are correct, except?

a. Resting heart rate decreases with age
b. Blood pressure is lowest at birth and gradually increases with age
c. Pulmonary vascular resistance is lowest at birth and increases to normal levels by 4-8 years of life
d. Normal blood pressure values of a preterm neonate are less than that of a full-term neonate.
e. A heart rate of 165 per minute in a crying 6-month-old baby is within normal limits

Answer: C

7. A two-month-old infant presents with progressive tachypnea, poor feeding, and difficulty breathing for the last month. His current weight is 4 Kg and birth weight was 3.5 kg. His examination was significant for cool extremities, intercostal retractions, holosystolic murmur on the left sternal border and a loud second heart sound. Of the following, the most likely diagnosis is:
    a. Ventricular septal defect
    b. Hypoplastic left heart syndrome
    c. Atrial septal defect
    d. Mitral regurgitation
    e. Dilated cardiomyopathy

    Answer: A

8. A three-month-old infant presents with progressive tachypnea, poor feeding, and difficulty breathing for the last month. Her current weight is 4.5 kg and birth weight was 3.5 kg. Her examination was significant for cold extremities, intercostal retractions, holosystolic murmur on the left sternal border, and a loud second heart sound. The liver was palpable 4 cm below the coastal margin. Which of the following statements about this infant's presentation is correct?
    a. The liver enlargement is due to hepatic inflammation
    b. The intercostal retractions are due to pulmonary vascular congestion
    c. The holosystolic murmur is due to mitral valve regurgitation
    d. Failure to gain weight is due to malabsorption
    e. The cold extremities are secondary to systemic vasodilation

    Answer: B

9. You were called to evaluate a newborn baby who was noted to be cyanotic. He is a full-term baby with a weight of 3.8 kg. Examination showed central cyanosis. respiratory rate was 45 per minute and heart rate 140 per minute and oxygen saturation of 75%. Cardiac auscultation showed no murmur. What is the most likely diagnosis?
    a. Respiratory distress syndrome
    b. Transposition of great artery
    c. Hypoplastic left heart syndrome
    d. Truncus arteriosus
    e. Tetralogy of Fallot

Answer: B

10. A 6 hour newly born male infant is noted by the nurse to be cyanotic. You were called to evaluate him. He is full term, with a weight of 3.5 kg. His examination showed normal heart rate and respiratory rate. He appears cyanotic and his oxygen saturation was measured to be 72%. He has no signs of respiratory distress, and his cardiac examination showed normal heart sounds with no murmurs and normal pulses. You obtained a CXR, which of the following is the most consistent finding?
    a. Cardiomegaly with increased pulmonary vascular markings
    b. Severe cardiomegaly with decreased pulmonary vascular markings (dark lungs)
    c. Egg on side cardiac shadow with narrow mediastinum
    d. Boot shaped heart with pulmonary vascular markings
    e. Snowman appearance of heart shadow

Answer: C

11. A six-year-old boy presented to the clinic for evaluation of a heart murmur heard during routine examination at school. He is asymptomatic. On physical exam, the child has normal growth parameters. His cardiac auscultation revealed a soft mid-systolic murmur grade 2/6 at the left upper sternal border (**another question: similar case but specified left second intercostal space)** with wide and fixed splitting of the second heart sound. The rest of the examination was normal. Which of the following is the most likely diagnosis? ***
    a. Pulmonary valve stenosis
    b. Atrial septal defect
    c. Aortic valve stenosis
    d. Innocent murmur with a normal heart
    e. Pulmonary hypertension

Answer: B

12. Regarding cardiac function in children, all of the following statements are correct except:
    a. During periods of increased metabolic demand, there is usually increased heart rate and stroke volume
    b. Low blood pressure is considered a late sign of decreased cardiac output
    c. Cardiac output is usually increased in patients with chronic anemia
    d. Cardiac output increases with increasing afterload
    e. Sympathetic stimulation increases cardiac contractility

Answer: D

13. A 9-month-old infant presents with cyanosis, his oxygen saturation is 80%. His examination shows a loud long systolic murmur at the left sternal border, with right ventricular heave. His pulses are normal, and he has no respiratory distress. Of the following, the most likely diagnosis is:
    a. Tetralogy of Fallot

b. Tricuspid atresia with ventricular septal defect
c. Truncus arteriosus
d. Pulmonary valve stenosis
e. Total anomalous pulmonary venous return

Answer: A

14. All of the following congenital heart defects match correctly with the corresponding chest X-ray finding, except:
    a. Atrial septal defect and left ventricular dilatation
    b. Large patent ductus arteriosus and cardiomegaly
    c. Transposition of great arteries and narrow mediastinum
    d. Tetralogy of Fallot and decreased pulmonary vascular markings
    e. Coarctation of aorta and rib notching

Answer: A

(D – In TOF The hilar areas and lung fields are relatively clear because of diminished pulmonary blood flow or the small size of the pulmonary arteries, or both.
E – With age, intercostal arteries enlarge due to collateral circulation, and the pressure from the arteries erodes the ribs.)

15. A six-month-old baby is brought for evaluation due to rapid breathing and failure to gain weight. On examination, heart rate was 160 per minute, respiratory rate 55 per minute, blood pressure 95/45. His weight is 5.2 Kg, oxygen saturation 94%. Apex beat is displaced laterally with prominent right ventricular impulse and 3/6 continuous murmur at the left upper sternal border with gallop rhythm. Of the following, the most likely explanation for this infant's failure to thrive is:
    a. Hypotonia
    b. Complete atrioventricular canal defect
    c. Tetralogy of Fallot
    d. Patent ductus arteriosus
    e. Hypothyroidism

Answer: D

16. All of the following congenital heart diseases and the corresponding signs match correctly, except:
    a. Ventricular septal defect and right ventricular hypertrophy
    b. Tricuspid atresia and left axis deviation
    c. Atrial septal defect and gallop rhythm
    d. Total anomalous pulmonary venous return and cyanosis
    e. Patent ductus arteriosus and prominent peripheral pulses

Answer: C

17. All of the following signs are consistent with a diagnosis of a large ventricular septal defect in a 9-month-old infant, except:
    a. Wide pulse pressure
    b. Displaced apical impulse
    c. Weight below 5th percentile
    d. Cardiomegaly on chest radiograph
    e. Left atrial dilatation on electrocardiogram

Answer: A

18. A one-day-old newborn was noted to be cyanotic by his nurse. He has been feeding normally with no respiratory distress. On examination the baby was cyanotic with oxygen saturation of 78% on room air. His respiratory rate is 45 per minute. He has no retractions and clear breath sounds. He has normal cardiac sounds and a loud holosystolic murmur. Which of the following statements about this patient is correct?
    a. Supplementation with 100% oxygen will most likely result in increase of the PaO2 in arterial blood gas to 500 torr
    b. Chest radiograph will most likely show signs of respiratory distress syndrome
    c. The presence of left axis deviation on electrocardiogram will most likely suggest the diagnosis of tricuspid atresia
    d. Complete blood count will most likely show hemoglobin concentration of more than 20 gram/dL
    e. Full sepsis work up should be obtained and the patient started on intravenous antibiotics

Answer: C

19. All of the following are consistent with the diagnosis of coarctation of aorta in a 12-year-old female, except:
    a. Hypertension
    b. Left ventricular hypertrophy on electrocardiogram
    c. Displaced apical impulse to the left anterior axillary line
    d. Radio-femoral pulse delay
    e. Wide mediastinum on chest radiograph

Answer: E

20. During fetal life, which of the following structures carry the highest oxygenated hemoglobin?
    a. Umbilical vein
    b. Pulmonary artery
    c. Superior vena cava
    d. Ascending aorta
    e. Inferior vena cava

Answer: A

21. A 12-month-old infant presents with cyanosis. His examination shows normal vital signs, with oxygen saturation of 78%. There was right ventricular heave, a loud systolic murmur at the left sternal border. You obtain chest X-ray for initial evaluation. Which of the following finding is most likely to explain his cyanosis?
    a. Bronchiectatic changes particularly of the lower lobes with normal cardiac size
    b. Boot shape heart with decreased pulmonary vascular markings
    c. Cardiomegaly with increased pulmonary vascular markings
    d. Egg on side cardiac shape with narrow mediastinum
    e. Right aortic arch with prominent left atrial appendage

Answer: B

22. A two-month-old baby was brought to you for evaluation because of tachypnea and poor feeding of one month duration. The history revealed that the baby was born at 32 weeks of gestation and stayed in the neonatal intensive care unit for 3 days but there was no need for ventilatory support. Her weight at birth was 2 kilograms and now only 3 kilograms. Vital signs showed heart rate of 170 per minute, respiratory rate of 60 per minute, and blood pressure of 75/30. The pulses were prominent. Which of the following findings on cardiac auscultation would most likely explain the patient's presentation?
    a. Diastolic murmur at the left second intercostal space
    b. Continuous murmur at the left subclavicular area
    c. Systolic murmur at the apex with radiation to the axilla
    d. Fine crepitations at both lung fields
    e. systolic murmur at the inter-scapular area

Answer: B

23. A six-month-old male child was referred to cardiology clinic for evaluation of heart murmur. He had uneventful pregnancy and perinatal history. He is growing and thriving normally with no cardiac symptoms. On examination, he is a healthy appearing infant with normal vital signs and pulses. His cardiac auscultation showed a 3/6 high pitch pansystolic murmur heard at the apex with no radiation. Which of the following is the most likely diagnosis in this infant?
    a. Small atrial septal defect
    b. Small ventricular septal defect
    c. Small patent ductus arteriosus
    d. Mild aortic stenosis
    e. Mild pulmonary stenosis

Answer: B

24. A four-month-old female infant presents with failure to thrive and tachypnea and diaphoresis with feeding. Perinatal history is not remarkable. Heart rate is 175 and

respiratory rate is 60 with intercostal retractions. Apex beat is displaced to the anterior axillary line. All of the following cardiac pathologies are among the differential diagnosis of this patient, EXCEPT:

a. Large ventricular septal defect
b. Truncus arteriosus
c. Large patent ductus arteriosus
d. Dilated cardiomyopathy
e. Large atrial septal defect

Answer: E

25. A one-day old male newborn is noted to have central cyanosis. On examination the baby has a respiratory rate of 50 per minute with no distress. Heart rate of 155 per minute, normal blood pressure. His oxygen saturation was 82% on room air. All of the following statements about evaluation of this baby are correct EXCEPT:
    a. Absence of tachypnea and other signs of respiratory distress rules out respiratory distress syndrome
    b. Absence of improvement of arterial pO2 with supplemental oxygen indicates cardiac cause of cyanosis
    c. Presence of left axis deviation on electrocardiogram is consistent with tricuspid atresia
    d. Presence of loud systolic murmur on cardiac auscultation is consistent with transposition of great arteries
    e. Presence of boot shape heart on chest radiograph is consistent with tetralogy of Fallot

Answer: D

(The hyperoxia test is one method of distinguishing cyanotic CHD from pulmonary disease. Neonates with cyanotic CHD usually are unable to significantly raise their arterial blood partial pressure of oxygen (PaO2) during administration of 100% oxygen)

26. Which of the following should be given to an unstable infant with suspected cyanotic congenital heart disease?
    a. Prostaglandin E1 (alprostadil)
    b. Prostaglandin E2 (dinoprostone)
    c. Phosphodiesterase 3 inhibitor (milrinone)
    d. Phosphodiesterase 4 inhibitor (mesembrine)

Answer: A

27. In a 4-year-old with a recent diagnosis of a large secundum atrial septal defect, all of the following are correct regarding complications of this defect, EXCEPT:
    a. This defect results in dilatation of the right atrium and right ventricle

b. There is a risk of tachyarrhythmia in adulthood
c. There is a risk of paradoxical emboli that increases with age
d. There is a risk of Eisenmenger syndrome in late childhood
e. Despite absence of symptoms, the defect should be closed

Answer: D

28. In a 3-year-old well child with an incidental finding of a soft systolic murmur, all of the following are considered in the differential diagnosis, EXCEPT:
    a. Mild aortic valve regurgitation
    b. Innocent murmur
    c. Atrial septal defect
    d. Mild pulmonary valve stenosis
    e. Mild anemia

Answer: A

29. A two-month-old infant presented with tachypnea and failure to thrive, examination showed weight below the 5th centile, intercostal retractions, displaced apical impulse, and a loud systolic murmur at the left sternal border. Which of the following is the most likely diagnosis?
    a. Pulmonary valve stenosis
    b. Tetralogy of Fallot
    c. Ventricular septal defect
    d. Hypoplastic left heart syndrome
    e. Mitral regurgitation

Answer: C

30. A 6-year-old child presented to the clinic because of an incidental finding of heart murmur. There are no symptoms, and the child has been thriving normally. On examination the child has normal growth, and his vital signs are normal for his age. Chest examination showed normal breath sounds, with normal first and second heart sounds, and there is a soft systolic murmur at the left sternal border that disappears when the child stands up. Which of the following is the most likely diagnosis?
    a. Coarctation of the aorta
    b. Innocent murmur
    c. ASD
    d. Pulmonary HTN
    e. Small VSD

Answer: B

31. All of the following result in volume overload on the left ventricle, EXCEPT?
    a. Coarctation of the aorta
    b. Aortic valve regurgitation

c. Patent ductus arteriosus
d. Mitral valve regurgitation
e. VSD

Answer: A

32. You are evaluating a 6-month-old infant because of failure to gain weight and tachypnea with feeding. Examination shows weight of 5 Kg, pale skin with prolonged capillary refill time and cold extremities. He is tachypneic and has mild intercostal retractions. The apical impulse is at the anterior axillary line and sixth intercostal space. All of the following are possible causes of this patient's presentation, EXCEPT:
    a. Patent ductus arteriosus
    b. Pulmonary valve stenosis
    c. Coarctation of the aorta
    d. Ventricular septal defect
    e. Cardiomyopathy

Answer: B

33. A two-year-old female was referred because of heart murmur. She is asymptomatic. Her examination revealed heart rate of 96 per minute, blood pressure of 100/50, prominent radial and femoral pulses, and a continuous murmur in the left sub-clavicular area. Which of the following is the most likely finding on chest X-Ray of this child?
    a. Dextrocardia
    b. Cardiomegaly
    c. Notched ribs
    d. Boot shaped heart
    e. Narrow mediastinum

Answer: B

34. Following birth, foramen ovale closes spontaneously in the normal heart. All of the following congenital heart diseases require the persistence of patent foramen ovale for survival EXCEPT:
    a. Total anomalous pulmonary venous return
    b. Pulmonary atresia with intact ventricular septum
    c. Hypoplastic left heart syndrome
    d. Tetralogy of Fallot
    e. Tricuspid atresia

Answer: D

35. A 2-month-old infant presents with tachypnea, poor feeding, and failure to gain weight. Physical examination showed weight below 5th percentile, tachypnea, tachycardia, and

hepatomegaly. Among the following congenital heart diseases, which is the **least** likely diagnosis? **(Least likely)**

a. Truncus arteriosus
b. Patent ductus arteriosus
c. Large ventricular septal defect
d. Primum atrial septal defect
e. Coarctation of the aorta

Answer: D

36. All of the following congenital heart diseases and their manifestations on physical examination match correctly, **except**:

a. Neonatal coarctation of aorta and poor femoral pulses
b. Atrial septal defect and fixed splitting of second heart sound
c. Tricuspid atresia and right ventricular heave
d. Large ventricular septal defect and displaced apical impulse
e. Transposition of great arteries and central cyanosis

Answer: C

37. A four-year-old child presents with progressive cyanosis since early infancy. He was diagnosed with cyanotic heart disease, but no interventions were done. On examination, the child is cyanotic with oxygen saturation of 65%. He has finger clubbing and plethoric face. Cardiac examination showed prominent apical impulse at the fifth intercostal space and mid-axillary line with NO right ventricular heave. There was a loud pansystolic murmur at the left sternal border. ECG showed sinus rhythm with left axis deviation. Which of the following is the most likely diagnosis?

A. Tricuspid atresia with ventricular septal defect
B. transposition of great arteries
C. Truncus arteriosus
D. Hypoplastic left heart syndrome.
E. Tetralogy of Fallot

Answer: A

38. A three-month-old female infant presented to the clinic with poor feeding and tachypnea since the age of one month. There was no history of fever, cough, or rhinorrhea. On examination, the child has heart rate of 170 per minute, respiratory rate of 65 per minute, blood pressure of 80/50 (normal). Pulses were palpable. She had grunting and intercostal retractions. Cardiac auscultation showed gallop rhythm with a systolic murmur at the left sternal border. The liver was enlarged to 4 cm below the costal margin. Chest radiograph shows cardiomegaly with pulmonary vascular congestion. Of the following, which is the most likely diagnosis?

A. Coarctation of aorta
B. Cardiac tamponade

C. Ventricular septal defect
D. Myocarditis
E. Patent ductus arteriosus

Answer: C

39. A 12-year-old female is referred for evaluation of a diastolic murmur, all of the following pathologies may cause diastolic murmurs, **EXCEPT**:
    A. Bicuspid aortic valve with aortic regurgitation
    B. Pulmonary regurgitation
    C. Rheumatic mitral stenosis
    D. Coarctation of aorta
    E. Tricuspid stenosis

    Answer: D

40. A 2-year-old male child with a diagnosis of tetralogy of Fallot has a baseline oxygen saturation of 85%. All of the following physiologic changes result in increased cyanosis in this child, **EXCEPT**:
    A. Exercise
    B. Fever
    C. Dehydration
    D. Travel to high altitude area
    E. Squatting

    Answer: E

41. All of the following congenital abnormalities result in hypertrophy of the left ventricle, **except**:
    a. Coarctation of aorta
    b. Hypertrophic cardiomyopathy
    c. Mitral stenosis
    d. Aortic stenosis
    e. Renal artery stenosis

    Answer: C

42. You are evaluating a 10-month-old infant because of failure to gain weight and tachypnea with feeding. Examination shows weight of 7 Kg (birth weight 3.5 Kg), pale skin with prolonged capillary refill time and cold extremities. He is tachypneic and has mild intercostal retractions. Apical impulse is at the anterior axillary line and sixth intercostal space. Auscultation showed 3/6 holosystolic murmur at the apex, and S3 gallop. You obtain a chest radiograph, which of the following is the most likely finding? (**One is correct**)

A. Cardiomegaly with bilateral lower lobe pneumonia
B. Right lower lobe pneumonia with normal heart size
C. Normal heart size with increased pulmonary vascular markings
D. boot shape heart with narrow mediastinum
E. Cardiomegaly with increased pulmonary vascular markings

Answer: E

43. A 12 hour newly born girl is noted by the nurse to be cyanotic. You were called to evaluate her. She is full term, with a weight of 3.8 kg. Her examination showed a normal heart and respiratory rate. She appears cyanotic and her oxygen saturation was measured to be 78%. She has no signs of respiratory distress, and her cardiac examination showed normal heart sounds with no murmurs and normal pulses. Of the following: which is the most likely diagnosis? (**One is correct**)
    A. Large patent ductus arteriosus
    B. Truncus arteriosus
    C. Transposition of great arteries
    D. Tetralogy of Fallot
    E. Critical aortic valve stenosis

Answer: C

44. Following birth, foramen ovale closes spontaneously in the normal heart. Of the following, which congenital heart disease requires the persistence of patent foramen ovale for survival? (**One is correct**)
    A. Coarctation of aorta
    B. Tricuspid atresia
    C. Tetralogy of Fallot
    D. Truncus arteriosus
    E. Atrioventricular canal defect

Answer: B

45. A 16-year-old primigravida gives birth to a 38-week gestational age male. At the time of delivery, it is noted that the umbilical cord has one artery and one vein. Which of the following is the most significant result of this finding in the cord? (**One is correct**)
    A. There is a greater likelihood of congenital anomalies.
    B. Maternal diabetes is probably present.
    C. There is an increased risk for infection.
    D. This appearance is typical for the umbilical cord.
    E. The normal cord should have two veins and two arteries.

Answer: A

46. A 13-year-old boy is referred to you because of high blood pressure measured by the school nurse. He is asymptomatic. On physical examination his blood pressure in the right arm was 160/90. He has a normal radial pulse but weak femoral pulse with radiofemoral delay. His cardiac exam shows a prominent apical impulse at the fifth intercostal space and anterior axillary line, with 3/6 systolic murmur that radiates to the inter-scapular area. You ordered a chest radiograph. Which of the following is the most likely finding to support your diagnosis? (**One is correct**)

    A. Pulmonary edema with cardiomegaly
    B. Boot shape heart with decreased pulmonary vascular markings
    C. Normal chest radiograph
    D. Normal heart size with right aortic arch
    E. Cardiomegaly with notched ribs

    Answer: E

47. A 2-year-old child was admitted to the intensive care unit with diagnosis of heart failure due to viral myocarditis. He has tachypnea and intercostal retractions. Cardiac examination showed gallop rhythm. He has cold extremities and prolonged capillary refill time. His blood pressure is borderline low. His chest radiograph shows cardiomegaly and pulmonary edema. Which of the following lines of management is most appropriate at this point? (**One is correct**)

    A. Bolus of intravenous fluids, inotropic support, and diuresis
    B. Bolus of intravenous fluids, oxygen and beta blockers
    C. Oxygen, diuresis, and inotropic support
    D. Beta blocker, nasogastric feeding with high calorie formula and vasodilators
    E. Aspirin and inotropic support

    Answer: C

48. All of the following findings on cardiac examination of a 3-month-old infant are considered normal, **except**:

    a. Heart rate of 180 beats per minute while crying vigorously.
    b. Capillary refill time of 1 second
    c. Blood pressure of 110/70
    d. Louder second heart sound compared to first heart sound at the upper sternal border.
    e. Visible apical impulse

    Answer: C

49. A 3-month-old presents to the clinic with history of bluish discoloration of the lips and tongue noticed for the last several weeks. He has been feeding normally and gaining weight,

and his development is normal. On examination you found mild degree of central cyanosis, in an otherwise healthy appearing infant. His cardiac auscultation showed a 3/6 systolic murmur at the left upper sternal border. The rest of the examination was normal. Among the following, the most likely diagnosis in this child is: **(one is correct)**

a. Transposition of great arteries
b. Large ventricular septal defect
c. Truncus arteriosus
d. Tetralogy of Fallot
e. Pulmonary valve stenosis

Answer: D

50. Which one of the following congenital heart diseases **always** requires the ductus arteriosus to be patented for survival? **(One is correct)**

a. Tetralogy of Fallot
b. Truncus arteriosus
c. Ventricular septal defect (VSD)
d. Tricuspid atresia with no VSD
e. Transposition of great arteries

Answer: D

51. During fetal life, oxygen is supplied to the fetus from the placenta. Which of the following statements is correct about the circulation**? (One is correct)**

A. The patent ductus arteriosus is important to direct blood from the aorta to the pulmonary artery.
B. The patent foramen ovale is important to direct blood from the right atrium to the left atrium.
C. The umbilical arteries carry highly oxygenated blood.
D. The blood vessels supplying the brain in the fetus carry the lowest oxygenated blood.
E. The left ventricle of the fetus is more dominant than the right ventricle.

Answer: B

52. A mother of a 7-year-old boy brought him to you because he gets tired at school when he plays with his friends. There are no other symptoms, and the child is growing and developing well. On cardiac examination you found heart rate of 85 beat per minute, blood pressure of 100/70 (normal), there was a prominent right ventricular impulse, normal first heart sound and splitting of the second heart sound. There was 3/6 mid-systolic murmur at the left sternal border with no radiation. These findings are consistent with which of the following congenital heart diseases? **(One is correct)**

A. Patent ductus arteriosus.
B. Ventricular septal defect
C. Coarctation of aorta

D. Total anomalous pulmonary venous return

E. Atrial septal defect

Answer: E

53. A 9-month-old infant presents with cyanosis; his arterial oxygen saturation is 80%. His examination shows a loud long systolic murmur at the left sternal border, with right ventricular heave. His pulses are normal, and he has no respiratory distress. Of the following, the most likely diagnosis is: **(one is correct)**

    A. Tetralogy of Fallot

    B. Tricuspid atresia with ventricular septal defect

    C. Truncus arteriosus

    D. Pulmonary valve stenosis

    E. Total anomalous pulmonary venous return

    Answer: A

54. Following birth, ductus arteriosus closes spontaneously within a few days. Of the following congenital heart diseases, which one requires the persistence of patent ductus arteriosus for survival? **(One is correct)**

    A. Pulmonary atresia.

    B. Total anomalous pulmonary venous return

    C. Ventricular septal defect

    D. Truncus arteriosus

    E. Aortic valve stenosis

    Answer: A

55. You are performing a routine physical examination of a six-month-old asymptomatic child prior to his vaccination, which of the following findings most likely represents significant heart disease? **(One is correct)**

    A. Heart rate of 150 per minute while crying.

    B. Presence of soft ejection systolic murmur at the left sternal border

    C. Presence of a soft early diastolic murmur at aortic area

    D. Palpable liver edge one cm below right costal margin

    E. Capillary refill time of one second

    Answer: C

56. Of the following findings during cardiac examination of a one-week-old infant, which one indicates significant pathology? **(One is correct)**

    A. S2 is louder than S1 at the pulmonary area.

    B. Heart rate of 250 per minute while baby is crying.

    C. Radial and femoral pulses felt equally at the same time.

    D. Liver edge is palpated at 1 cm below costal margin.

E. Apical impulse felt at the fourth intercostal space at the mid-clavicular line.

Answer: B

57. A two-month-old infant presents with progressive tachypnea, poor feeding, and difficulty breathing for the last month. His current weight is 4 Kg and birth weight was 3.5 kg. His examination was significant for cool extremities, intercostal retractions, holosystolic murmur on the left sternal border and a loud second heart sound. Of the following, the most likely diagnosis is: **(one is correct)**
    A. Ventricular septal defect
    B. Hypoplastic left heart syndrome.
    C. Atrial septal defect
    D. Mitral regurgitation
    E. Dilated cardiomyopathy.

    Answer: A

58. All of the following findings on evaluation are expected in a 3-month-old infant with Tetralogy of Fallot, **except**:
    a. Clubbing of fingernails
    b. Central cyanosis
    c. Loud systolic murmur at the left sternal border
    d. Normal femoral pulses
    e. Normal respiratory rate

    Answer: A

59. All of the following congenital heart diseases and their manifestation on chest X-ray are correct, **except**:
    a. Large ventricular septal defect and cardiomegaly
    b. Tetralogy of Fallot and boot shape heart
    c. Transposition of great arteries and wide mediastinum
    d. Coarctation of aorta and notched ribs
    e. Truncus arteriosus and increased pulmonary vascular markings.

    Answer: C

60. All of the following statements about cardiac function in children are correct, **except**:
    a. Infants' cardiovascular system is under sympathetic dominance compared to adults.
    b. Newborn infants can increase their cardiac output to a better extent compared to older children.

c. In children with depressed cardiac function, anemia can exacerbate the symptoms of heart failure.
d. In normal hearts, right ventricular output is equal to left ventricular output.
e. Cardiac output is determined by stroke volume and heart rate.

Answer: B

61. All of the following cardiac abnormalities result in dilatation of the left ventricle, **except**:
    a. Atrial septal defect
    b. Mitral regurgitation
    c. Patent ductus arteriosus
    d. Aortic regurgitation
    e. Truncus arteriosus

Answer: A

62. An 8-week-old baby, a known case of patent ductus arteriosus and heart failure is being treated with Lasix. All of the following electrolyte disturbances are expected, **except**
a. Hyponatremia.
    b. Hypokalemia
    c. Metabolic acidosis
    d. Hypercalciuria
    e. Hypochloremia

Answer: C

63. An asymptomatic 5-year-old male on physical had S2 splitting and a systolic murmur on the left upper sternal border. CXR was done and found an enlarged RA and increased pulmonary marking. The diagnosis is:
    a. ASD
    b. pulmonary HTN
    c. VSD
    d. TOF

Answer: A

64. In the treatment of heart failure, all of the following medications will result in improvement of cardiac contractility, EXCEPT:
    a. Dopamine
    b. Epinephrine
    c. Digoxin
    d. Propranolol
    e. Milrinone

Answer: D

65. All of the following medications have a positive inotropic effect on heart muscle, EXCEPT:
    a. Epinephrine
    b. Norepinephrine
    c. Dopamine
    d. Dobutamine
    e. Milrinone

Answer: B

66. A patient with TOF was doing well, gaining weight, and feeding well. For two months their cyanosis has worsened with O2 sat decreasing from 84% to 78%. The systolic murmur on the lower left sternal border increased. What could be the reason for the drop in O2 sat?
    a. Infection
    b. The VSD became smaller
    c. The pulmonary obstruction worsened
    d. Progressive polycythemia

Answer: C

67. Failure to gain weight, displaced apical beat, loud systolic murmur over the left sternal border, and clear chest are findings consistent with which CHD?
    a. VSD
    b. TOF
    c. truncus arteriosus

Answer: B

68. A 10-year-old girl presents with recurrent episodes of syncope. All of the following findings in history taking and physical examination may point to a significant heart disease, **except**:
    a. Episodes of syncope happen while the girl is running.
    b. The girl feels retrosternal chest pain prior to fainting.
    c. The presence of blood pressure of 150/90 on physical examination
    d. The presence of 2/6 ejection systolic murmur that disappears when the girl stands up.
    e. The presence of right ventricular heave on physical examination

Answer: D

69. A 3-year-old child was admitted to the intensive care unit with cardiogenic shock due to myocarditis. The child was placed on mechanical ventilator, and started on intravenous inotropic support, and diuresis. Which of the following parameters indicate worsening of this patient's condition?
    A. Decreased serum lactate.
    B. Increased urine output from 0.3 to 1.2 mL/Kg/hr.

C. Decreased venous oxygen saturation from 60% to 45% taken from the central venous line.
D. Increased pH of arterial blood gas from 7.25 to 7.35
E. Change of blood pressure from 90/70 to 100/60

Answer: C

70. A 13-year-old female presented to the emergency room after having sudden loss of consciousness while competitively running at school, the school nurse describes no pulse for several seconds before she started CPR. The patient regained pulse and consciousness after two minutes of chest compression. Her past history has been unremarkable except for occasional palpitations after playing sports. While evaluating this girl, all of the following diagnoses should be considered, **EXCEPT**:
    A. Aortic stenosis
    B. Long QT syndrome
    C. Hypertrophic obstructive cardiomyopathy
    D. Mitral regurgitation
    E. Coarctation of aorta

    Answer: E

71. In a child with decreased cardiac function due to cardiomyopathy, all of the following are expected compensatory mechanisms, **except:**
    A. Polycythemia
    B. Increased heart rate
    C. Water retention to increase preload.
    D. Increased sympathetic tone.
    E. Increased angiotensin II level

    Answer: A

OTHER COLLECTED PAST PAPER QUESTIONS:

72. Hypertension, radiofemoral delay, diagnosis: (2022)
    - Coarctation of Aorta

73. What is not found in the physical examination in a patient with holosystolic murmur?
    - Liver span

74. What's wrong regarding PDA?
    - Right atrial hypertrophy

75. ECG of girl with SVT with palpitations and dizziness in addition to very low BP and cold extremities, what is true?

- Low Cardiac Output

76. Picture of boot shaped heart, what is expected in physical examination?
    - Loud systolic murmur in pulmonary area

77. Picture of mottled and reticular rash in lower limbs of infant, which DOES NOT cause it?
    - Cyanotic heart disease

78. Case with machine-like murmur?
    - Wide pulse pressure (PDA)

79. Child with tachypnea and heart failure signs, machine-like heart murmur, which of the following is most likely to be present?
    - Bounding pulses

80. Opening systolic click on the right side with radiation and systolic murmur?
    - Pulmonary stenosis

81. Female 15-year-old asymptomatic with systolic murmur with interscapular radiation?
    - **Coarctation of the Aorta**

82. A case of cyanotic congenital heart disease without murmur, Dx:
    - TGA

83. Murmur with splitting of S2, Dx:
    - ASD

84. Wrong murmur description
    - Early diastolic murmur heard at the right 2nd intercostal space is associated with mitral stenosis.

85. A child with mid-systolic murmur, that decreases upon standing, best thing to do?
    - Reassurance

86. True about large VSD
    - Symptoms start after 4-8 weeks with dyspnea

87. Wrong about ASD
    - Eisenmenger is a complication in late childhood

88. Seen in PDA
    - BP 100/40

89. Child 3 months with cyanotic attacks with crying and pulmonic ejection murmur, which can be seen
    - boot-shaped heart

90. snowman X-ray:
    - TAPVR

91. down syndrome, which is false
    - TOF is the most common cardiac anomaly

92. Cyanosis + Systolic murmur over the left sternal border?
    - Pulmonary stenosis

93. Correct about fetal circulation:
    - Foramen ovale serves as a right to left shunt

94. VSD question: which of the following indicates that the size of VSD is decreasing:
    - The murmur is getting louder

95. Wrong about TOF
    - Cardiomegaly on CXR

96. Mechanism of heart failure in patient with large VSD at present and O2 sat =96%
    - Pulmonary hypertension and RF failure

97. A 5-month-old baby with cyanotic spells (for 2 months) that occur while he is crying. A systolic ejection murmur is present on the left parasternal, other signs:
    - TOF

98. 1 week old baby who with pallor and mottled skin, S3 gallop. picture of HF, most likely dx:
    - VSD

99. 6-hour old infant with cyanosis (O2 is 75%) associated with continuous murmur and oligomeric lung field on X-ray?
    - Oxygen administration

Respiratory

1. Most common causative pathogen of pneumonia is in 4m-4y: (2022)

a. Strep pneumo
b. Staph
c. RSV
d. Klebsiella
e. Mycoplasma

Answer: C

2. Most common cause of otitis media and pneumonia in agammaglobulinemia? (2022)
    a. S. Pneumo
    b. CMV
    c. Staph

Answer: A

3. 5 months baby with wheezing and mild fever, URTI 2 weeks ago otherwise normal what you will find on X-ray? (2022)
    a. Hyperinflation at one side
    b. Consolidation
    c. Bilateral hyperinflation

Answer: C

4. A croup patient received treatment. They returned back after 2 weeks with the same symptoms, no drooling, and up to date vaccinations. The most likely causative agent is: (2022)
    a. Staph
    b. Strep
    c. Parainfluenza
    d. H flu

Answer: C

(**Note**: *It is more likely this is persistence of the original viral infection. Bacterial tracheitis is a rare but serious superinfection of the trachea that may follow viral croup and is most commonly caused by S. aureus. Bacterial tracheitis should be considered when high fever, toxicity, and worsening respiratory distress develop after several days of croup-like illness.)*

5. Which of the following is not found in cystic fibrosis? (2022)
    a. Perianal abscess
    b. Salt wasting
    c. Pancreatitis
    d. Pansinusitis

Answer: A

6. URTI may come with superimposed bacterial sinusitis, the most likely symptom to occur is: (2022)
    a. Edematous mucous membranes
    b. Turbinates are dilated
    c. Thick mucus secretions
    d. Blue mucus membranes

Answer: C

7. A 10-year-old male patient presented to the emergency room with fever and cough. CXR showed bilateral lung infiltrate. All of the following are indications for admission for children with pneumonia, except:
    a. Signs of respiratory distress
    b. Age less than 6 years
    c. Patients with immune deficiency
    d. Lobar pneumonia with suspected resistance for beta-lactam antibiotics
    e. No response to oral antibiotics

Answer: B

Factors Suggesting Need for Hospitalization of Children with Pneumonia:

Age <6 mo
Immunocompromised state
Toxic appearance
Moderate to severe respiratory distress
Hypoxemia (oxygen saturation <90% breathing room air, sea level)
Complicated pneumonia*
Sickle cell anemia with acute chest syndrome
Vomiting or inability to tolerate oral fluids or medications
Severe dehydration
No response to appropriate oral antibiotic therapy
Social factors (e.g., inability of caregivers to administer medications at home or follow-up appropriately)

* Pleural effusion, empyema, abscess, bronchopleural fistula, necrotizing pneumonia, acute respiratory distress syndrome, extrapulmonary infection (meningitis, arthritis, pericarditis, osteomyelitis, endocarditis), hemolytic uremic syndrome, or sepsis.

8. A 12-year-old female is brought to the emergency department. She is breathing 30 times per minute, is unable to speak in full sentences, and has a peak expiratory flow rate 50% of predicted. The preferred first line therapy for her asthma exacerbation is:
    a. Beta-agonist nebulization and aminophylline IV
    b. Beta-agonist nebulization and inhaled corticosteroids
    c. Beta-agonist nebulization and hydrocortisone IV
    d. Magnesium sulfate IV
    e. Inhaled steroids and hydrocortisone IV

Answer: C

9. Which of the following is usually clinically diagnostic of cystic fibrosis in the newborn?
    a. Tachypnea

b. pneumothorax
c. clubbing
d. meconium ileus
e. hemoptysis

Answer: D

10. In infants respiratory syncytial virus infection can present as all the following, except:
    a. Otitis media
    b. Apnea
    c. Pneumonia
    d. Bronchiolitis
    e. Asthma

Answer: E

11. In a 9-year-old child with asthma exacerbation, which one of the following findings is correct on his pulmonary function test?
    a. Decreased total lung volume
    b. Decreased lung compliance
    c. Decreased residual lung capacity
    d. Increased Forced Expiratory Volume in 1sec (FEV1)
    e. Increased Forced Residual Capacity

Answer: E

12. All of the following are correct about pneumonia except:
    a. Mycoplasma pneumonia is a common causative agent in early infancy
    b. Bronchiolitis is most commonly associated with respiratory syncytial virus infection
    c. Hemophilus influenza type b is an important cause of lobar pneumonia in unvaccinated children
    d. Vancomycin is effective for treatment of penicillin resistant pneumococci
    e. Staphylococcus aureus is the most common cause of empyema

Answer: A

(Streptococcus pneumoniae (pneumococcus) is the most common bacterial pathogen in children 3 weeks to 4 years of age, whereas Mycoplasma pneumoniae and Chlamydophila pneumoniae are the most frequent bacterial pathogens in children aged 5 years and older.)

13. All of the following are correct about viral croup except:
    a. it is typically sudden in onset
    b. it is most common in children less than two years of age
    c. it responds well to steroids or nebulized adrenaline
    d. it is most common in autumn and early winter
    e. patients rarely need intubation

Answer: A

14. Which of the following statements is correct about sweat chloride testing?
    a. False negative test (i.e normal test with presence of cystic fibrosis) may be secondary to hypoproteinemia
    b. Sweat chloride test usually normalizes once treatment of cystic fibrosis is initiated
    c. Monitoring of sweat chloride test results is an important step to evaluate adequacy of management
    d. Normal sweat chloride test should be confirmed by genetic testing to rule out cystic fibrosis
    e. Obtaining sweat chloride testing is as accurate in newborns as in older children

Answer: A

15. According to the GINA (global initiative for asthma) guidelines, asthmatic patients should be considered for controller therapy if they start using inhaled bronchodilators:
    a. more than two times per day
    b. more than two times per night
    c. more than two days per week
    d. more than two weeks per year
    e. more than two days per month

Answer: C

16. In a 9-year-old child with asthma exacerbation, all of the following are correct about his pulmonary function test, except:
    a. Increased Forced residual capacity
    b. Decreased Forced Expiratory Volume in 1sec (FEV1)
    c. Decreased FEV 25-75
    d. Increased residual lung capacity
    e. Decreased total lung volume

Answer: E

17. All of the following are correct about pharyngitis except:
    a. treatment with penicillin continues to be effective against group A beta hemolytic streptococci
    b. differentiation between viral and bacterial infection by physical examination is not easily achieved
    c. the presence of anterior cervical adenopathy with sudden onset is more common in bacterial pharyngitis
    d. treatment of strep pharyngitis with antibiotics decreases the incidence of rheumatic fever
    e. acute glomerulonephritis follows only streptococcal pharyngitis

Answer: E

18. All of the following are correct about pneumonia in children except:
    a. hemophilus influenza type b is a significant cause of pneumonia in countries that do not use h flu b vaccine
    b. empyema is most commonly associated with staphylococcus aureus
    c. mycoplasma pneumonia is the most common cause of pneumonia in school age children
    d. Chlamydia trachomatis is acquired from the maternal genital tract
    e. Viruses are an uncommon cause of pneumonia in infancy

Answer: E

19. All of the following are typical features of epiglottitis EXCEPT?
    a. Onset over hours
    b. Preceding coryza
    c. Drooling saliva
    d. Temperature of 39 c
    e. Absent or slight cough

Answer: B

20. All following are characteristic findings for bronchiolitis EXCEPT?
    a. Subcostal retractions
    b. Decreased lung volume on chest x-ray
    c. Dry cough
    d. Tachypnea
    e. Wheezes

Answer: B

21. A two-month-old is admitted to the hospital with RSV bronchiolitis, of the following which is the least likely scenario:
    a. Patient may go on to develop acute respiratory failure needing mechanical ventilation
    b. Patient may develop significant episodes of apnea requiring intubation and mechanical ventilation
    c. The course of his disease may take several weeks to resolve
    d. He will have a higher chance of developing reactive airway disease in the future
    e. Secondary bacterial pneumonitis is a common complication

Answer: E

22. You are assessing a 5-year-old male with severe acute asthma exacerbation. The most concerning finding is:

a. The PaO2 on an ABG is 65 torr when patient is on room air with respiratory rate of 36 breaths/minute
b. The PaCO2 is 50 torr when patient is on room air breathing 36 breaths/minute
c. Patient cannot speak in full sentences
d. Patient has a silent chest on auscultation
e. Patient has a resting heart rate of 160 beats per minute

Answer: B

(The answer is B as tachypnea + CO2 retention is indicative of respiratory failure. While D is a sign of severe asthma, it does not necessarily mean the patient is in respiratory failure.)

23. A three-year-old boy is brought by ambulance to the emergency room in severe respiratory distress. The child is sitting up on the stretcher leaning forward, you notice inspiratory stridor and drooling from his mouth. He appears anxious. His vital signs are Temp 38.2, RR 38, HR 140, SPO2 94% on room air, BP 95/45, Capillary refill time less than 2 seconds. Regarding his illness all the following are true EXCEPT:
    a. Hemophilus Influenzae is the most common infectious cause
    b. Treatment with intravenous antibiotics is needed
    c. You may have to restrain the child to be able to examine his throat
    d. Lateral Radiograph of the neck may reveal the thumb sign
    e. You should alert the ENT surgeon and anesthesia physician as soon as possible

    Answer: C

24. You are discussing a chest radiograph of a 6-year-old boy with the pediatric resident, he points to you a large pleural effusion, in addition to a lobar infiltrate with pneumatoceles on the right side. From All the following organisms the most likely etiology:
    a. Streptococcus Pneumoniae
    b. Chlamydia pneumoniae
    c. Staphylococcus Aureus
    d. Group A Streptococcus
    e. Streptococcus Viridans

    Answer: C

25. A 10-year-old female has presented to the pediatric clinic with cough for the last 6 months, no fever, describes it as “wet”, but can’t expectorate any sputum. She has lost some weight but is not sure how much and to you she seems quite pale. She also complains of frequent headaches. A chest Xray showed dextrocardia. Of the following statements which one is CORRECT:
    a. PPD is diagnostic
    b. Sweat chloride testing is diagnostic
    c. Pulmonary function testing is diagnostic
    d. Electron microscopy may provide the diagnosis
    e. Only Bronchoscopy can give us the diagnosis

Answer: D

26. In infants during spontaneous respirations, the major contributor to the total respiratory resistance is: ***
    a. Nasal airway and mouth
    b. Glottis
    c. Trachea
    d. Bronchi
    e. Bronchioles

Answer: A

27. A 10-year-old female presented to the pediatric clinic with a five-month history of wet cough. Her mother reports a weight loss of 1.5 kg over the last 4 months. All of the following conditions are possible causes except:
    a. Cystic fibrosis
    b. Immune deficiency
    c. Chronic asthma
    d. Chronic bronchitis
    e. Primary ciliary dyskinesia

Answer: C

28. All of the following statements are true about pulmonary disease in Cystic Fibrosis in children except:
    a. Pseudomonas aeruginosa in sputum is associated with progressive pulmonary disease
    b. Pulmonary function testing shows a restrictive pattern during early stages of the disease
    c. Pulmonary therapy should aim at clearing secretions and treating infections
    d. Staphylococcus aureus is commonly isolated from sputum during early stages of the disease
    e. Pneumothorax can be a complication of advanced lung disease

Answer: B

29. The drug of choice to treat Mycoplasma pneumonia is:
    a. Ceftriaxone
    b. Amikacin
    c. Cotrimoxazole
    d. Erythromycin
    e. Amoxicillin

Answer: D

30. A 9-month-old female is admitted with fever, difficulty breathing and rhinorrhea. She is started on nebulized albuterol every two hours. Her fever resolves but she continues to cough. On exam She has both inspiratory and expiratory wheezes in both lung fields. Her SaO2 is 96% on room air and a CBC shows WBC of 8,000 with lymphocytic predominance. CXR shows bilateral hyperinflation. Next morning her SaO2 is 88% on room air and there is markedly decreased air entry on auscultation of the right lung when compared to the left. Repeat CXR shows opacification of the right lung with some mediastinal shift to the right. The most likely cause for this change in her condition is:
    a. Most likely a radiologic artifact due to a poor technique
    b. Mucous plug causing atelectasis
    c. Right pneumothorax
    d. Aspiration pneumonia
    e. Worsening pneumonia

Answer: B

31. An 11-year old child with Bronchial Asthma is coming for follow up at the clinic. He is being treated with low dose - Inhaled Corticosteroids (ICS) for the past 4 weeks but not showing adequate control of symptoms, The most appropriate step to optimize his asthma control should be:
    a. Check for compliance and daily administration of ICS
    b. Increase the dose of ICS from (low) to (medium) dose
    c. Send a sputum culture to exclude bacterial infection
    d. Add a leukotriene antagonist (montelukast) to ICS
    e. Add a long-acting B-agonist (LABA) to ICS

Answer: A

32. A 5-year old child is presenting with intermittent attacks of coughing and wheezing. You are discussing the diagnosis of reactive airway disease with his family. The family questions you about the possibility of persistence of these symptoms into later childhood and adulthood. Which of the following investigations you can recommend to evaluate the predictive risk of future asthma in this child?
    a. Chest X-ray to assess for hyperinflation and atelectasis
    b. Sputum sample for eosinophil count
    c. Serum sample for inflammatory markers
    d. Lung function test (spirometry) to assess for airway obstruction
    e. Skin Prick test for inhaled allergens

Answer: E

33. A 3-month-old infant presented to the emergency department with 3- day history of coughing, noisy breathing and difficulty in feeding. These symptoms were preceded by nasal discharge for 2 days. No previous history of similar episodes. On examination his temperature was 37.8 C , RR was 60 b/m. He had nasal flaring with increase work of breathing and his O2 saturation was 82%. On auscultation he had diffuse expiratory wheeze.

You administered oxygen therapy and admitted the child. Among the following treatment options which is best recommended for further management of this child:

a. Systemic corticosteroids
b. Intravenous ceftriaxone
c. Nebulized Bronchodilators
d. Nebulized corticosteroids
e. Nebulized hypertonic saline

Answer: E

34. All of the following are triggers of extrinsic asthma, **except**:
    a. Olive tree pollen
    b. Cold air
    c. Cat's dander
    d. Cow's milk
    e. Dust mites

Answer: B

35. All of the following may be associated with cystic fibrosis, **EXCEPT:**
    A. Rectal prolapse.
    B. Insulin-dependent hyperglycemia
    C. Hyperchloremic acidosis during episodes of significant dehydration
    D. Bronchiectasis
    E. Nasal polyposis

Answer: C

36. All of the following are correct about laryngotracheobronchitis(croup) **EXCEPT**?
    A. viruses are the major etiologic agents.
    B. patients may respond to inhalation of racemic epinephrine.
    C. The disease is most common in children older than four years of age.
    D. treatment with steroids has proved effective.
    E. onset is usually insidious.

Answer: C

37. All of the following regarding epiglottitis are true, **EXCEPT:**
    A. Anxiety-provoking interventions should be avoided.
    B. The incidence of acute epiglottitis is much less common now due to vaccination.
    C. Definitive diagnosis of acute epiglottitis is by laryngoscopy.
    D. Aminoglycosides are the drug of choice.
    E. Its clinical presentation is similar to bacterial tracheitis.

Answer: D

38. All of the following are indications for admission for children with pneumonia, **EXCEPT**:
    A. Age less than 6 months
    B. Respiratory distress
    C. Immunocompromised patients
    D. Patients with pneumonia due to Mycoplasma pneumonia
    E. No response to oral antibiotics

Answer: D

39. A 12-year-old boy who has cystic fibrosis is hospitalized for treatment of a pulmonary exacerbation. Gram stain of sputum reveals many polymorphonuclear leukocytes and gram-negative rods. Of the following, the MOST appropriate antibiotic choice for this patient is an aminoglycoside plus (**One is correct**)
    A. Azithromycin
    B. Ceftriaxone
    C. Cefuroxime
    D. Ticarcillin
    E. Vancomycin

Answer: D

40. An 18-month-old girl has been having an intermittent nonproductive cough for the past 6 months. Her parents state that the cough wakes the toddler at night a few times a month and occurs when playing vigorously. During a recent upper respiratory tract illness, her cough worsened and occurred daily for 3 weeks. On physical examination, there is no nasal discharge, and the toddler appears healthy.
    Of the following, the most likely diagnosis is (One is correct)
    A. Allergic rhinitis
    B. Asthma
    C. Atypical pneumonia
    D. Gastro esophageal reflux
    E. Sinusitis

Answer: B

41. Regarding diagnosis of cystic fibrosis, which **one is correct**?
    a. Immune Reactive Trypsinogen (IRT) elevation confirm diagnosis.
    b. Sweat Chloride testing is replaced nowadays by genetic testing.
    c. Genetic testing diagnose 100% of cases.
    d. Meconium ileus is an early manifestation of cystic fibrosis.
    e. Patients usually have normal weight for age.

Answer: D

42. All of the following are correct about respiratory infections in children, **except**
    a. Respiratory syncytial virus leads to outbreaks during the winter and colder months mainly.
    b. Parainfluenza virus is the most common cause of croup.
    c. Streptococcal pneumoniae is the leading cause of empyema.
    d. Respiratory infections may cause exacerbations in patients with asthma.
    e. Empyema is best treated by drainage and antibiotics.

Answer: C

43. A 5-year-old male presents to your office with a chronic recurrent productive cough, increased at night, worse with exercise and with upper respiratory infections. Growth has been normal. Chest x-ray findings are normal except for mild hyperinflation. The most likely diagnosis is: **(Choose one correct)**
    a. Sinusitis
    b. Asthma
    c. Gastroesophegeal reflux
    d. Tuberculosis
    e. Cystic fibrosis

Answer: B

44. A 1-year-old boy presents himself with a 2-month history of "wet" coughing. He was delivered at term but had delayed passage of meconium due to a meconium plug. Over the past 3 to 6 months, he has been treated each month for acute otitis media. His parents are concerned that, despite a good appetite, their son has been losing weight and has four to six loose, foul-smelling stools per day. Of the following, the MOST appropriate next test or study is **(one is correct)**
    A. 24-hour pH probe monitoring
    B. Pulmonary function testing
    C. Serum immunoglobulins (IgG, IgA, and IgM)
    D. Sweat chloride measurement
    E. Tuberculin skin test

Answer: D

45. A 4-year-old child has atopic dermatitis due to severe allergies to dust, animal dander, and many kinds of pollens. Mediators released from which cell type are responsible for the clinical manifestations immediately following exposure to these substances **(one is correct)**
    A. B cells
    B. Macrophage
    C. Mast cells

D. T helper 1 cells
E. T helper 2 cells

Answer: C

46. All of the following can cause wheezes in children **except:**
    A. Asthma
    B. Cystic fibrosis
    C. Lactose intolerance
    D. Gastro esophageal reflux disease
    E. Viral bronchiolitis

Answer: C

47. A 32-year-old woman gives birth at 31 weeks gestation. Within an hour following delivery, the neonate develops respiratory distress and expires despite intubation and mechanical ventilation. An autopsy is performed. The lungs are firm and airless; on microscopic examination the lungs demonstrate extensive pink hyaline membranes within alveoli. The most likely cause of these findings is. (**One is correct**)
    A. Congenital pneumonia
    B. Maternal hypertension
    C. Immaturity of type 2 pneumocytes
    D. Meconium aspiration
    E. Transient tachypnea of newborns

Answer: C

48. All of the following are manifestations of cystic fibrosis **except:**
    A. Sinusitis
    B. Hyperglycemia
    C. Cholestasis
    D. Precocious puberty
    E. Failure to thrive.

Answer: D
(Delayed puberty is a manifestation of CF)

49. All of the following can cause acute upper airway obstruction **except:**
    A. Croup
    B. Laryngitis
    C. Bacterial trachitis
    D. Bronchiolitis
    E. Epiglottitis

Answer: D

50. Regarding cystic fibrosis, all of the following statements are correct, **except**:

a. There is a defect in the Chloride channel.
b. An autosomal recessive disease
c. Inherited on chromosome number 9.
d. Affects females and males equally.
e. Affected patients have 2 defective genes.

Answer: C

51. All of the following statements are correct about cystic fibrosis, **except**:
    a. It is inherited as autosomal recessive.
    b. Sweat chloride level is elevated.
    c. Patients usually have significant failure to thrive.
    d. Recurrent respiratory tract infections are primarily secondary to immune deficiency.
    e. Patients require supplementation with fat soluble vitamins.

Answer: D

52. All of the following medications have bronchodilator effect, **except**:
    a. Propranolol
    b. Salbutamol
    c. Theophylline
    d. Epinephrine
    e. Ketamine

Answer: A

53. What is the most common trigger for asthma in young children age 0-4 years?
    a. Allergic rhinitis
    b. Cigarette smoke
    c. Cold air
    d. Exercise
    e. Upper respiratory infection

Answer: E

54. In an acute bronchial asthma attack, all of the following statement are correct EXCEPT:
    a. During early stages of acute asthma, minute ventilation is increased and PaCo2 falls
    b. pH is normal or elevated during the early stage of acute attack of asthma
    c. Hypercarbia and respiratory acidosis are present in all stages of bronchial asthma
    d. Oxygen and inhaled short-acting beta-2 adrenergic agonists are the mainstay of emergent treatment of acute asthma exacerbations
    e. Administration of systemic glucocorticoids is given to those who fail to improve after beta-2 adrenergic agonists inhalation

Answer: C

55. All of the following are true regarding acute bacterial rhinosinusitis in children EXCEPT:
    a. Amoxicillin-clavulanate is the first-line empiric antimicrobial therapy
    b. Intranasal corticosteroids is a necessary adjuvant therapy
    c. Viral URI and allergic rhinitis are the most frequent predisposing factors
    d. Normal imaging studies (CT or plain film) of the paranasal sinuses exclude diagnosis
    e. Cough (wet or dry) is an important symptom in Acute bacterial rhinosinusitis

Answer: B

56. A 10-year-old boy has a 1-year history of cough that is worse at night and with exercise. Which one of the following tests is most likely to assist you to make a diagnosis?
    a. Barium swallow
    b. Bronchoscopy.
    c. Chest radiograph.
    d. Spirometry.
    e. Sweat chloride test.

Answer: D

57. Cystic Fibrosis can cause all the following, except:
    a. Diabetes Mellitus
    b. Chronic liver disease
    c. Rectal prolapse
    d. Chronic sinusitis
    e. Immune deficiency

Answer: E

58. The parents of a 6-week-old male infant bring in their son for evaluation of noisy breathing of 2 weeks duration. They state that the vaginal delivery was uncomplicated, and the infant has been bottle-feeding with appropriate weight gain, on a cow milk formula. The noise occurs during Inspiration and worsens when the infant is placed supine or cries. The parents had not noticed any symptoms of upper respiratory tract infection. Of the following, the most likely explanation for the noisy breathing is **(one is correct)**
    A. Airway foreign body
    B. Gastro esophageal reflux
    C. Laryngomalacia
    D. Milk protein allergy
    E. Vascular ring

Answer: C

59. You are seeing a 2-year-old child in the office for a recheck visit after a local emergency department physician diagnosed sinusitis. She has continued to have symptoms of unilateral

purulent nasal discharge and bad breath smell. She has not responded to a 10-day course of amoxicillin therapy. Of the following, the most likely cause of her nasal symptoms is (**One is correct**)

A. Antimicrobial-resistant sinusitis
B. Nasal foreign body
C. Recurrent sinusitis
D. Seasonal allergic rhinitis
E. Viral upper respiratory tract infection

Answer: B

60. 3-year-old child with sinusitis, which is wrong?
    A. CT is required for diagnosis
    B. Strep pneumonia is the most common cause
    C. Amoxicillin is the first line of treatment.
    D. If not treated it could lead to brain abscess

Answer: A

61. A case of inspiratory stridor with toxic appearance and unstable vital signs, what is the most likely cause?
    A. Bacterial tracheitis
    B. Croup

Answer: A

62. Laryngomalacia, all true except?
    a. Aggravated by GERD
    b. Inspiratory stridor
    c. Very common after surgery

Answer: C

63. All in bronchiolitis except?
    a. Wheezing
    b. Fever
    c. Dry cough
    d. tachypnea
    e. decreased air on CXR

Answer: E

(If the illness becomes more severe, RSV bronchiolitis patients may have hyperexpansion of the chest)

64. Least common microorganism to cause pneumonia at 2 months of age:
    a. Mycoplasma
    b. GBS

c. Staph
d. E.coli
e. Klebsiella

Answer: A

65. Acute bronchial asthma, all except
    a. In early stages there is decrease in Pco2
    b. Hypercapnia and respiratory acidosis in all stages

Answer: B

66. Wrong about epiglottitis:
    a. fever 39
    b. drooling
    c. absent cough
    d. preceded by coryza

Answer: D

67. A child with chronic cough for 1 year, with history of prolonged jaundice and failure to thrive: what's the cause:
    a. Cystic fibrosis
    b. GERD
    c. Kartagener
    d. Asthma

Answer: A

68. Which of the following is not used in treatment of acute asthma exacerbation?
    a. SABA
    b. Systemic corticosteroids
    c. Mg sulfate
    d. Anti-cholinergic
    e. Mast cell stabilizers

Answer: E

69. Pt with picture of epiglottitis what to do:
    a. ENT consultation for tracheostomy
    b. Intubation under controlled setting

Answer: B

70. 69) A 2.6 Kg newborn girl is found to be cyanotic. When examined the baby started to cry and cyanosis improved. The rest of the examination was normal. Of the following, the most likely explanation is: (one is correct)
    a. Choanal atresia
    b. Cyanotic heart disease
    c. Polycystic kidney disease
    d. Tracheoesophageal fistula
    e. Respiratory distress syndrome

Answer: A

OTHER COLLECTED PAST PAPER QUESTIONS:

71. Which of the following is true about respiratory failure? (2022)
    - V/Q mismatch is the most common cause

72. Asthma on x-ray?
    - Bilateral inflation of lungs

73. Patient had croup then superimposed bacterial infection most likely by:
    - Staph aureus

74. MCC of hypoxia? ***
    - V/Q mismatch

75. Caffeine in newborns?
    - Decreases apnea

76. Picture of cystic fibrosis with ascites, what's wrong?
    - Normal size spleen

77. CT sinusitis, not a complication?
    - Lung abscess

78. Steeple sign on x-ray? ***
    - Parainfluenza

79. A possible complication of acute pharyngitis?
    - Rheumatic fever

80. Child with clubbing and respiratory symptoms, key diagnostic test:
    - genetic testing

81. History of an unvaccinated 3-year-old refugee with stridor, what is the most common organism?
    - H. influenza type B

82. A case of non-productive cough, wheezing, symptoms increased with exercise, what's the diagnosis?
    - Asthma.

83. A case of URTI associated with purulent discharge, fever, headache and lasting for 15 days, what is the most appropriate next step?
    - Give amoxicillin for 2 weeks

84. A case of pneumonia with URTI-like presentation in a 10-year-old boy, what is the most likely pathogen?
    - Mycoplasma pneumonia

85. A case of community acquired pneumonia that did not resolve with outpatient treatment, what's the most appropriate management?
    - Admit and give ceftriaxone and vancomycin

86. A case of inspiratory stridor, what's the most common cause?
    - Laryngomalacia

87. Wrong about croup:
    - Treated by antibiotics

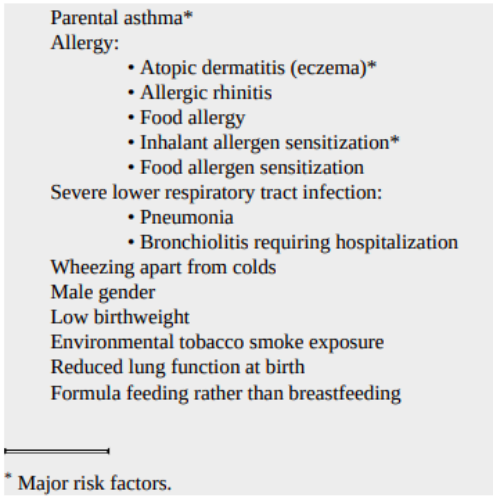
88. Patient with failure to thrive and fat malabsorption, Dx?
    - Cystic fibrosis

89. What finding is not caused by consolidation in the physical examination?
    - Decreased tactile vocal fremitus over the affected part of the lung *(it should be increased in consolidation).*

90. Most common cause of OSA in children is
    - Adenoid hypertrophy.

91. Not a predictor of future asthma

- Number of hospital admissions *(not sure if this is correct, because milder disease is more likely to remit)* **Early childhood risk factors for persistent asthma:**



Parental asthma*
Allergy:
- Atopic dermatitis (eczema)*
- Allergic rhinitis
- Food allergy
- Inhalant allergen sensitization*
- Food allergen sensitization

Severe lower respiratory tract infection:
- Pneumonia
- Bronchiolitis requiring hospitalization

Wheezing apart from colds
Male gender
Low birthweight
Environmental tobacco smoke exposure
Reduced lung function at birth
Formula feeding rather than breastfeeding

* Major risk factors.

92. Child with barking cough, stridor and hoarseness, next step
    - Give oral dexamethasone and nebulized epinephrine

93. Wrong about bronchiolitis (wheeze and respiratory distress in 3m old)
    - bronchodilators are recommended

94. Not given in acute asthma exacerbation
    - nebulized dexamethasone (should be oral or IV)

95. Not used in cystic fibrosis
    - IVIG

96. For Pseudomonas
    - Piperacilin

97. Pt with fever, cough, decreased air entry at one side, next step
    - CXR

98. Reactive airway disease and respiratory failure, mechanism
    - VQ mismatch

99. Wrong about surfactant
    - Decreases lung compliance

100. Epiglottitis
    - Intubate in ER (don't touch the pt)

101. A patient was treated for pneumonia with oral amoxicillin. He then came back after five days with pleural effusion... which antibiotics should be given next?
- Ceftriaxone and vancomycin

102. Wrong about asthma
- -most children with recurrent wheezes continue to have asthma in adulthood

103. Child with inspiratory stridor, barking couch and hoarseness, wrong
- -nebulised bronchodilators are the mainstay of treatment

104. Wrong about viral bronchiolitis
- Usually needs a chest x ray to confirm diagnosis

105. Not diagnostic of cystic fibrosis
- Low immunoreactive trypsinogen in the serum

(If the immunoreactive trypsinogen is elevated, the patient may have CF, but it is not a diagnostic test.)

106. Not seen in cystic fibrosis
- Low serum immunoglobulin

107. Not a common cause of wheeze:
- Heart failure

108. Wrong about chronic cough:
- Asthma can be excluded in absence of wheeze

109. Can be assessed at home?
- Peak Expiratory Flow Rate (PEFR)

110. Case 6 months old infant with fever tachypnea and wheezes what is the responsible organism
- RSV

111. A patient had an exacerbation of Asthma, managed with Albutamol 3 times, improved, but his PO2 only slightly increased, the next step in management is?
- Systemic steroids

112. Case of epiglottitis. What's the wrong statement?
- Settle the child down and examine his throat.

113. Wrong about epiglottitis:
- Gradual onset with progression.

Gastrointestinal

1. The most antigenic part of the components of breast milk is: (2022) ***
    a. The protein component
    b. The lipid component
    c. The carbohydrate component
    d. The prebiotic component
    e. The mineral component

    Answer: A

2. Not cause of acute diarrhea since one week: (2022)
    a. a. Rotavirus
    b. b. Primary lactose intolerance
    c. c. Amoeba
    d. d. Antibiotic associated diarrhea

    Answer: B

3. FTT in Cystic Fibrosis is caused by: (2022)
    a. a. Fat malabsorption
    b. b. Protein malabsorption
    c. c. Carbs malabsorption

    Answer: A

4. All of the following statements about breast milk components are true, EXCEPT:
    a. The carbohydrate component is lactose
    b. The lipid component is long chain triglycerides
    c. Breast milk is deficient in vitamin D
    d. Breast milk caloric content is 67 kcal per 100 ml
    e. The protein component is hydrolyzed casein

    Answer: E

5. You see a 4-month-old infant with biliary atresia. She has failure to thrive. This is likely due to:
    a. Fat malabsorption
    b. Protein malabsorption
    c. Carbohydrate malabsorption
    d. Iron malabsorption

e. Zinc malabsorption

Answer: A

6. At what age is the introduction of fresh cow's milk allowed? (one is correct)
    a. 4 months
    b. 6 months
    c. 9 months
    d. 12 months
    e. 2 years

Answer: D

7. All of the following cause invasive/bloody diarrhea EXCEPT:
    a. Yersinia Coli
    b. Salmonella
    c. Vibrio cholera
    d. Shigella
    e. Campylobacter Jejuni

Answer: C

8. All of the following conditions may require long term use of special formula or diet, except:
    a. Phenylketonuria (PKU)
    b. Acute gastroenteritis
    c. Fat malabsorption
    d. Cholestatic liver disease
    e. Cow's milk protein allergy

Answer: B

9. All the following are true about breast milk except:
    a. Amount and contents vary according to the infant's age
    b. Easy to digest due to the high whey: casein ratio
    c. Breastfed babies are less likely to be constipated
    d. Breast milk has more sodium load compared to formula milk
    e. Breast fed babies have less risk of sudden infant death syndrome

Answer: D

10. All of the following statements about chronic diarrhea in children is correct, except:
    a. Giardia Lamblia commonly leads to chronic diarrhea
    b. Stool pH of less than 5.5 (acidic) is most likely secondary to protein malabsorption
    c. The presence of reducing substances in the stool can be secondary to lactose deficiency
    d. Chronic diarrhea of cystic fibrosis is usually in the form of steatorrhea
    e. In secretory diarrhea, the stool amount is not dependent on diet

Answer: B

11. True statements regarding celiac disease include all of the following except:
    a. It is immune-mediated
    b. May have diarrhea
    c. May present with vitamin D resistant rickets
    d. Gluten free diet such as avoidance of wheat, barley, and rice is the best treatment
    e. May be associated with diabetes mellitus

Answer: C

12. All of the following are correct about patients with diarrhea except:
    a. Invasive diarrhea is characterized by the presence of stool PMNs on stool examination
    b. Rotavirus causes osmotic diarrhea
    c. Diarrhea due to enterohemorrhagic E-coli (OH:157) should be treated with antibiotics
    d. Shigella is associated with high fever in most patients
    e. Campylobacter jejuni has been associated with guillian-bare syndrome

Answer: C

13. A first-time mother asks you about the correct age for introducing solids in her healthy infant's diet. What would you tell her?
    a. 1 months
    b. 3 months
    c. 6 months
    d. 8 months
    e. 12 months

Answer: C

14. The recommended age to introduce low-fat milk into children's diet is:
    a. 6 months
    b. 12 months
    c. 18 months
    d. 24 months
    e. 36 months

Answer: D

15. All of the following are correct about rotavirus except ***
    a. it is the most common cause of diarrhea in children
    b. it induces osmotic diarrhea
    c. stool polymorphonuclear cells are increased
    d. dehydration is the most important complication of rotavirus
    e. it is highly contagious to others

Answer: C

16. Which of the following is the best way of evaluation of adequacy of an infant's nutrition?
    a. Adequate weight gain
    b. Good urine output
    c. Calorie count
    d. Height
    e. Head circumference

Answer: A

17. Regarding acute diarrhea in pediatrics, all of the following are true, EXCEPT:
    a. Most cases of acute diarrhea require supportive therapy only.
    b. In most cases, specific diagnostic tests are needed to know the exact etiology.
    c. Drinks containing large amount of carbohydrates can result in worsening of the diarrhea.
    d. Very young infants are usually more severely affected than older patients with acute diarrhea.
    e. Most cases are self-limited.

Answer: B

18. Regarding celiac disease, all of the following groups are at higher risk than the general population to develop celiac disease, EXCEPT:
    a. Patients with trisomy 13
    b. Diabetic patients
    c. Patients with trisomy 21
    d. First degree relatives of patients with celiac disease
    e. Strong family history of autoimmune disease

Answer: A

19. All of the following formulas might be considered to treat cow's milk allergy in infants, EXCEPT:
    a. Soy based formula
    b. Lactose free formula
    c. Extensively hydrolyzed formula
    d. Amino acid-based formula
    e. Partially hydrolyzed formula

Answer: B

20. You follow up a 6-month-old male infant in your clinic. When plotting his growth parameters, you noticed that his weight has crossed 3 percentiles in the last 3 months, whereas his length and head circumference continued to follow the same original percentile. All of the following are possible causes for this, EXCEPT:

a. Persistent diarrhea
b. Incorrect preparation of the formula
c. Excessive vomiting
d. Poor social situation at home
e. Chromosomal abnormality

Answer: E

21. You are asked to review a newborn term male infant because his mother is a hepatitis B carrier. The baby is now 2 hours of age and is attempting a breastfeed with his mother. Which of the following options is the most appropriate next step in the management of this baby?
    a. No management required because of low risk of transmission
    b. Cease the breastfeed immediately and allow only formula feeding.
    c. Arrange for Hep B immunoglobulin to be administered within the next 24 hours.
    d. Arrange Hep B vaccine to be administered within the next 72 hours.
    e. Arrange for both Hep B immunoglobulin and Hep B vaccine to be administered within the next 10 hours.

Answer: E

22. All of the following are reported benefits of breastfeeding EXCEPT: ***
    a. Promotes mother–infant bonding.
    b. Protects from hemorrhagic disease of newborns
    c. Decreased risk of asthma and eczema in infants predisposed to these conditions
    d. Reduced risk of recurrent infections
    e. Decreased frequency of diarrheal disease

Answer: B

23. All of the following cause watery diarrhea with no polymorphonuclears in the stool EXCEPT:
    a. rotavirus
    b. Vibrio cholera
    c. norovirus
    d. giardia
    e. amoeba

Answer: E

24. In infants with cow's milk allergy, you would switch them to less allergic formula. In these patients, you would expect to see a response for the newly introduced formula:
    a. Immediately
    b. After 12 hrs
    c. Within 2-3 days
    d. After 1 week
    e. After 1 month

Answer: C

25. You meet a patient at clinic who was just diagnosed to have celiac disease, you would tell him all of the following facts about celiac disease, EXCEPT:
    a. Biopsy-based diagnosis is the gold standard in making the diagnosis
    b. Relatives of celiac disease patients are at a higher risk to develop celiac and should therefore be screened.
    c. Sensitivity to gluten resolves after 5 years of gluten free diet
    d. Anti-Tissue Transglutaminase (TTG) titer gets lower usually with good adherence to gluten free diet
    e. Celiac patients are at risk to develop Vitamin D Deficiency

    Answer: C

26. All of the following are causes of chronic diarrhea in a 3-month-old infant, EXCEPT:
    a. Primary lactase deficiency
    b. Congenital sodium diarrhea
    c. Tufting enteropathy
    d. congenital chloride diarrhea
    e. Celiac disease

    Answer: E

27. You see in the clinic a 10-month-old infant with diarrhea of 3 days duration, with minimal vomiting. After your physical exam you diagnosed her to have mild acute gastroenteritis. The best step in the management is: ***
    a. Continue breastfeeding and a regular diet
    b. Avoid breastfeeding and substitute a lactose-free formula for 48 hours
    c. Avoid breastfeeding and substitute for oral rehydration solution ORS for 48 hours
    d. Start intravenous fluids and make patient NPO (nill per os) in order to achieve "bowel rest"
    e. Start empirical metronidazole for 5 days

    Answer: A

28. When breast milk is compared to STANDARD cow's milk formula, all are true, EXCEPT:
    a. Both have the same carbohydrate component
    b. Both have the same calorie content
    c. Both have the same vitamin D content
    d. Both have the same fat component
    e. Both are made of the same proteins

    Answer: C

29. Soy formula is used in the treatment of galactosemia because:
    a. it contains lactose

b. of its modified protein component
c. of its modified carbohydrate component
d. of its fat content
e. of its probiotic content

Answer: C

30. All of the following findings can be seen in celiac disease patient, EXCEPT:
    a. High titer of anti-Tissue Transglutaminase (TTG)
    b. Normal vitamin D level
    c. IgA deficiency
    d. Negative HLA-DQ2 /DQ8
    e. Iron deficiency anemia

Answer: D

31. Which of the following maternal infections is a contraindication of breastfeeding in developed countries?
    a. HIV
    b. HSV
    c. Hep B
    d. Hep C

Answer: A

32. You are evaluating a child at your clinic due to diarrhea of one month duration. All of the following are helpful diagnostic tests for his illness EXCEPT:
    a. Low sweat chloride reading
    b. Low zinc level
    c. High titer of anti- tissue transglutaminase
    d. High fecal antitrypsin level
    e. High fecal calprotectin reading

Answer: A

33. Regarding secondary lactose intolerance that develops post gastroenteritis in pediatrics, all are true **EXCEPT:**
    A. Gets better with lactose free formula in infants.
    B. Oral supplement of the lactase enzyme helps to relieve the symptoms.
    C. Avoidance of dairy products relieves the symptoms.
    D. Causes worsening of the diarrhea
    E. This condition is rare.

Answer: E

34. Regarding Celiac disease in pediatrics, the least expected to be seen in a patient who suffers from celiac disease is:
    A. Itchy skin rash
    B. Constipation
    C. Lactose intolerance
    D. Myopathy
    E. osteoporosis

Answer: D

35. All of the following are true regarding Soy formula, **except:**
    A. Can be used for infants with Cow's milk protein intolerance.
    B. The carbohydrate content of this formula includes sucrose.
    C. Unlike other formulas, it has to be given with extra vitamin supplements since it is nutritionally deficient with vitamins.
    D. Is the formula of choice for galactosemia patients.
    E. There is a cross reactivity with the regular Cow's milk formula.

Answer: C

36. Urine test positive for reducing substances suggests one of the following disorders (**One is correct**)
    A. Galactosemia
    B. Glycogen storage disease
    C. Hyperammonemia
    D. Myoglobinurea
    E. Hyperbilirubinemia

Answer: A

37. Atopic dermatitis, chronic cough, failure to thrive, vomiting and diarrhea can be secondary to allergy to which one of the following components of cow's milk? **(Choose one correct)**
    a. Whey protein
    b. Linolenic acid
    c. Zinc
    d. Lactose
    e. short chain fatty acids

Answer: A

38. The milk used for patients with galactosemia is: **(Choose one correct)**
    a. Sucrose free milk
    b. Lactose free milk
    c. Maltose free milk
    d. Cow's protein free milk
    e. Fructose free milk

Answer: B

39. All of the following are causes of chronic diarrhea in pediatrics, **except:**
    A. Giardia infection
    B. Cystic fibrosis
    C. Lactose intolerance
    D. Chronic non- specific diarrhea due to excess juice intake
    E. Rota virus infection

Answer: E

40. All of the following are well-known presentations of Celiac disease, except:
    A. Abdominal pain
    B. Diarrhea
    C. Bleeding tendency
    D. Short stature
    E. Constipation

Answer: C

41. One of the following is **true** regarding breast milk and cow's milk formula **(one is correct)**
    A. Breast milk has more whey: casein ratio in comparison to Cow's milk formula.
    B. Breast milk has a higher vitamin D level in comparison to Cow's milk formula.
    C. Breast milk is rich in vitamin K.
    D. Iron supplement to breast fed infant should start at 7 months of life.
    E. Breast milk is appropriate for lactose intolerant infants.

Answer: A

42. A 1-year-old female returns for follow-up for poor growth and chronic diarrhea. Her height is at the 25th percentile and her weight and body mass index (BMI) are both <3rd percentile. On exam she has decreased subcutaneous fat stores. Her labs are remarkable for a positive fecal fat and a sweat chloride level of 85 mmol/L (normal 0-40). All of the following is true about this patient's condition, **except**
    A. The mode of inheritance of this condition is autosomal recessive.

B. Patients with this disease hardly ever reach 50s of age.
C. Medications can alleviate diarrhea and probably improve growth.
D. Blood testing is not available yet to diagnose this condition.
E. About 85% of these patients have problems with fat absorption.

Answer: D

43. Which one of the following tests is used to screen for carbohydrate malabsorption? **(Choose one correct)**
    a. Sudan test
    b. Stool for albumin
    c. Stool for alpha 1 antitrypsin
    d. Stool for glucose
    e. Stool for reducing substances.

    Answer: E

44. A 4-month-old baby who is breast-fed is complaining of irritability and diarrhea, stool heme occult was positive, you suspect cow's milk protein allergy. Which one of the following management options is correct? **(Choose one correct)**
    a. Place the baby on a regular infant formula instead of breast milk
    b. Place the baby on lactose free formula
    c. Prescribe the baby antihistamine to treat his allergy.
    d. Place the baby on hydrolysed amino acid formula
    e. Refer the baby to an allergy-immunologist for desensitization.

    Answer: D

45. Which of the following is a classic indicator of organic abdominal pain in children? **(One is correct)**
    a. Pain lasting more than 3months.
    b. Pain beginning between 6-14 years of age.
    c. Complaint of diffuse abdominal pain
    d. Pain awakening patient at night
    e. Positive family history of abdominal pain

    Answer: D

46. A ? month-old infant presents with acute mild dehydration due to diarrhea and a few episodes of emesis. What is the most appropriate course of action? **(One is correct)**
    a. IV bolus of 10 mL/Kg of normal saline.
    b. IV bolus of 20 mL/Kg of normal saline

c. Feed through diarrhea with the regular diet
d. A trial of oral rehydration solution
e. Keep NPO

Answer: D

47. A 3-year-old boy with frequent diarrhea and weight loss. Weight was less than 3rd percentile. The boy had abdominal distension. Which of the following organisms may be responsible for this child's illness? **(One is correct)**
    a. E-Coli
    b. Giardia Lamblia
    c. Entameba histolytica
    d. Shigella species
    e. Yersinia enterolytica

    Answer: B

48. All of the following statements about celiac disease are correct, **except:**
    a. short stature can be a presenting symptom.
    b. Children are usually irritable.
    c. The best serological test is anti-tissue transglutaminase antibody.
    d. It can be associated with selective IgA deficiency.
    e. Treatment includes gluten free diet for the first 5 years of life.

    Answer: E

49. Which of the following represents the greatest percentage of calories in human breast milk? **(Choose one correct)**
    a. Carbohydrate
    b. Protein
    c. Fat
    d. Cholesterol
    e. Whey

    Answer: C

50. All of the following are true concerning composition of breast milk, **except:**
    a. The major carbohydrate component of human milk is lactose.
    b. Whey and casein are the major protein components.
    c. Fat accounts for about one third of the caloric value of human milk
    d. The vitamin and mineral contents in human milk vary with maternal diet.
    e. Although iron and calcium are present in small quantities in human milk, infants are able to absorb a greater proportion of these minerals than from cow's milk.

Answer: C

51. Fever + bloody diarrhea, most likely organism:
    a. Shigella
    b. Salmonella

Answer: A

52. Not a contraindication to breast feeding:
    a. Breast abscess
    b. HIV in Jordanian mothers
    c. Active genital herpes
    d. Severe psychoses
    e. Active TB

Answer: C

53. a case about type 1 FTT, asking about the wrong statement:
    a. It's the most common type
    b. nonorganic cause
    c. cannot be caused by vomiting

Answer: B+C?

54. A case of FTT type 1 (only weight < 3rd percentile) is most likely due to?
    a. Cystic fibrosis
    b. Hypothyroidism
    c. Celiac disease

Answer: None

(Note: *All of the following answer choices cause type 2 FTT*)

55. Best test used for diagnosis of rotavirus:
    a. Antigen test
    b. PCR
    c. Stool analysis
    d. Stool culture
    e. Rota antibody

Answer: A

56. One year old child, growth chart showing type 3 failure to thrive with low Ht,Wt, and HC. The most likely cause is:
    a. Celiac
    b. Hypothyroidism

c. TORCH infection

Answer: C

57. Which is wrong about acute diarrhea
    a. Lactose free formula shortens the course
    b. One month duration

Answer: B

58. Advice for parents with a child who's failing to gain weight.
    a. Don't force feed him
    b. Eating while doing what he loves

Answer: A
(not sure if B is incorrect)

59. All are used to treat cow's milk allergy exept:
    a. lactose free formula
    b. soya based formula
    c. hydrosylated formula
    d. partially hydrosylated formula
    e. amino acid based formula

Answer: A+D

60. A 9-year-old diagnosed with CF and a picture of him with yellow sclera, all should be done in the physical exam except:
    a. Use measuring tape
    b. Transmitted thrills
    c. Shifting dullness
    d. Succession splash

Answer: D

61. You follow up a 6-month old male infant in your clinic. When plotting his growth parameters, you noticed that his weight has crossed 3 percentiles in the last 3 months, whereas his length and head circumference continued to follow the same original percentile. All of the following are possible causes for this , EXCEPT:
    a. Persistent diarrhea
    b. incorrect preparation of the formula
    c. excessive vomiting
    d. poor social situation at home

e. chromosomal abnormality

Answer: E

OTHER COLLECTED PAST PAPER QUESTIONS:

62. Child with history of failure to thrive and recurrent chest infections, what is the best test to reach to diagnosis?
    - Sweat chloride.

63. Picture with scenario of celiac, which is not found?
    - Erythema marginatum

64. Infant with cow milk allergy?
    - Change formula.

65. Failure to thrive type 1, which is wrong?
    - It is called stunted.

66. Wrong about breast-milk
    - Whey is the most important protein component.

67. Not needed in evaluating recurrent pancreatitis?
    - Anti-tissue transglutaminase

68. In which scenario is there no need for medium-chain fatty acid formula
    - Child with rotavirus gastroenteritis of 10 days

69. Baby 3 kg in weight, takes 50 ml of breast milk every 3 hours, what is his daily caloric intake per kg
    - 90 kcal/kg/d

70. Gold standard for celiac disease
    - Histology

71. Can be a cause of bloody diarrhea
    - Campylobacter jejuni

72. Most common cause of shock in children is
    - Gastroenteritis

73. AKI following acute gastroenteritis is caused by?
    - Dehydration

74. 2-month-old with constipation, unlikely cause

- Celiac disease

75. Formula of choice for child with cow's milk protein allergy
    - Casein hydrosylate formula

76. A case of gastroenteritis + watery diarrhea, what is the most common cause?
    - Rotavirus

Endocrine

1. Wrong about growth parameters? (2022)
    a. Weight doubles in 6 months
    b. Height doubles in 4 years
    c. Head circumference increase 12 cm in first year
    d. Average weight at birth 2.4-4.2
    e. Average height at birth 48-52 cm

    Answer: A

2. A 12-year-old presented with short stature below 3rd percentile. Weight is at 15th percentile, puberty is delayed, all other ? is normal. Growth velocity is 5cm/year, bone age is 10 years, your diagnosis is: (2022)
    a. Growth hormone deficiency
    b. Constitutional growth and pubertal delay
    c. Chronic disease

    Answer: B

3. The most common cause of congenital hypothyroidism is: (2022) ***
    a. Dyshormogenesis
    b. Central hypothyroidism
    c. Thyroid Dysgenesis
    d. Iodine deficiency
    e. Thyroglobulin deficiency

    Answer: C

4. Manifestations of congenital hypothyroidism in the first 4 weeks of life are non-specific and include all of the following except:
    a. Decreased feeding
    b. Prolonged jaundice
    c. Constipation

d. Delayed development
e. Lethargy

Answer: D

5. Causes of short stature in a 7-year-old child could be due to all of the following except:
    a. Nutritional obesity
    b. Endocrinopathies
    c. Genetic causes
    d. Chromosomal disorders
    e. Bone dysplasia

Answer: A

6. During the first year of life of normal growth all of the following statements are correct except:
    a. Weigh increases by about 6-7 kg over birth weight
    b. Height increases by about 12 cm over birth height
    c. Average age for eruption of teeth is about 6-7 months
    d. Average age for anterior fontanelle to start to close is 9 months
    e. Average weight for newborn female is 3.2 kg

Answer: B

(A newborn's length starts on average at 50 cm. They should double their height by 4 years old. Half of that growth (25 cm) should be completed in the first year of life. In their second year they should grow another 12 cm, and in their third another 6 cm).

7. All of the following secondary sexual characters are used in the evaluation of sexual maturation rate (SMR) except:
    a. Pubic hair in both males and females
    b. Breast development in the female
    c. Axillary hair in both sexes
    d. Penile size in the male
    e. Testicular size in the male

Answer: C

8. The parents of a 10-year-old male complained that their son is short. His height was 125 cm (at -3 standard deviations), height-age was 7.5 years, bone-age was 7 years, and weight to height was at the 40th percentile. The rest of his physical exam was normal. His short stature is most likely due to
    a. Genetic (=familial) causes
    b. Endocrine disorder
    c. Constitutional delay of growth and adolescence
    d. Chromosomal disorder.

e. Chronic diseases e.g: celiac disease

Answer: C

9. All of the following statements concerning the age of onset of menarche in a normal adolescent female is correct except:
    a. There is concordance with the onset of menarche in the mother.
    b. There is concordance with the onset of menarche in older sisters.
    c. Occurs earlier in blacks than in whites.
    d. Occurs earlier in thin athletic girls than in obese girls
    e. It usually occurs after peak height velocity is reached

Answer: D

10. A newborn's weight is 3.2 Kg at birth. His expected normal weight at the age of one year is closest to:
    a. 6.4 kg
    b. 10 kg
    c. 5 kg
    d. 12 kg
    e. 15 kg

Answer: B

11. Educating patients with diabetes mellitus in an integral part of the management. This includes all of the following, except:
    a. Instructions to wear something to identify them as a diabetic
    b. Instructions concerning manifestations of hypoglycemia
    c. Instructions to avoid competitive sports
    d. Instructions about home blood glucose monitoring
    e. Instructions about nutrition

Answer: C

12. The clinical picture of congenital hypothyroidism is fully developed by 3-6 months of age, and these include all of the following, except:
    a. Large, protruded tongue
    b. Psychomotor retardation
    c. Broad hands and short fingers
    d. Myxedema of the eye lids and external genitalia
    e. Early closure of anterior fontanelle

Answer: E

13. A 9-year-old male presents to your clinic for short stature evaluation. You order a random screening blood test which may contain all the following EXCEPT?

a. Anti-tissue transglutaminase
b. Random growth hormone
c. CBC, ESR
d. Thyroid function test
e. KFT

Answer: B

14. Characteristics of growth hormone deficiency in neonates include the following EXCEPT?
    a. Neonatal jaundice
    b. Low birth weight
    c. Microphallus
    d. Hypoglycemia
    e. Midline defect

Answer: B

(A baby's size at birth reflects its intra-uterine environment. Its weight can be affected by congenital anomalies, infection, or placental insufficiency. Genetics and GH do not play a role yet.)

15. In a newborn with ambiguous genitalia in whom an ultrasound showed the presence of a uterus the most important test to reach a diagnosis is:
    a. serum electrolytes
    b. cortisol level
    c. ACTH level
    d. 17OH progesterone
    e. Aldosterone

Answer: D

16. The most common cause of adrenal insufficiency in children is:
    a. autoimmune
    b. infection
    c. withdrawal of long-term steroids
    d. congenital adrenal hyperplasia
    e. adrenoleukodystrophy

Answer: C

17. A 10-day-old newborn was found to have a TSH of 100 IU/ml (normal less than 10) and a low free T4. All of the following statements concerning his condition are true EXCEPT?
    a. this child most probably has agenesis or dysgenesis of the thyroid gland
    b. he will be on lifelong thyroxine treatment
    c. starting thyroxine treatment early on will prevent severe mental retardation
    d. there is a screening program for thyroid function in Jordan
    e. this condition is inherited as autosomal recessive

Answer: E

18. All of the following statements regarding puberty in girls is true EXCEPT?
    a. it is precocious if it starts before the age of 8 years
    b. it is delayed if it does not start till the age of 13
    c. the first sign of puberty in girls is usually breast budding
    d. central precocious puberty is commonly associated with a CNS pathology
    e. peak height velocity occurs earlier in girls than it does in boys

Answer: D

19. A 12-year-old boy presented to the clinic as short stature. Weight is on the 5th percentile. He is prepubertal and with low growth velocity. Bone age is 8 years. All of the following could be a cause of his short stature EXCEPT:
    a. Constitutional delay of growth and puberty
    b. Growth hormone deficiency
    c. Hypothyroidism
    d. Celiac disease
    e. Chronic renal disease

Answer: A

20. A 12-year-old boy presented to the clinic as short stature. Weight is on the 50th percentile. He is prepubertal and growth velocity is 3 cm/year. Bone age is 8 years. All of the following could be the cause of his short stature except:
    a. Constitutional delay of growth and puberty
    b. Growth hormone deficiency
    c. Hypothyroidism
    d. Chronic liver disease
    e. Idiopathic short stature

Answer: A

(**Note:** *The correct answer for both 19 and 20 remains A. The questions specify low growth velocity, and in constitutional delay the growth rate remains mostly within the lower limits of normal).*

21. A 6-year-old girl with type one diabetes is on multiple daily insulin regimens. She had an episode of hypoglycemia with pallor, tremor and headache. Her blood glucose was 40 mg/dL. One is CORRECT regarding management:
    a. Glucagon IM or SC immediately.
    b. A cup of juice immediately
    c. After treating her hypoglycemia, omit the rapid acting insulin dose for the next meal.

d. Omit the long-acting insulin dose for the next 24 hours
e. Give complex carbohydrate immediately

Answer: B

22. All of the following are associated with primary adrenal insufficiency, EXCEPT:
    a. Skin hyperpigmentation
    b. Salt craving
    c. Addison disease
    d. Abnormal neurological examination
    e. Low ACTH

Answer: E

23. Which of the following types of congenital adrenal hyperplasia is associated with hypertension: ***
    a. 21-hydroxylase deficiency
    b. 11-β-hydroxylase deficiency
    c. 3-β-hydroxysteroid dehydrogenase deficiency
    d. 17-β- hydroxysteroid dehydrogenase deficiency
    e. Lipoid congenital adrenal hyperplasia

Answer: B

24. All of the following are found in an infant with adrenal crisis, EXCEPT: ***
    a. Severe dehydration with metabolic acidosis
    b. Hyponatremia
    c. Hyperkalemia
    d. Low renin
    e. Low aldosterone

Answer: D

25. A 12-year-old girl presented with short stature and decreased growth velocity. She is prepubertal, with normal bone age. All of the following could be a cause of her condition, EXCEPT:
    a. Growth hormone deficiency
    b. Constitutional delay of growth and puberty.
    c. Hypothyroidism
    d. Turner syndrome
    e. Familial non pathological short stature

Answer: B

26. All of the following could be a cause of hypoglycemia in a neonate, EXCEPT:
    a. Hyperinsulinism

b. Adrenal insufficiency
c. Small for gestational age
d. Infant of a diabetic mother
e. Hypothyroidism

Answer: E

27. All of the following conditions are risk factors for short stature except:
    a. Central nervous system infection
    b. Klinefelter syndrome
    c. Hypothyroidism
    d. Cleft palate
    e. Celiac disease

Answer: B

28. You are counseling a mother of a 10-year-old boy who was recently diagnosed with type one diabetes about the condition of her child. All of the following regarding this child's diabetes is true EXCEPT:
    a. He needs to be screened for thyroid and celiac diseases
    b. He needs to use both a long acting and a short acting insulin
    c. His glycated hemoglobin needs to be maintained below 7.5%
    d. There are some sports that he cannot participate in
    e. This is by far a life-long diagnosis

Answer: D

29. A 10-year-old female is brought by her mother as she noticed breast budding since one week. You are explaining the normal pubertal progression in females. All of the following regarding puberty in females is true EXCEPT:
    a. Menarche usually coincides with Tanner stage 3
    b. The girl will have minimal growth after menarche
    c. It is normal for girls to start having breast budding after the age of eight years
    d. The girl will reach her peak height velocity by Tanner stage 3
    e. Girls who do not develop breast budding by the age of 13 years have delayed puberty

Answer: A

30. You are evaluating a 4-month-old baby in the clinic and his mother is asking about normal growth parameters for infants. All of the following are true statements regarding this issue EXCEPT:
    a. The baby will double his birth length at the age of three years
    b. This baby's weight now is most likely double his birth weight
    c. His head circumference will increase by 12 cm in the first year of life
    d. The baby will lose 10% of his birth weight in the first week of life

e. The average birth weight of term infants is between 2.5-4.2 kg.

Answer: A

31. All of the following are correct regarding growth during the first year of life, **except**:
    a. Tripling birth weight
    b. Gaining 24-25 cm in length.
    c. Increasing head size by 10-12 cm.
    d. Erupting 4-6 teeth
    e. Upper to lower segment proportion becoming similar to adults.

Answer: E

32. All of the following are signs of an affected infant with congenital hypothyroidism, **EXCEPT**:
    A. Short extremities
    B. Wide anterior fontanelle
    C. Slow pulse
    D. Hypertonia
    E. Large tongue

Answer: D

33. All of the following are known consequences of obesity, EXCEPT :
    a. insulin resistance
    b. hepatic steatosis
    c. pseudotumor cerebri
    d. late menarche
    e. cholelithiasis

Answer: D

34. One of the following is associated with secondary adrenal insufficiency:
    A. Skin hyperpigmentation
    B. Salt craving
    C. Addison disease
    D. Normal serum cortisol on ACTH stimulation test
    E. Low ACTH

Answer: E

35. All of the following milestones of a full-term normal infant is correct, **except**:
    a. Doubles birth weight by age 4-5 months
    b. Triples the birth weight by the age of one year
    c. Doubles birth length by the age of 2.5-3 years
    d. Gains about 15-16 cm in length by the end of 6 months of age

e. Average birth weight is 3.5 Kg.

Answer: C

36. Which of the following statements regarding the definition of macrocephaly is correct (**One is correct**):
    A. Head circumference (HC) > 97th centile
    B. HC >75th centile
    C. HC >50th centile
    D. HC > one standard deviation above the mean for age
    E. HC >three standard deviation above the mean for age

Answer: A

37. The first sign of puberty in boys usually is **(one is correct) *****
    A. Pubic hair.
    B. Penile elongation.
    C. Deepening of the voice.
    D. Testicular enlargement.
    E. Facial hair

Answer: D

38. All of the following are recognized laboratory findings in primary adrenocortical failure **except**:
    A. Elevation of serum ACTH.
    B. Antibodies to 21-Hydroxylase.
    C. Positive high dose ACTH stimulation test.
    D. Hyperkalemia.
    E. Hypernatremia.

Answer: E

39. An 11-year-old female presented to the clinic with short stature. She has no dysmorphic features. Her height is well below the 3rd centile and her weight is at the 25th centile. The upper segment/lower segment ratio is 0.9. Breast and pubic hair Tanner stage 1. Growth velocity is 3 cm/year, and her bone age is 8 years. One of the following could be a cause for her short stature: (One is correct)
    A. Non-pathological familial short stature
    B. Constitutional delay of growth and puberty
    C. Growth hormone deficiency
    D. Skeletal dysplasia
    E. Syndromic short stature

Answer: C

40. A neonate with ambiguous genitalia had clitoromegaly and fused labia. There were no palpable gonads. The rest of the exam is normal except for hypertension. The most likely diagnosis is (One is correct)
    A. Salt losing 21 Hydroxylase deficiency.
    B. Non salt losing 21 Hydroxylase deficiency.
    C. 11 beta hydroxylase deficiency
    D. 3 beta hydroxysteroid dehydrogenase deficiency
    E. 18 beta hydroxylase deficiency

Answer: C

41. A 3-year-old female with congenital adrenal hyperplasia presented to the ER with high grade fever and vomiting and was found to have bacterial meningitis. All are true about her management, **except:**
    A. IV Ceftriaxone and Vancomycin
    B. Antipyretic agent
    C. Stress dose IV hydrocortisone
    D. Diuretic (like Spironolactone)
    E. Intravenous fluids

Answer: D

42. All of the following are true for primary adrenal insufficiency, **except:**
    A. Anorexia
    B. Hyponatremia
    C. Postural hypotension
    D. Hypokalemia
    E. Hypoglycemia

Answer: D

43. All of the following are associated with Turner syndrome **except:**
    A. Congenital heart disease
    B. Congenital lymphedema
    C. Normal growth velocity
    D. Renal malformations
    E. Sensorineural hearing loss

Answer: C

44. All of the following are usually associated with Klinefelter Syndrome **except:**
    A. Occurs only in males.
    B. Short stature

C. Delayed or incomplete pubertal development.
D. Gynecomastia
E. Small testes

Answer: B

45. During the period of adolescence in the males, which one of the following occurs during early stages of Tanner SMR (stage 1-2): **(one is correct)**
    a. Peak height velocity.
    b. Acceleration of linear growth
    c. Axillary hair
    d. Acne
    e. Facial hair

Answer: B

46. Which one of the following is correct regarding the epidemiology of congenital hypothyroidism? **(One is correct)**
    a. Males and females are equally affected.
    b. More common in blacks than in whites
    c. Rare in the middle east
    d. The overall incidence is 1/4000
    e. Dysgenesis of the thyroid gland is the most common cause.

Answer: E

47. Early manifestations of congenital hypothyroidism include all of the following, **except**:
    a. Irritability and excessive crying
    b. Constipation
    c. Poor weight gain
    d. Hoarse cry
    e. May look normal at birth.

Answer: A

48. Which of the following is correct regarding familial (genetic) short stature? **(Choose one correct)**
    a. Short at birth
    b. Decreased linear velocity (i.e., the yearly increment)
    c. Bone age is equal to chronological age.
    d. Delayed puberty
    e. Weight to height is decreased.

Answer: C

49. Causes of permanent congenital hypothyroidism include all of the following **except**:
    a. Dysgenesis of thyroid gland
    b. Inborn errors of metabolism of the thyroid gland
    c. Maternal antithyroid drugs
    d. Thyroid stimulating hormone (TSH) deficiency.
    e. Endemic Iodine deficiency

    Answer: C

50. The most common cause of diabetes mellitus in pediatric age group is **(one is correct)**:
    A. Insulin resistance.
    B. Neonatal diabetes.
    C. Maturity onset diabetes of the young.
    D. Cystic fibrosis.
    E. Antibody mediated.

    Answer: E

51. A5 year old boy presented to the clinic with short stature, his mother is 160 cm, his father is 177 cm, his mid parental height would be **(one is correct)**
    A. 160 cm
    B. 175cm
    C. 168.5cm
    D. 178.5cm
    E. 170cm

    Answer: B

52. A 3-day old newborn presented with shock, hyperpigmented genitalia, and empty scrotum. After initial resuscitation steps (airway and breathing) and fluid resuscitation, the most important step in the management is **(one is correct)**
    A. Karyotyping.
    B. 17 OH-Progesterone serum level.
    C. Hydrocortisone maintenance dose.
    D. Hydrocortisone stress dose.
    E. Fludrocortisone

    Answer: D

53. All of the following clinical findings in well-established congenital hypothyroidism are correct, **except**:
    a. Head size is always enlarged.
    b. Mouth is kept open.
    c. Hands are broad, and fingers are short.
    d. Hair is coarse.

e. Hypotonia

Answer: A

54. Wrong about obesity:
    a) BMI > 85th
    b) Can be caused by Prader Willi

Answer: A

55. True about puberty?
    a) Delayed in male > 13
    b) Central precocious puberty in females is mostly due to brain tumor

Answer: None

(Note: *To be more specific, puberty in males is delayed if they are >14 years old. The normal range in males is 9-14 years while in females it is 8-13)*

56. A child with TSH 10 , T4 3 which is low , one of the following is wrong :
    a) It is most likely due to thyroid agenesis or dysgenesis during embryological development
    b) Patient most likely will require lifelong thyroxine
    c) Early treatment prevents development of mental retardation
    d) Thyroid screening is routine in Jordan
    e) It is autosomal recessive

Answer: E

57. Which one of the following will not help you in your dx of congenital GH deficiency?
    a) Neonatal hypoglycemia
    b) Neonatal hyperbilirubinemia
    c) Micropenis
    d) Low birth weight
    e) Cleft palateAnswer: D

58. Which of the following is not given in adrenal crisis?
    a) IV hydrocortisone
    b) Ventoline nebulizer
    c) Kayexalate Resin
    d) Fludrocortisone
    e) Normal saline

Answer: (See note after question 62)

59. 10-year-old female with short stature, Bone age= 8, normal growth velocity, the most likely cause:
    a) Idiopathic short stature
    b) Constitutional delay of growth and puberty
    c) Low growth hormone

Answer: B

60. CAH due to 21 alpha hydroxylase deficiency associated with all the following except:
    a) Hyperkalemia
    b) Hyponatremia
    c) Metabolic acidosis
    d) Hypoglycemia
    e) HTN

Answer: E

61. A case of low T4 and Normal TSH, cleft palate, what is the most common cause:
    a) Central Hypothyroidism
    b) Thyroid dysgenesis

Answer: A

62. Child presented to ER with shock, scrotal hyperpigmentation, Na 120, K 6, hypoglycemia, and hypotension (case of adrenal crises). You do all of following except:
    c) Emergency injection of glucocorticoid
    d) Fludrocortisone
    e) IV normal saline
    f) IV 5% dextrose
    g) Kayexalate

Answer: See Note

(**Note:** *We have received arguments for multiple answers. If we go solely according to the slides, the answer could be fludrocortisone because mineralocorticoid replacement is not needed during treatment with stress doses of hydrocortisone)*

63. Obese female adolescents might suffer from all of the following **EXCEPT:**
    A. Insulin resistance
    B. Late menarche
    C. Pseudotumor cerebri
    D. Fatty liver disease
    E. Sleep apnea

Answer: B

64. Which of the following disorders is usually diagnosed by florescence in situ hybridization (FISH)?
    A. Prader willi syndrome
    B. Spinocerebellar ataxia
    C. Leigh syndrome
    D. Neurofibromatosis type 1
    E. Tuberous sclerosis

    Answer: A

65. All of the following statements about hypoglycemia are correct, except:
    a. Blood sugar level in 2 hour old newborn is lower than 2 month old infant
    b. Brain damage due to hypoglycemia is as bad as hypoxia
    c. Insulin level is important investigation in hypoglycemic patients
    d. Somogi phenomenon suggests hyperglycemia
    e. Severe hypoxia in neonates can cause hypoglycemia

    Answer: D

OTHER COLLECTED PAST PAPER QUESTIONS:

66. The typical presentation of congenital adrenal hyperplasia 21-β is described. Which is wrong:
    - Low renin

67. What is important concerning a child with decreased height on the growth chart?
    - Nutritional history

68. Most common cause of primary hypothyroidism?
    - Dysgenesis of thyroid

69. Constitutional short stature, which is wrong?
    - Accelerated in early childhood.

70. What is the mid-parental height of a male child if his parents' heights are 173 and 160 cm?
    - 173 cm

71. 13-year-old girl, still not menstruating but she has secondary sexual characteristics, what to do?
    - Reassurance

72. Not needed for DX of Addison's disease?
    - 17-OH progesterone

73. A case describing acanthosis nigricans, best thing to do?
    - Check blood glucose and do HbA1C.

74. True about growth in children
    - Height is mostly determined by the mid-parental height

75. A boy with slow growth velocity and delayed bone age, possibly cause
    - GH deficiency

76. 3-month child with low T4, high TSH and goiter, most likely cause
    - Thyroid dyshormonogenesis

77. Above 85th percentile:
    - Overweight

78. Doesn't require further evaluation ***
    - A Female 14 y/o at Tanner stage 5 with decreased rate of growth than the preceding year

79. Not seen in congenital hypothyroidism:
    - Hypertonia

80. 14-year-old boy with short stature and delayed puberty, bone age is delayed, growth velocity is normal, what is next step?
    - Reassure (it is constitutional short stature)

81. Average length of full term infants at birth
    - 50 cm

82. Not a cause of acquired growth hormone deficiency
    - Sino-optic dysplasia

83. Child at 5 months, birth weight 3.2, length 50cm and head circumference 35cm. True about her now?
    - Her weight is around 6 kg

84. Wrong about male puberty
    - Peak growth velocity in G3

Neonatology

1. Premature baby born at 30 weeks, the most accurate isolated factor for prediction of survival: (2022)
    a. Antenatal steroid 36 h before delivery
    b. Gestational weight
    c. Gestational age
    d. Surfactant
    e. Intrapartum antibiotics

    Answer: C

2. Osteopenia of prematurity main diagnostic labs: (2022)
    a. Serum Alkaline Phosphatase and phosphorus
    b. Vitamin D
    c. Calcium and PTH
    d. Thyroid and calcium

    Answer: A

3. 28-week newborn, true about your physical exam (2022)
    a. Dry the baby, wrap him and put him in a radiating thermal incubator, Something about radiant intubator?
    b. Immediately you should put the baby in plastic bag or warming pads for temperature regulation
    c. Transfer to NICU for intubation

    Answer: A or B?

4. True about physical exam of all newborns (2022)
    a. Initial assessment should be Done after birth by a pediatrician if no risk factors
    b. Full assessment should be done within 24 hours after delivery
    c. initial normal assessment guarantees that the baby is fully normal
    d. talk to the newborn parents only when abnormal thing + write your findings

    Answer: B

5. Regarding apnea of prematurity we use caffeine for the following reason (2022)
    a. it helps in ROP (retinopathy or prematurity?)
    b. it decreases apnea rate
    c. it increases blood pressure of the baby

    Answer: B

6. Which of the following is not cause of indirect hyperbilirubinemia (2022)
    a. Hypothyroidism
    b. Hemolysis

c. Biliary atresia
d. Breast feeding
e. Intestinal obstruction

Answer: C

TABLE 1
Causes of unconjugated hyperbilirubinemia in neonates[4-6]

Increased bilirubin production	Increased enterohepatic circulation	Decreased clearance of unconjugated bilirubin	Metabolic conditions	Inborn errors of metabolism
Hemolysis (immune-mediated, heritable)	Insufficient breast milk/ feeding	Prematurity	Hypothyroidism	Galactosemia
Extravasation (cephalohematoma)	Pyloric stenosis	G6PD deficiency	Hypopituitarism	Gilbert syndrome
Polycythemia	Bowel obstruction			Crigler-Najjar syndrome (I and II)
Sepsis	Ileus			Breast milk jaundice due to other bilirubin UGT1A1 mutations
Disseminated intravascular coagulation				Tyrosinemia
Macrosomic infants of diabetic mothers				Hypermethioninemia

G6PD, glucose-6-phosphate dehydrogenase; UGT1A1, uridine diphosphate-glucuronosyltransferase, family 1, polypeptide A1.

7. All of the following are true regarding neonatal jaundice except (2022)
    a. physiological jaundice occur in 1 week
    b. occur due to low life span of RBC + immature liver enzymes
    c. Breastfeed + premature are at a low risk to develop it
    d. visual estimation of jaundice gives inaccurate measure of bilirubin level

    Answer: C

8. Which of the following situations is consistent with physiologic jaundice?
    a. Jaundice in the first 12 hours of life.
    b. Serum bilirubin increasing less than 5 mg/dl/day
    c. Direct serum bilirubin greater than 2 mg/dl
    d. Jaundice starts at day 14 of life
    e. Bilirubin level equal 8 mg/dl in cord blood

    Answer: B

9. A post-term baby is defined as a baby whose gestational age is***
    a. Less than 38 weeks
    b. Between 38-39 weeks
    c. Between 39-41 weeks
    d. Between 41-42 weeks
    e. Above 42 weeks

    Answer: E

10. A three-day old term infant born at home and breastfed exclusively presented to the emergency department with lethargy, bulging fontanelle, and bright red blood from the rectum. What is the most likely etiology of his presentation?
    a. Fluoride deficiency

b. Vitamin D deficiency
c. Vitamin K deficiency
d. Iron deficiency
e. Vitamin B12 deficiency

Answer: C

11. Empirical treatment of early neonatal sepsis consists of:
    a. Ampicillin and Gentamicin
    b. Vancomycin and Cefotaxime
    c. Vancomycin and Gentamicin
    d. Emipinem
    e. Cefotaxime and Cloxacillin

Answer: A

12. All of the following are side effects of phototherapy, except:
    a. Skin rash
    b. Dehydration
    c. Corneal ulcers
    d. Bronze baby syndrome
    e. Infection

Answer: E

13. A 1-week-old male presents with bilateral enlargement of the breasts. His birth history was unremarkable. Physical examination is normal except for enlarged breasts. The appropriate next step should be:
    a. Reassurance
    b. Abdominal sonogram
    c. Estrogen level
    d. Chromosome study
    e. Progesterone level

Answer: A

14. All of the following regarding breast feeding is correct, except:
    a. Should be initiated immediately after birth
    b. Colostrum should not be fed
    c. Term healthy babies should feed on demand
    d. Vit D should be supplemented
    e. Fe should be supplemented

Answer: B

15. Regarding neonatal physical exam at birth, all are normal findings, except:

a. Bifid uvula
b. Bluish spot on the back
c. Pulsating umbilical cord
d. Breast engorgement
e. Presence of the posterior fontanelle

Answer: A

16. A newborn who had at the end of first minute of age the following description: Heart rate of 120 per minute, regular respiratory rate of 50 per minute, acrocyanosis, flexed upper limbs and lower limbs, and when you did nasal suction, the baby was sneezing multiple times. This baby's Apgar scores would be:
    a. 9
    b. 8
    c. 10
    d. 6
    e. 7

Answer: A

17. Most of the normal term babies will pass meconium in the first:
    a. 24 hours
    b. 12 hours
    c. 48 hours
    d. 4 hours
    e. 3 days

Answer: C

18. Regarding meconium aspiration, all are correct, except:
    a. Aspiration usually occurs intrauterine
    b. Aspiration can cause severe respiratory disease
    c. It can be complicated by air leaks
    d. As meconium is sterile, there is no risk for infection
    e. Chest X-ray shows coarse infiltrate

Answer: D

19. Regarding breast milk jaundice all are correct, except:
    a. Occurs at the end of the first week
    b. It occurs due to decreased fluid intake
    c. It resolves when breast feeding is discontinued
    d. The elevated bilirubin is of the indirect type
    e. High bilirubin due to breast milk jaundice is not associated with high risk of neurotoxicity

Answer: B

20. All of the following are fetal and neonatal complications of gestational diabetes in pregnancy, except:
    a. Cardiac anomalies
    b. Macrosomia
    c. Oligohydramnios
    d. Polycythemia
    e. Delayed lung maturation

Answer: C

21. All of the following are recognized benefits of breast feeding, except:
    a. Better neurodevelopment
    b. Decreased risk of obesity
    c. Decreased risk of diabetes
    d. Decreased risk of rickets
    e. Decreased risk of gastroenteritis

Answer: D

22. Concerning Respiratory distress syndrome (RDS), all of the following are true, except:
    a. The major reason for this disorder is surfactant deficiency
    b. It is the most common respiratory disorder of the premature infant
    c. The chest radiograph reveals decreased lung inflation with diffuse symmetrical reticulogranular (ground glass appearance) lung fields and air bronchograms
    d. The presence of apnea suggests mild disease
    e. The treatment of RDS generally includes support ventilation and artificial surfactant replacement

Answer: D

23. All of the following are true statements regarding neonatal jaundice, except:
    a. Visual inspection to predict bilirubin levels is adequate and accurate
    b. Breast feeding Jaundice is prevented by frequent and effective nursing
    c. Onset and resolution of physiologic Jaundice maybe delayed in premature infants
    d. Pathologic Jaundice should be considered if it is apparent in the first 24 hours of life
    e. Breast fed infants are more likely to have hyperbilirubinemia than formula fed infants

Answer: A

24. Which one of the following statements about infant feeding is correct?
    a. Feeding is safe immediately after birth
    b. First feed should be sterile water
    c. Feeding should follow a strict schedule

d. Weighing babies before and after feeds is important to assess intake
e. Crying is an indication of hunger

Answer: A

25. All of the following factors should be strongly considered in determining whether an exchange transfusion is indicated in a term neonate with an indirect bilirubin of 23 mg/ dL, except:
    a. Age of the neonate (time since birth)
    b. Presence of hemolysis as Rh incompatibility
    c. The presence of meningitis or acidosis
    d. Type of feeding (breast milk or formula)
    e. Presence of acute bilirubin encephalopathy

Answer: D

(A – What bilirubin level is considered critical depends on what day it is since birth. C – Acidosis is a complication of exchange transfusion E – Signs of acute bilirubin encephalopathy is an indication for exchange transfusion)

26. Regarding mechanism of grunting in neonates, which of the following is correct?
    a. Increased negative intrathoracic pressure in a patient with difficulty breathing
    b. Exhalation against a partially closed epiglottis to keep airways and alveoli open
    c. Passage of air through upper airways that are narrowed by inflammation
    d. Dysfunction of vocal cords in severe respiratory distress
    e. Lower airway obstruction

Answer: B

27. At 5 minutes of age a newborn found to have: Heart rate 110 per minute, respiratory rate is irregular; he was flexing his upper limbs only. When suctioned through his nostrils he sneezed, and all his body was pink except hands and feet were blue. His APGAR score is:
    a. 10
    b. 9
    c. 8
    d. 7
    e. 6

Answer: D

28. All of the following factors lead to neonatal hyperbilirubinemia, except:
    a. Shortened neonatal red cell life span
    b. High packed cell volume of red blood cells (PCV)
    c. Limited conjugation of bilirubin in the liver
    d. Decreased enterohepatic circulation
    e. Immature liver uptake of bilirubin

Answer: D

29. Regarding vitamin D supplementation for infants, all of the following statements are correct, except:
    a. Exclusively breastfed babies should be given supplementation
    b. Those on vitamin D fortified formula consuming less than 1000 mL per day should be given supplementation
    c. The recommended daily dose of vitamin D is 400 International units
    d. There is no need to supplement breast feeding babies if the mother has documented adequate stores of vitamin D
    e. Oral supplementation of vitamin D is the common route of supplementation

Answer: D

30. Which one of the following is the most common cause of jaundice presenting in the first 24 h of life? ***
    a. Prematurity.
    b. Hemolysis
    c. Breastfeeding.
    d. Physiological jaundice.
    e. Early-onset sepsis

Answer: B

31. Which of the following is a true statement about performing the newborn examination?
    a. Examination should be done without the presence of parents to decrease their anxiety
    b. The newborn examination can be undertaken any time in the first 6–8 weeks of life
    c. Normal cardiac examination at the delivery room doesn't rule out congenital heart disease
    d. A 'systems-based' approach is better than a 'head to toe' approach.
    e. Only speak to the parents and document findings if something is abnormal.

Answer: C

32. Which of the following statements is true of the Apgar score?
    a. APGAR stands for Airway, Pulse, Gasp, Alertness, Reflexes
    b. The scores describe the newborn's condition at the end of the third minute of life
    c. After one minute of resuscitation, we should stop to calculate Apgar scores and accordingly decide what to do next.
    d. Crying is a must for a healthy term infant in order to score 2 out of 2 in the breathing part.
    e. A newborn with Acrocyanosis will score 1 out of 2 in the color part

Answer: E

(When using APGAR as a mnemonic, APGAR stands for Appearance, Pulse, Grimace, Activity, and Respiration)

33. All of the following is correct with regard to the composition of human milk versus cows' milk except:
    a. Human milk contains more lactoalbumin.
    b. Human milk contains more vitamins A, C and E.
    c. Human milk contains more calcium and phosphate.
    d. Human milk contains more lactoferrin.
    e. Human milk contains more IgA

Answer: C

34. All of the following regarding breast feeding is correct except:
    a. Lactation helps the mother lose weight acquired in pregnancy.
    b. Breastfeeding is more convenient and cheaper.
    c. Lactational amenorrhea is a form of contraception.
    d. Oxytocin release during breastfeeding contracts the uterus and helps its involution.
    e. Breastfeeding increases the risk of premenopausal breast cancer.

Answer: E

35. Regarding birth weight, one of the following is true?
    a. Very low birth weight (VLBW) is defined as BW <1000 g.
    b. Extremely low birth weight is defined as BW <750 g.
    c. Preterm IUGR babies should be fed 150–165 mL/kg of high-calorie milk from birth to prevent hypoglycemia.
    d. Babies with congenital cytomegalovirus (CMV) infection are often SGA.
    e. Down's syndrome babies have a higher-than-expected birth weight but tend not to grow as tall as their peers during childhood.

Answer: D

36. All of the following predispose the newborn to hypoglycemia EXCEPT:
    a. Maternal diabetes
    b. Low birth weight
    c. Large for gestational age newborns
    d. Hyper-insulinemia
    e. Breast milk jaundice

Answer: E

37. Newborn cyanosis is most likely due to cardiac, pulmonary, neurologic, or hematologic disorders. It is clinically evident when absolute concentrations of deoxygenated hemoglobin rise above:

a. 1g/dL
b. 2g/dL
c. 3g/dL
d. 4g/dL
e. 5g/dL

Answer: E

38. What is the Apgar (APGAR) score for a child with a heart rate of 90, irregular and weak cry, cyanotic extremities, weak and slightly flexed extremities, and grimacing facial expression?
    a. 0
    b. 3
    c. 5
    d. 7
    e. 9

    Answer: C

39. All of the can be seen in postmature (>42 weeks) infants EXCEPT?
    a. Meconium aspiration
    b. Persistent pulmonary hypertension
    c. Hyperglycemia
    d. Hypocalcemia
    e. Polycythemia

    Answer: C

    (Hypoglycemia, not hyperglycemia, is a complication of post maturity)

40. In which of the following situation the Jaundice is most likely to be physiologic in a term, bottle-fed infant?
    a. Jaundice at 12 hours of age
    b. Serum bilirubin level increasing more than 5mg/dl in 24 hours
    c. Direct serum bilirubin greater than 2 mg/dl
    d. Jaundice at the age of 17 days
    e. Serum bilirubin level 11 mg/dl at 5 days of age

    Answer: E

41. Which of the following is the most common cause of neonatal polycythemia?
    a. Meconium-stained amniotic fluid
    b. Breech presentation
    c. Delayed cord clamping
    d. Prematurity (<34 weeks)
    e. Post-maturity(>42weeks)

Answer: C

42. A newborn has a positive Coombs test, spherocytes, increased bilirubin, and increased reticulocytes. Which of the following is most likely cause of his condition?
    a. Physiologic Anemia of infancy
    b. Intraventricular hemorrhage
    c. Immune hemolysis (as ABO incompatibility)
    d. Hereditary spherocytosis
    e. Glucose-6-phosphate dehydrogenase deficiency

Answer: C

43. Recognized benefits of breast feeding include all of the following EXCEPT?
    a. diminished risk of food allergy
    b. decreased risk of necrotizing enterocolitis
    c. less risk of viral gastroenteritis during infancy
    d. less risk of hemorrhagic disease of the newborn
    e. less risk of otitis media

Answer: D

44. All of the following are true statements regarding normal examination of the newborn EXCEPT:
    a. Has excessive skin fragility and extensibility
    b. Nails may protrude beyond the fingertips in infants born post term
    c. Post term newborn may have peeling of the skin
    d. A small, white papule on an erythematous base (erythema toxicum) can develop 1-3 days after birth
    e. Vesiculo-pustular eruption (Pustular melanosis) can present at birth around the chin, neck, back, and extremities

Answer: A

45. All of the following are true statements regarding infants born to diabetic mothers EXCEPT:
    a. Infants born to these mothers may be large and plethoric at birth,
    b. Hypoglycemia is mostly related to hyperinsulinemia
    c. Infants are less likely to develop congenital anomalies if diabetes is well controlled during pregnancy
    d. Infants are at risk of cardiac hypertrophy
    e. There is increased risk of oligohydramnios

Answer: E

46. All are true regarding intravenous fluid requirements in newborns EXCEPT:
    a. Fluid needs vary according to gestational age
    b. Insensible water loss is inversely related to gestational age

c. High humidity can be used to increase insensible water losses
d. The fluid loss is diminished when an infant is clothed and breathes humidified air
e. Daily weights, urine output, and serum urea nitrogen and sodium levels should be monitored carefully to determine fluid needs

Answer: C

47. All are true regarding clinical manifestations of respiratory distress syndrome (RDS) EXCEPT:
    a. Usually appears within minutes of birth
    b. Characteristically tachypnea, grunting, intercostal and subcostal retractions, nasal flaring, and cyanosis are noted.
    c. Breath sounds may be normal
    d. Untreated patients may also have a mixed respiratory-metabolic acidosis
    e. The signs reach a peak within 5-7 days after treatment

Answer: E

48. All of the following are supportive of the diagnosis of physiological jaundice EXCEPT:
    a. Appearance at day 2 of age
    b. Presence of non-blanching skin rash
    c. Peak of 10mg/dl
    d. Normal physical examination
    e. Indirect hyperbilirubinemia

Answer: B

49. Regarding Meconium aspiration syndrome, all of the following are true EXCEPT:
    a. It is seen in term and post-term babies
    b. Chest X-ray typically shows air bronchogram
    c. Meconium-stained amniotic fluid is a sign of intrauterine hypoxemia
    d. Pneumothorax is a known complication
    e. Pulmonary hypertension is a known complication

Answer: B

50. Prematurely born children have high risk for all the following complications, EXCEPT:
    a. Hypothyroidism
    b. Attention-deficit hyperactivity Disorder (ADHD)
    c. Lower visual acuity
    d. Failure to thrive
    e. Delayed motor development

Answer: A

51. A 1-hour-old new-born presented with tachypnea. He was born at 40 weeks gestation via Caesarean section due to previous Caesarean section. On examination, he looks well,

respiratory rate 75 breath/min, heart rate 150 beat/min. Temperature 36.8 °C and capillary refill < 2 seconds. Membranes were ruptured at birth. The best next step is to:

a. Admit the baby and observe
b. Give surfactant
c. Take cultures and start antibiotics
d. Place the baby on nasal CPAP
e. Intubate

Answer: A

52. You were called to see a newborn infant. The senior resident asked you to calculate the APGAR score. Regarding APGAR scores, one of the following is correct:
    a. It is a score for term infants
    b. Capillary refill time is not part of the scoring items
    c. It is used to guide resuscitation
    d. It predicts development of epilepsy in future
    e. It predicts the IQ of the infants

    Answer: B

53. Which of the following is an abnormal finding in a newborn?
    a. Epstein pearls
    b. Craniotabes
    c. Wormian bones
    d. Vernex Caseosa
    e. Mongolian spot

    Answer: C

54. A 48-hour-old male newborn has jaundice. He is receiving breast milk every 5-6 hours. His mother stated that the baby cries between feedings. The mother's blood group is A positive and the baby's blood type is O negative, Coombs test is negative. The total serum bilirubin level was 16 mg/dL at 48 hours of life. The baby's birth weight was 3.4 kg. The baby's weight after 24 hours is 3.2 kg. The Most likely cause of the jaundice in this baby is:
    a. Physiologic jaundice
    b. Breast-milk jaundice
    c. Rh-hemolytic disease
    d. ABO hemolytic disease
    e. Breast-feeding jaundice

    Answer: E

55. In babies who are born prematurely, you continue to do correction for their developmental age till they reach the age of: **(Choose one correct)**
    a. 6 months
    b. 9 months

c. 12 months
d. 18 months
e. 24 months

Answer: E

56. All of the following are benign findings in neonates **EXCEPT:**
    A. Erythema toxicum
    B. Vaginal bleed
    C. Breast engorgement
    D. Bulging fontanelle
    E. Mongolian spots

Answer: D

57. In respiratory distress syndrome all can be used for newborn treatment **EXCEPT:**
    A. Surfactant
    B. Mechanical ventilation
    C. Dexamethasone
    D. Oxygen
    E. Intravenous fluids

Answer: C

58. All of the following are known complications of prematurity **EXCEPT:**
    A. Corneal ulceration
    B. Motor delay
    C. Patent ductus arteriosus
    D. Intraventricular hemorrhage
    E. Respiratory distress syndrome

Answer: A

59. All of the following are contraindication for breast feeding **EXCEPT:**
    A. mother with HIV infection
    B. mother with hepatitis B infection, infant vaccinated
    C. mother with herpes lesions on breasts
    D. mother diagnosed with acute psychosis.
    E. baby diagnosed with galactosemia.

Answer: B

60. All of the following medications can be administered during the neonatal period **EXCEPT:**
    A. Amikacin
    B. Cefotaxime
    C. Ceftriaxone
    D. Paracetamol
    E. Ibuprofen

Answer: C
(Neonates are not given ceftriaxone because it binds to albumin and displaces bilirubin)

61. All of the following can be used to treat neonatal hyperbilirubinemia **EXCEPT:**
    A. Double volume exchange transfusion
    B. Phototherapy
    C. Intravenous immunoglobulin
    D. Phenobarbital
    E. Corticosteroids

Answer: E

62. All of the following are true regarding the management of infants with direct hyperbilirubinemia, **EXCEPT:**
    A. formula modification is usually advised.
    B. Vitamin B and C supplements are important.
    C. Urosdeoxycholic acid is used to improve the bile flow.
    D. Serial physical exam is required to check for ascites.
    E. Monitoring gastrointestinal bleeding is important.

Answer: B

63. All of the following are causes of prolonged unconjugated hyperbilirubinemia in the newborn **except: *****
    A. Breast milk jaundice
    B. Breast feeding jaundice.
    C. Hypothyroidism
    D. Hemolytic disease of the newborn
    E. Urinary tract infection

Answer: B

64. All of the following are causes of direct hyperbilirubinemia, **except:**
    A. Tyrosinemia

B. Fructosemia
C. Gilbert syndrome
D. Hypothyroidism
E. Choledochal cyst

Answer: C

65. You were called to the delivery room for resuscitation of a premature baby. It went smoothly, and you took the baby to the intensive care unit for further management. Your junior colleague is asking about expected acute complications and ways to avoid it. Your answer should include all of the following **except:**
    A. There is high risk of dehydration.
    B. Hypoglycemia is a possibility.
    C. We should watch for the development of respiratory distress signs.
    D. The premature baby should be placed in a pre-warmed incubator.
    E. Oxygen saturation should be kept above 96%, to help the ductus arteriosus to close.

Answer: E

66. A 10-day old newborn presented to the emergency room with decreased feeding and activity, he was born at term, uncomplicated pregnancy.no neonatal unit admission. the pediatrician on call should include all of the following in the management plan **except:**
    A. Blood culture
    B. Ampicillin and cefotaxime
    C. Intravenous fluids
    D. Urine culture
    E. Immunogubulin levels

Answer: E

67. Regarding care of well-newborns, all are correct in regard to parent education **except:**
    A. Smoking tobacco increases the risk of sudden infant death syndrome.
    B. Babies should be breast fed on demand and not on a time schedule.
    C. Supplementation with artificial milk formula is important in the first few days of life.
    D. Co-bedding is the wrong practice.
    E. Vit D supplementation is recommended for breast-fed babies.

Answer: C

68. You see a 4-week-old male infant in clinic. He is breastfeeding well, and his weight gain has been appropriate. Mom reports that his stools are almost white in color and his urine is dark brown. On the physical exam, he has mild jaundice, and his liver is palpable 3 cm below the

costal margin. You suspect biliary atresia. All of the following are true regarding the immediate and long-term management of this patient, **except:**

A. Changing formulas is important to ensure good growth.

B. Vitamin supplementation is usually needed in such cases.

C. Diuretics might be needed in the management later on

D. Hyperbilirubinemia in this condition is of conjugated/direct type.

E. First line of treatment is liver transplant.

Answer: E

69. At birth, a newborn is noted to have the following findings: Heart rate 80/min, the respiratory effort is poor and irregular, he is blue all over, no reflex irritability and he is flaccid and limp. The Apgar score of the baby at this point is **(one is correct)**

A. 0

B. 1

C. 2

D. 3

E. 4

Answer: C

70. A 21-year-old primigravida gives birth at 29 weeks gestation. At one minute after birth, the baby appears blue in color, has a heart rate of 40/minute, exhibits no respirations, is flaccid with no movement, and does not respond to stimulation. The baby's Apgar score at 1 minute is. (**One is correct**)

A. 0

B. 1

C. 2

D. 3

E. 4

Answer: B

71. Which one of the following is **true** about respiratory distress syndrome **(one is correct)**

A. Ground glass appearance on Chest x-ray

B. The disease usually worsens after 72 hours of age.

C. Steroid therapy will reduce the disease severity if given early after birth.

D. Surfactant therapy is rarely helpful.

E. Early CPAP is rarely helpful.

Answer: A

72. A full-term newborn is delivered by elective cesarean section. Within the first few hours of life, she started to have respiratory distress. You suspected transient tachypnea of newborns. Which of the following is true about this condition? **(one is correct)**
    A. It is the most common respiratory disorder caused by surfactant deficiency.
    B. It is usually fatal.
    C. Onset occurs immediately after birth and rarely lasts beyond 48hours.
    D. It can lead to chronic lung disease.
    E. Characterized by air bronchogram.

Answer: C

73. All of the following are correct regarding breast milk **except:**
    A. Decreased risk of necrotizing enterocolitis.
    B. Decreased risk of gastroenteritis during infancy.
    C. Decreased risk of allergy later in life.
    D. Increased risk of obesity later in life
    E. Increased risk of vitamin D deficiency

Answer: D

74. Breast-feeding is contraindicated in all of the following maternal conditions **except:**
    A. Severe neuroses or psychoses
    B. AIDS
    C. Mastitis
    D. Active TB
    E. Substance abuse

Answer: C

75. All of the following are signs of good breastfeeding, **except:**
    a. Audible rhythmic swallowing during nursing
    b. Breasts feeling less full after each feeding session.
    c. At least 1-2 wet diapers per day after the 3rd day of life
    d. At least 3-4 bowel movements every 24 hours
    e. Lack of persistent pain during breastfeeding sessions

Answer: C

76. Concerning neonatal jaundice **which one** of the following statements is **correct**? **(One is correct)**
    a. Skin color is a reliable indicator of the degree of hyperbilirubinemia.
    b. Normal physical exam excludes pathological jaundice.

c. Breastfed babies should receive water supplementation to help prevent the development of hyperbilirubinemia.

d. The administration of intravenous immunoglobulin is recommended as an adjunctive treatment for hyperbilirubinemia due G6PD deficiency.

e. Breast feeding Jaundice is prevented by frequent and effective nursing.

Answer: E

77. Concerning supplementation of oxygen to the neonate, which of the following **best** describes the adverse effects of oxygen? **(One is correct)**
    a. Can cause lung, eye and brain injury.
    b. Can cause eye and brain damage.
    c. Can cause brain damage and renal damage.
    d. Can cause eye and renal damage.
    e. Can Cause lung, eye, brain and renal injury.

Answer: A

78. A healthy newborn baby boy may have all of the following, **except**:
    a. Erythema of the umbilical skin extending to the abdomen
    b. Production of breast milk
    c. Single Palmar crease
    d. Umbilical hernia
    e. Vomiting of small amounts after each feed

Answer: A

79. Direct reacting hyperbilirubinemia on the 10th day of life suggest all of the following, **except:**
    a. Cystic fibrosis
    b. Galactosemia
    c. Neonatal hepatitis
    d. Choledochal cyst
    e. Gilbert disease

Answer: E

80. Male infant born at 39 weeks with unremarkable prenatal course, his birth weight was 3.0 kg. Both mother and baby's blood group are B-Rh positive. At the age of 36 hrs he had visible jaundice. He is being breast fed and fed well approximately every 2 hrs. His Hemoglobin is 17.5 mg/dl. Total Bilirubin 10 mg/dl. Direct bilirubin 0.9 mg/dl. His direct and

indirect Coomb's are negative. His physical exam was normal. What is the most likely diagnosis in this infant? **(Choose one correct)**

a. Undiagnosed neonatal sepsis
b. Breast milk jaundice
c. Normal physiologic jaundice
d. ABO incompatibility
e. Hypothyroidism

Answer: C

81. All of the following are risk factors for exaggerated physiologic jaundice, **except**:
    a. Low caloric intake
    b. Formula feeding
    c. Dehydration
    d. Polycythemia
    e. Prematurity

Answer: B

82. All of the following are recognized benefits of breast feeding **except**:
    a. Helps newborns to pass meconium easier after birth.
    b. Improves cognitive development.
    c. Decreases risk of food allergies
    d. Reduces risk of sudden infant death (SIDS) syndrome.
    e. Increases obesity risk

Answer: E

83. An infant has the following findings at 5 minutes of life: pulse 130 bpm, cyanotic hands and feet, good muscle tone, and a strong cry and grimace, this infant's APGAR score is: **(Choose one correct)**
    a. 6
    b. 7
    c. 8
    d. 9
    e. 10

Answer: C

84. Incidence of respiratory distress syndrome increases with all of the following, **except**:
    a. Maternal diabetes
    b. Black race

c. Male gender
d. Cesarean section delivery
e. Prematurity

Answer: B

85. Normal findings in a newborn girl includes all of the following, **except**:
    a. Vaginal bleeding
    b. Lanugo hair
    c. Erythema toxicum
    d. Conjunctival haemorrhage
    e. One umbilical artery

Answer: E

86. All of the following predispose a baby to be small for gestational age, **except**:
    a. Placental insufficiency
    b. Multiple gestation pregnancy
    c. Congenital TORCH infection
    d. Maternal diabetes
    e. Recipient in twin- twin transfusion

Answer: E

87. In transient tachypnea of newborn, all of the following are true, **except**:
    a. More common in babies delivered by Cesarean section.
    b. Caused by delayed absorption of fetal lung fluid.
    c. Usually resolves by 72 hours of age.
    d. Cannot be clearly differentiated from congenital pneumonia.
    e. Babies will often need surfactant therapy.

Answer: E

88. All of the following can present as direct hyperbilirubinemia, **except**:
    a. Tyrosinemia
    b. Galactosemia
    c. Congenital TORCH infections
    d. Hypothyroidism
    e. Hepatitis B

Answer: D

89. All of the following are correct about hepatitis B EXCEPT?
    a. infants are at increased risk of developing hepatitis B chronic carrier state than adults

b. administration of both Hepatitis B vaccine and hepatitis B immune globulin is necessary in order to prevent transmission from infected mothers to their newborn
c. hepatitis B vaccine is contraindicated in the premature
d. antihepatitis core antibodies are not protective
e. hepatitis B is more contagious than hepatitis C

Answer: C

90. Maternal chorioamnionitis may prevent one of the following prematurity complications: **(one is correct)**
    a. Chronic lung disease
    b. Cerebral palsy
    c. Periventricular leukomalacia
    d. Intraventricular hemorrhage
    e. respiratory distress syndrome

Answer: E

91. Regarding comparison of human milk to cow's milk, all of the following statements are correct, except:
    a. Human milk contains lower iron content.
    b. Human milk contains lower casein content.
    c. Human milk contains an equal number of calories.
    d. Human milk contains an equal amount of fat.
    e. Human milk contains a lower amount of carbohydrates.

Answer: E

(Note: Technically, c and d aren't true according to the slides as they are not equal but the values are close. E is definitely false because human milk has a higher amount of carbohydrates than cow's milk.)

92. Which of the following is not a part of newborn screening?
    a. FMF
    b. G6PD
    c. Phenylketonuria
    d. Hypothyroidism
    e. Galactosemia

Answer: A

93. You have attended a preterm delivery. The baby was tachypnic and had retractions and was managed by nasal CPAP. After 2 hours he still has respiratory distress and is admitted to NICU. What is the underlying mechanism of this illness:

a. surfactant deficiency
b. residual pulmonary fluid

Answer: A

94. While consultating a first-time mother, she asked you about similarities between breast milk and regular formula, you would tell her that they are similar in which of following:
    a. same vitamin d content
    b. same protein content
    c. same oligosaccharide content
    d. same sugar content

Answer: D

(Note: *Both breast milk and infant formula contain lactose as the primary source of carbohydrate.*)

95. Which of the following is wrong about transient tachypnea of the newborn?
    a. Hypercapnia and met acidosis are common
    b. Most common cause of resp distress
    c. Mostly with C/S
    d. Occurs in terms and preterms
    e. Occurs due to prolonged resorption of lung fluid

Answer: A

96. Wrong about RDS?
    a. Risk decreases with maternal diabetes
    b. Reduced lung volume on CXR
    c. May occur immediately after birth

Answer: A

97. All of the following are associated with severe prematurity except?
    a. TTN
    b. Anemia
    c. Gestational diabetes

Answer: A

98. Cannot be evaluated during newborn physical exam?
    a. Ambiguous genitalia
    b. bifid uvula
    c. Coloboma
    d. Umbilical vessels
    e. Coarctation of aorta (CoA)

Answer: E

99. The only concerning sign in a 17 day neonate?

a. Erythema toxicum
b. Breast engorgement
c. Jaundice

Answer: C

100. Patient with RDS , all of the following are true except :
a. Prematurity is an important risk factor
b. Due to surfactant deficiency
c. It can present after 24 hours of life
d. Present with grunting
e. Nasal CPAP is a preferred modality for respiratory support

Answer: C

101. a newborn crying weakly, HR 110, sneezes when suctioned, pink body blue face, arms flexed legs extended, APGAR score:
a. 6
b. 7
c. 8

Answer: A

102. One is alarming in a newborn:
a. Mongolian spot
b. Diastolic murmur
c. Erythema toxicum

Answer: B

103. A preterm newborn noticed to have grunting 2 hours after birth, the most probable cause:
a. surfactant deficiency
b. meconium aspiration

Answer: A

104. Physiological jaundice is characterized by: ***
a. Rate of increase is less than 5 mg/dl/day
b. Occurs in the first 12 hrs
c. Direct bilirubin <2 mg/dl

Answer: A

105. A 48-hour old infant presented with jaundice, -ve coombs test, birth weight of 3.4, and weight at 48 hour is 3.1. Diagnosis?
a. ABO incompatibility
b. Rh incompatibility
c. Physiological jaundice

d. Breast milk jaunduce
e. Breatfeeding jaundice

Answer: E

106. Not a cause of direct hyperbilirubinemia AT 2 MONTHS OF AGE :
a. Alagille
b. Biliary atresia
c. Hypothyroidism
d. UTI
e. Wilson's Disease (explanation: Wilson manifests at 4 yr age)

Answer: E

107. Infants of diabetic mothers can present with all of the following, except:
a. Large for gestation
b. Small for gestation
c. High PCV (packed cell volume)
d. Hypocalcemia
e. Hyponatremia

Answer: E

108. A case of cephalohematoma. What is wrong? ***
a. Will resolve in 1 day
b. Hyperbilirubinemia
c. Over one bone
d. May calcify after that

Answer: A

109. All the following statements are true about cephalhematoma, except:
a. It is due to subperiosteal collection of blood
b. It is a risk factor for exaggerated physiologic neonatal jaundice
c. It usually crosses suture lines
d. It is most commonly seen in parietal area
e. Observation and follow up is main management

Answer: C

110. Regarding neonatal resuscitation all are true **EXCEPT:**
A. a skilled person should be present at each delivery.
B. the first 30 seconds of life are for assessment and initiation of early resuscitation steps.
C. accepted heart rate is above 100 bpm.

D. The drug used for bradycardia is Atropine.

E. if the baby is not breathing, positive pressure ventilation should be started.

Answer: D

111. Neonatal resuscitation all true except

a. 90% don't need resuscitation
b. You should not start chest compression untill you ventilate
c. Adrenaline can be give IV or endotracheally
d. Give 0.9% NS as fluid
e. All newborns are sent to radiant warmers and have their pulse and RR checked

Answer: E

112. All of the following are true about fluid and electrolyte therapy in neonates **EXCEPT:**

A. Sodium should not be given on the first day of life.

B. Premature babies need more fluids due to increased insensible losses.

C. Glucose 5% is the maintenance solution.

D. When patent ductus arteriosus is present, fluids should be restricted.

E. potassium should be added to the intravenous solution.

Answer: C

113. A baby was born at term. She had a heart rate of 40 bpm at 30 seconds of age, with irregular breathing efforts, the best next step to do is (**One is correct**)

A. Administer oxygen with a face mask.

B. Starts chest compressions at a rate of 3:1.

C. Give positive pressure ventilation at a rate of 40 bpm.

D. Gently rub the baby's back to stimulate to breath.

E. Give adrenaline 10 mcg/kg intravenously.

Answer: C

114. A 2.6 Kg newborn girl is found to be cyanotic. When examined the baby started to cry and her cyanosis improved. There were no other signs of respiratory distress. The rest of the examination was normal. One of the following explains her condition (**One is correct**)

A. Choanal atresia

B. Cyanotic heart disease

C. Polycystic kidney disease

D. Tracheoesophageal fistula

E. Respiratory distress syndrome

Answer: A

115. Eight hours after birth, an infant exhibits excessive drooling and mild respiratory distress. Abdominal X- ray shows complete lack of air in the gastrointestinal tract. Which is the most likely diagnosis **(one is correct)**

A. Tracheoesophageal fistula, H type

B. Pyloric atresia

C. Choanal atresia (bilateral)

D. Esophageal atresia with distal tracheoesophageal fistula

E. Isolated esophageal atresia

Answer: E

116. Which one of the following findings in a newborn need's further investigations or treatment? **(Choose one correct)**

a. Engorged breast

b. Epstein pearls

c. Mongolian spot

d. White pupillary reflex

e. Erythema toxicum

Answer: D

117. All of following considered normal finding in newborn except:

a. mongolion spot

b. leukocoria

c. mottled skin

d. erythema toxicum

e. acrocyanosis

Answer: B

118. All of the following regarding neonatal resuscitation are true, **except**:

a. Around 10% only will need aggressive resuscitation efforts.

b. There should be a skilled team in resuscitating newborns at each delivery.

c. Drying the newborn is an essential part of resuscitation.

d. Each step of resuscitation should continue for 60 seconds before reassessment of the baby's heart rate and breathing efforts.

e. Intravenous volume expansion is sometimes needed.

Answer: D

119. A 30-year-old G2 P1 woman gives birth at 37 weeks gestational age. Apgar scores are 8 at 1 minute and 10 at 5 minutes. The infant is noted to weigh 4450 gm. However, within 3 hours after delivery, the infant is irritable and exhibits seizure activity. Laboratory

studies show that the infant's blood glucose is 22 mg/dl. Which of the following is the most likely cause? (**One is correct**)

A. Congenital syphilis
B. DiGeorge syndrome
C. Gestational diabetes
D. Acute pancreatitis
E. Gestational hypertension

Answer: C

120. Concerning Necrotizing Enterocolits (NEC), all of the following statements are correct, except:

a. NEC is the most common gastrointestinal emergencies occurring in neonates
b. The exact etiology is still unknown
c. Patients with significant disease can develop strictures
d. An infectious etiology is the most likely causative factor
e. The rate of occurrence of NEC is inversely related to gestational age at birth
f.

Answer: D

121. Necrotizing enterocolitis can present with all of the following, **except:**

a. Abdominal distension
b. Bloody stools
c. Intestinal perforation
d. Hypo activity
e. Jaundice

Answer: E

122. Regarding necrotizing Enterocolitis all of the following are true EXCEPT:

A. It's a complication of very low birth weight babies.
B. Most of the newborns who develop it have already started feeding.
C. broad spectrum antibiotics should be given.
D. it's a transient disease without any chronic complication.
E. abdominal Xray are still the gold standard for diagnosis.

Answer: D

123. Polycythemia in the neonatal period is associated with all the following, except:

a. Trisomy 21
b. Small for gestational age
c. Maternal diabetes mellitus
d. Respiratory distress

e. The donor in twin -twin transfusion

Answer: E

124. All of the following are problems in infants of diabetic mothers, except:
a. Hypoglycemia
b. Hypocalcemia
c. Anemia
d. Hypomagnesaemia
e. Hyperbilirubinemia

Answer: C

OTHER COLLECTED PAST PAPER QUESTIONS:

125. Jaundice at 2 days, investigation?
- Serum bilirubin

126. Part of newborn screening in Jordan
- PKU

127. True about TTN
- Usually mild and rarely last for more than 48 hours.

128. A case of term infant with respiratory distress, delivered by elective cesarean, O2 sat as ?%, what's the most likely cause?
- TTN

129. Does not increase the risk of RDS?
- Antenatal steroids

130. A case of newborn with central cyanosis, did not cry, HR 50, when his nasopharynx was aspirated he had no reaction, his APGAR score is?
- 1

131. (There was a case but it is not present in the file) What is the 1st step in resuscitation?
- Ventilation

132. Post term with green amniotic fluid and respiratory distress, which is true
- Pulmonary hypertension is a known complication

133. Not a mechanism of physiologic neonatal jaundice
- Increased RBC life span

134. Most significant risk factor of CP in the premature
- Periventricular leukomalcia

135. Newborn that is below 2.4kg with normal pregnancy is
- Low birth weight

136. Suggests hypotonia
- Baby almost slips on vertical suspension

137. What is the APGAR score for baby immediately crying after birth, flexed upper and lower limbs, blue feet but pink mucosa under the tounge, HR 102, he was sneezing when you carried him to mother:
- **9**

138. Mother was given corticosteroids antenatally
- Doesn't reduce post-natal growth

139. Born at 37 weeks, clear amniotic fluid, in respiratory distress after birth requiring CPAP and intubation, most likely cause
- Respiratory distress syndrome

140. Born at 39 by caesarian section, shortness of breath in 2 hours, clear amniotic fluid, wrong about him (TTN)
- The onset of this condition is usually after 24 hours

141. Exclusive breast feeding is recommended for at least
- 6 months

142. Apgar score of a newborn with vigorous cry, heart rate 150, cried when bottle withdrawn, flexed arms and legs and tongue cyanosis
- **8**

143. Not a means of nutrition for a child with poor suckling
- Feeding with parenteral maintenance fluids

144. HR=140, regular breathing, very active & sneezing, lips, hands and feet are blue, some flexed some extended... APGAR?
- 8

145. Wrong about breast milk?
- Sucrose

146. Common cause of unconjugated hyperbiliribuenemia jaundice?
- Breastmilk jaundice

147. All of the following are indicators of pathological jaundice except:
- Liver edge palpable 1cm below the costal margin

148. Not an anatomical difference in neonates that makes them more susceptible to respiratory failure
- Not sure (cephalad and anterior trachea?)

149. Wrong about grunting?
- Only heard via stethoscope

150. Expiration against partially blocked epiglottis. Mostly due to
- RDS

Neurology

1. Which of the following doesn't indicate cerebral hypotonia? (2022)
    a. hyperreflexia
    b. other brain abnormalities
    c. Fasciculations
    d. Ophthedenia

Answer: C

2. 3 Years female with 40 temperature followed URTI, came with seizure for 10 mins, parents reported that this is her first time and her sibling had same episode and which of the following is WRONG about her febrile seizure (2022)
    a. High risk to develop epilepsy in this patient
    b. Can have another episode even at 38 temperature
    c. No drug is indicated after second seizure attack
    d. Teach them to put the baby at lateral position next time
    e. Rectal valium is indicated next time the seizure remain for more than 5 mins

Answer: A

3. Developmental delay case 30 GA baby, now 3 years old, plays with his sibling, sat at one year, now walks with one hand held, talks 50 word without sentences, which of the following is true? (2022)
    a. Has global developmental delay cause by Cerebral palsy
    b. Has global developmental delay caused by phenylketonuria
    c. Has global developmental delay caused by Autism
    d. Normal developmental delay for his corrected age

Answer: A

4. Acute ataxia, wide gait... what to order next (2022)
    a. Brain MRI
    b. Spinal MRI
    c. Brain MRA
    d. Lumbar puncture
    e. X-ray

Answer: A

5. Which of the following is not present at 4 months: (2022) ***
    a. Social smile
    b. Follow moving objects
    c. Pushing with feet when held
    d. No head lag
    e. Transfer objects from hand to hand

Answer: E

6. Which of the following is not present at 4 years (2022) ***
    a. Drawing vertical lines
    b. Drawing horizontal lines
    c. Drawing circle
    d. Drawing square
    e. Drawing triangle

Answer: E

7. Which of the following is not present at 18 months (2022) ***
    a. Knowing self age and sex
    b. Walking with one hand held
    c. Running stiffly

Answer: A

8. Wrong about social smile (2022)
    a. Normal Onset at 2 months
    b. onset can normally be delayed to 3 months
    c. Delayed social smile indicates cognitive problem
    d. Hypoglycemia can cause social smile delay
    e. Maternal hypothyroid can cause social smile delay

Answer: B or C

9. A 4-yr-old child presents with a hard, fixed abdominal mass that causes discomfort. Physical examination also shows hypertension. The most likely etiology is: (2022)
    a. Nephroblastoma

b. Neuroblastoma
c. Renal cell carcinoma

Answer: B

10. A 2-year-old baby presented to you with history of fever following which he developed a generalized tonic-clonic seizure that lasted 5 minutes. Parents reported a similar event 3 months ago. He has a runny nose, and his general exam and meningeal signs were negative. All of the following statements regarding his condition are correct except?
    a. The risk of recurrence continues till the age of six years
    b. This is a complex febrile convulsion
    c. Seizures may recur even at a temperature of 38 degrees Celsius
    d. There is no need to start antiepileptic treatment
    e. Rectal diazepam is advised if the seizure is prolonged.

Answer: B

(A simple febrile seizure is a primary generalized, usually tonic-clonic, attack associated with fever, lasting for a maximum of 15 min, and not recurrent within a 24-hr period. A complex febrile seizure is more prolonged (>15 min), and/or is focal, and/or recurs within 24 hr.)

11. A 2.5-year-old child who was born prematurely at 30 weeks of gestation presented to you with delayed walking. He sat at one year of age. His parents noticed that he is left-handed when he was 9 months old. He forms 2-3 word sentences and his social interactions are normal according to his parents. His examination showed increased tone in his right upper and lower limbs. All of the following statements about his condition are correct except:
    a. The child has hemiplegic cerebral palsy
    b. The child has weakness on the right upper limb
    c. Deep tendon reflexes are expected to be decreased on the right side
    d. Sensation is expected to be intact
    e. His vision needs to be assessed

Answer: C

12. All of the following conditions are risk factors for cerebral palsy except:
    a. Triplet gestation
    b. Prematurity
    c. Consanguinity
    d. Low birth weight
    e. Pre-eclampsia

Answer: C

13. What is the drug of choice for initial treatment neonatal seizures?
    a. Phenobarbital
    b. Succinylcholine

c. Midazolam
d. Siazepam
e. Lamotragine

Answer: A

14. All of the following statements regarding simple febrile convulsions are correct except:
    a. Seizures are generalized tonic-clonic
    b. Duration of seizure is less than 15 minutes
    c. Does not recur within 24 hours
    d. Increases the risk of future epilepsy by 10 folds
    e. Recurrence risk is high in infancy

Answer: D

15. Which of the following statements regarding cerebral palsy in children is true?
    a. Pertussis vaccine is contraindicated in cerebral palsy patients
    b. Patients' language skills deteriorate with time
    c. Deafness worsens with time
    d. Tetraplegic cerebral palsy patients carry worst prognosis
    e. The majority of patients with cerebral palsy have mental retardation

Answer: D

16. One of the following is a characteristic of partial complex seizures:
    a. Epileptic activity usually arises from the frontal lobe
    b. There is usually change in the level of consciousness
    c. Presents with recurrent brief fainting
    d. The patient can remember the event during the attack
    e. It is startle-like

Answer: B

17. A normal infant starts to visually track objects 180 degrees at the age of:
    a. One month
    b. Two months
    c. Four months
    d. Six months
    e. Eight months

Answer: B

18. A normal child starts to put objects in his mouth at the age of:
    a. 4 months
    b. 6 months

c. 8 months
d. 10 months
e. 12 months

Answer: A

19. A normal infant starts to roll from prone to supine at the age of:
    a. 2 months
    b. 3 months
    c. 6 months
    d. 8 months
    e. 10 months

Answer: C

20. A normal infant starts to run at the age of: ***
    a. 9 months
    b. 12 months
    c. 18 months
    d. 30 months
    e. 36 months

Answer: C

21. Brisk deep tendon reflexes suggest one of the following:
    a. Spasticity
    b. Rigidity
    c. Hypotonia
    d. Myotonia
    e. Dystonia

Answer: A

22. All of the following electrolyte abnormalities can present with seizures, except:
    a. Hyponatremia
    b. Hypernatremia
    c. Hypoglycemia
    d. Hypokalemia
    e. Hypomagnesemia

Answer: D

23. Regarding neonatal seizures all are correct, except:
    a. Change in vital signs help to diagnose subtle seizures
    b. Treatment of choice is Phenobarbital
    c. May carry poor prognosis regarding neurodevelopment

d. Meningitis should be ruled out
e. Can be caused by hypokalemia

Answer: E

24. Which one of the following statements regarding cerebral palsy in children is true?
    a. Vaccination is contraindicated in cerebral palsy patients
    b. Patient's neurological status usually deteriorates with time
    c. Inheritance is autosomal dominant
    d. Choreoathetotic cerebral palsy is related to high bilirubin level in the neonatal period
    e. The majority of patients die in the first years of life

Answer: D

25. The drug of choice for absence epilepsy is: ***
    a. Valproic acid
    b. Carbamazepine
    c. Topiramate
    d. Clonazepam
    e. Vigabatrin

Answer: A

26. A normal child starts to draw a horizontal line at the age of:
    a. 12 months
    b. 15 months
    c. 24 months
    d. 36 months
    e. 48 months

Answer: C

27. A normal child starts to know his full name at the age of:
    a. 24 months
    b. 30 months
    c. 40 months
    d. 48 months
    e. 60 months

Answer: B

28. A normal child starts to draw a triangle at the age of: ***
    a. 2 years
    b. 3 years
    c. 3.5 years

d. 4 years
e. 5 years

Answer: E

29. All of the following are side effects of valporic acid except:
    a. Alopecia
    b. Thrombocytopenia
    c. Weight loss
    d. Elevated liver enzymes
    e. Drowsiness

Answer: C

(Valproic acid causes weight gain)

30. Onset of social smile is expected at age of: ***
    a. Birth
    b. 2 months
    c. 4 months
    d. 6 months
    e. 7 months

Answer: B

31. Normal range of walking in children is between:
    a. 6-9 months
    b. 9-15 months
    c. 7-10 months
    d. 15-18 months
    e. 18-21 months

Answer: B

32. A child starts to copy a circle at age:
    a. 1 year
    b. 2 years
    c. 3 years
    d. 4 years
    e. 5 years

Answer: C

33. A one-year-old child is expected to speak: ***
    a. One word
    b. 2 words
    c. 3 words in addition to mama and baba

d. 10 words
e. Phrases

Answer: C

34. A 2.5-year-old boy presented to you with inability to walk and spasticity in the lower limbs. He was born prematurely at 28 weeks gestation and he was on a ventilator for one month. Which of the following statements regarding his condition is correct:
    a. This child will never walk
    b. Sensation will be affected in the lower limbs
    c. His motor development will mostly improve with time
    d. Since he is premature his motor development is normal for corrected age
    e. This child will have global developmental delay

Answer: B?

35. All the following are pervasive developmental disorders EXCEPT?
    a. Autistic disorder
    b. Asperger syndrome
    c. Rett syndrome
    d. Childhood disintegrative disorder (regression)
    e. Schizophrenia

Answer: E

36. Which of the following statements regarding global developmental delay in children is correct:
    a. The most common cause of global developmental delay is metabolic disorders
    b. It is defined as delay in all four developmental domains
    c. In almost all cases there is no identified cause
    d. Chromosomal analysis is helpful only in dysmorphic patients
    e. Electroencephalogram (EEG) is not helpful in the diagnosis

Answer: E

37. A one-year-old child started to have abnormal attacks of recurrent laughter. His EEG showed epileptic activity. This seizure is most likely: ***
    a. Gelastic
    b. Palatal myoclonic
    c. Tonic
    d. Uncinate
    e. Jacksonian

Answer: A

38. The normal children start speaking pronouns at age of:
    a. 1yr
    b. 1.5yrs
    c. 2 yrs
    d. 2.5yrs
    e. 4 years

Answer: D

39. Full-term newborns have all of the following EXCEPT:
    a. head lift
    b. track visually human faces
    c. react to sweets placed on their tongues
    d. smile socially
    e. feel hot objects

Answer: D

40. Stranger anxiety starts to develop at age of:
    a. 6-9 months
    b. 15-24 months
    c. 4-6 months
    d. 36 months
    e. 40 months

Answer: A

41. A 4-year-old girl presented to you because she sits only with support, and she speaks only 5 correct words. On examination she had spasticity in the lower limbs. Which of the following statements regarding her condition is CORRECT:
    a. This child has cerebral palsy
    b. This child has autism
    c. This child has global developmental delay
    d. This child has learning difficulties
    e. This child has a metabolic disorder

Answer: C

42. A 4-year-old girl presented to you because she has global developmental delay. All of the following are important investigations to reach for final diagnosis EXCEPT:
    a. Standard chromosomal analysis
    b. Chromosomal analysis for fragile X
    c. Electroencephalogram (EEG)
    d. Fundoscopy
    e. Brain MRI

Answer: C

43. A five-month-old infant presented to you with recent onset of recurrent staring attacks for the last one month. The most likely diagnosis for his condition is:
    a. Absence epilepsy
    b. simple partial epilepsy
    c. partial complex epilepsy
    d. infantile spasm
    e. Atonic epilepsy

Answer: C

(Absence seizures typically begin between the ages of 4-8. Partial complex seizures can manifest as decreased responsiveness, staring, looking around seemingly purposelessly, or automatisms.)

44. A 4-month-old girl presented with recent onset of abnormal movements in the form of spasms in series that recur several times per day. Her examination showed ash leaf spots on the skin and her brain MRI showed subependymal calcification All of the following statements regarding her condition are correct EXCEPT:
    a. This infant has west syndrome
    b. This infant has tuberous sclerosis
    c. Vigabatrin is effective in her condition
    d. This infant will most likely manifest developmental delay
    e. Vagal nerve stimulation is the treatment of choice for this condition

Answer: E

(West syndrome commonly occurs in children with tuberous sclerosis complex. West syndrome is characterized by epileptic/infantile spasms. These spasms usually begin in the early months after birth.)

45. All of the following statements regarding west syndrome (infantile spasms) are correct except:
    a. It occurs in infancy
    b. Drugs of choice include vigabatrin
    c. Prognosis is good in most cases
    d. Spasms can occur in extension or flexion
    e. Affects patients with tuberous sclerosis

Answer: C

46. Which of the following statements regarding global developmental delay (GDD) in children is correct?
    a. The most common cause of global developmental delay is genetic
    b. All four developmental domains should be delayed to diagnose GDD
    c. In almost all cases there is no identified cause
    d. Chromosomal analysis is not indicated in patients with absent dysmorphic features

e. History of GDD in another sibling makes the diagnosis of cerebral palsy unlikely

Answer: E

47. A five-year-old child started to have recurrent episodes of stares. Which of the following is the most useful to differentiate between absence epilepsy and focal epilepsy with altered level of consciousness (partial complex epilepsy)?
    a. Duration of stare
    b. Family history of epilepsy
    c. Number of episodes/month
    d. Brain MRI
    e. EEG

Answer: E

48. Which of the following epilepsy syndromes is the least likely to respond to medical treatment:
    a. Lennox Gastaut syndrome
    b. Childhood absence epilepsy
    c. Juvenile absence epilepsy
    d. Rolandic epilepsy
    e. Juvenile myoclonic epilepsy

Answer: A

49. A mother brings in her child for a health supervision visit. He is able to stand alone, walks few steps with one hand held, and releases a toy from his hand upon demand. Of the following, these developmental milestones are MOST typical for a child whose age is:
    a. 6 months
    b. 9 months
    c. 12 months
    d. 15 months
    e. 18 months

Answer: C

50. All of the following emerging patterns of developmental milestones match EXCEPT:
    a. Knows heavier of two weights :5 years
    b. Knows age: 3 years
    c. Knows name: 2.5 years
    d. Refers to self by the pronoun "I": 4 years
    e. Tells stories: 4 years

Answer: D

51. An infant who rolls over, sits with pelvic support, supports most of his weight, prefers his mother and enjoys looking at a mirror most likely has a developmental age of:***
    a. 3 months
    b. 4 months
    c. 6 months
    d. 9 months
    e. 12 months

Answer: C

52. All of the following statements are true EXCEPT:
    a. Vibration sense is detected at birth.
    b. Babinski reflex (upward) is normally present at the age of 2 years.
    c. Non-sustained clonus is present till the age of 2 months
    d. Receptive language is more mature than expressive language.
    e. Indirect light reflex is present at birth.

Answer: B

53. All of the following regarding the emergence pattern of fine motor development match EXCEPT:
    a. Draws a vertical line: 1.5 years
    b. Draws a horizontal line: 2 years
    c. Draws a circle: 3 years
    d. Draws a triangle: 5 years
    e. Draws a cross: 3 years

Answer: E

54. All of the following are true about cerebral palsy in children EXCEPT:
    a. Spasticity is present in all cases
    b. Diplegic type is the most common
    c. Baclofen helps in the management
    d. Physiotherapy has to start early
    e. Epilepsy is documented in about one third of cases.

Answer: A

55. Most common age of onset of temper tantrums is:
    a. 1-2 years.
    b. 2-4 years
    c. 3-6 years
    d. 4-6 years
    e. First year of age

Answer: B

56. A 3-year-old child is able to do which one of the following?
    a. Cut picture with scissors
    b. Hops
    c. Skips
    d. Knows age and sex
    e. Copies a square

Answer: D

57. A 2-year-old boy presented to your clinic with history of fever and focal clonic seizure that lasted for 15 minutes. He looked active and well, had runny nose, and meningeal signs were negative. The parents said he had a similar event coinciding with fever when he was 1.5 years old, a brain MRI was done and was normal. Which of the following statements about his condition is correct?
    a. The risk of febrile seizures will continue for life
    b. Recurrence may occur even with low grade fever
    c. This child has epilepsy
    d. The child has very low risk of a third recurrence
    e. Antiepileptic treatment is advised to prevent recurrence

Answer: B

58. A premature baby who was born at 28 weeks gestation, presented to your clinic at age of 12 months for developmental assessment, he should be able to do all of the following EXCEPT:
    a. Say baba and mama specifically
    b. Plays peek-a-boo
    c. Immature pincer grasp
    d. Sit without support
    e. Wave bye- bye

Answer: A

59. Which of the following statements regarding cerebral palsy (CP) is correct?
    a. The majority of cases will occur due to hypoxic ischemic injury at time of birth
    b. Hypotonia is most prominent in hemiplegic cp
    c. Mental retardation is most common in diplegic cp
    d. Quadriplegic cerebral palsy is the most common type
    e. The majority of children with cerebral palsy are born at term

Answer: E

60. Full head support is established at age of:
    A. birth
    B. 2 months
    C. 4 months

D. 6 months
E. 8 months

Answer: C

61. Children can copy a triangle at the age of: ***
    A. 2 years
    B. 2.5 year
    C. 3 years
    D. 4 years
    E. 5 years

Answer: E

62. Infants start laughing at age of:
    A. 2 months
    B. 4 months
    C. 5 months
    D. 6 months
    E. 8 months

Answer: B

63. Which of the following reflexes persists for life? **(Choose one correct)**
    a. Tonic neck reflex
    b. Rooting reflex
    c. Parachute reflex
    d. Placing reflex.
    e. Plantar reflex

Answer: C

Reflex	Age at appearance	Age at resolution
Moro (startle)	34 to 36 weeks PCA	5 to 6 months
Asymmetric tonic neck reflex	38 to 40 weeks PCA	2 to 3 months
Trunk incurvation (Galant)	38 to 40 weeks PCA	1 to 2 months
Palmar grasp	38 to 40 weeks PCA	5 to 6 months
Plantar grasp	38 to 40 weeks PCA	9 to 10 months
Rooting	38 to 40 weeks PCA	2 to 3 months
Parachute	8 to 9 months of age	Persists throughout life

64. An infant is usually physiologically and developmentally ready for transition to solid food at the age of: **(one is correct)**
    a. 2-3 months
    b. 4-6 months
    c. 8-10 months
    d. 1 year
    e. 2 years

    Answer: B

65. A 13 year old girl was diagnosed 6 months ago to have generalized epilepsy and was controlled on valproic acid. She presented recently to the emergency room with history of abnormal clonic movements involving the upper and lower limbs with crying and moaning for the last five hours. Valproic acid level turned to be normal. A video EEG during the attack showed no epileptic activity .The most proper step in management of her current condition is :
    A. Add another antiepileptic drug.
    B. Increase the dose of valproic acid.
    C. Stop valproic acid and start a new generation antiepileptic.
    D. Request psychiatry consult
    E. Observe and reassurance.

    Answer: D

66. During neurological examination a clonus is considered to be normal if elicited bilaterally till the age of: ***
    A. 2 months
    B. 4 months
    C. 6 months
    D. 9 months
    E. 12 months

    Answer: A

67. All of the following statements regarding neurological examination in children are correct **EXCEPT:**
    A. Visual fixation is present at birth.
    B. Visual acuity reaches 20/20 by 6 months of age.
    C. Pupils react to light from birth.
    D. Ability to follow a bright target is present since birth.
    E. Ability to distinguish colors starts at 3 months of age.

    Answer: B or E

68. A 6-year-old boy presented to you with history and EEG findings suggestive of absence epilepsy. In addition, he is currently having generalized tonic clonic seizures. The most appropriate monotherapy for his epilepsy is:
    A. Valproic acid
    B. ethosuxamide
    C. levetarecitam
    D. topiramate
    E. vigabatrin

    Answer: A

69. A 4-month-old infant is having recurrent attacks of uprolling of the eyes, cyanosis, and myoclonic jerks whenever he is frustrated or angry and crying. The most likely diagnosis for this child is **(one is correct)**
    A. Gelastic seizures
    B. Partial complex seizures
    C. Myoclonic seizures
    D. Generalized seizures.
    E. Breath holding spells.

    Answer: E

70. A 12-month-old infant is having recurrent attacks of uprolling of the eyes, cyanosis, and myoclonic jerks whenever he is frustrated or angry and crying. Which of the following is **CORRECT** about his condition?
    A. This infant has generalized epilepsy.
    B. This infant has myoclonic epilepsy.
    C. He needs to be started on intermittent Phenobarbital.
    D. He needs psychiatric consultation.
    E. Parents need education and counseling in this benign condition.

    Answer: E

71. A neonatal nurse called you to evaluate a 4-day old premature baby who is having recurrent lip smacking. You suspect neonatal seizures. Regarding neonatal seizures **one is correct:**
    A. Treatment of choice is phenobarbital.
    B. lip smacking is not a known form of subtle seizures in newborns.
    C. Generalized tonic –clonic seizures are the most common type.
    D. hypokalemia is a major cause of neonatal seizures.
    E. seizure activity in prematures is part of their development and considered physiological.

    Answer: A

72. A blind infant is suspected to have (**One is correct**)
    A. Gross motor delay
    B. Fine motor delay
    C. Social delay
    D. Language delay
    E. Normal development

Answer: ?

73. A deaf child is expected to have (**One is correct**)
    A. Gross motor delay
    B. Fine motor delay
    C. Social delay
    D. Language delay
    E. Normal development

Answer: D

74. An eighteen-month-old toddler is expected to speak at least (**One is correct**)
    A. 10 single words
    B. 30 single words
    C. 50 single words
    D. Two words sentences.
    E. 3 words sentences.

Answer: A

75. Infants roll over by the age of (**One is correct**)
    A. 3-4 months
    B. 5-6 months
    C. 8-9 months
    D. 10-11 months
    E. One year

Answer: B

76. All of the following regarding the primitive reflexes are correct **except:**
    A. Primitive reflexes assess the integrity of the brain stem and basal ganglia.
    B. Primitive reflexes are usually symmetrical.
    C. Grasp and rooting reflexes are inhibited by maturation of the frontal lobe.
    D. Asymmetry of primitive reflexes indicate focal brain or peripheral nerve injury.
    E. All primitive reflexes disappear by 2 years of age.

Answer: E

77. Which of the following factors increase the risk for development of epilepsy in children with febrile convulsion **(one is correct)**

A. Febrile seizures associate with fever>39 C.

B. Age of onset below one year

C. Positive family history of epilepsy

D. History of a brother with febrile seizures

E. Onset of febrile seizures at 2 years of age

Answer: C

Risk Factors for Occurrence of Subsequent Epilepsy After a Febrile Seizure*

RISK FACTOR	RISK FOR SUBSEQUENT EPILEPSY
Simple febrile seizure Recurrent febrile seizures	1% 4%
Complex febrile seizures (>15 min in duration or recurrent within 24 hr)	6%
Fever < 1 hr before febrile seizure	11%
Family history of epilepsy	18%
Complex febrile seizures (focal)	29%
Neurodevelopmental abnormalities	33%

* Having more than one risk factor is at least in part additive.

78. Which of the following regarding the emergence of developmental milestones matches correctly? **(Choose one correct)**

a. Draws a circle: 3 years

b. Draws a square: 5years

c. Draws a man with 4 parts: 6 years

d. Draws a triangle: 3 years

e. Draws a cross: 2 years

Answer: A

79. A child presented to you for developmental assessment. He runs stiffly, eats with a spoon, points to body parts and speaks 6 words. His developmental age is **most** likely: **(Choose one correct)**

a. 12 months

b. 13 months

c. 14 months

d. 18 months

e. 24 months

Answer: D

80. All of the following statements regarding the disappearance of primitive reflexes are correct, **except**
    a. Palmar grasp reflex disappears by 2-3 months of age.
    b. Moro reflex disappears by 5-6 months of age.
    c. Tonic neck reflex disappears by 6-7months of age.
    d. Parachute reflex disappears by 9-10 months of age.
    e. Rooting reflex disappears by 1-2 months of age.

Answer: D

81. Which one of the following is expected to be drawn by an 18–20-month-old toddler: **(one is correct)**
    A. Vertical line
    B. Horizontal line
    C. Parallel lines
    D. Circle stroke
    E. Square

Answer: A

82. A child who is able to tell stories, draws a square and triangle, uses scissors and is able to skip most likely has a developmental age of: **(one is correct)**
    a. 2.5 years
    b. 3 years
    c. 3.5 years
    d. 4 years
    e. 5 years

Answer: E

83. A 7-month-old male infant, presented to you for developmental assessment. He was born by Cesarean section prematurely at 28 weeks. You want to do corrections for his developmental age. Which of the following is his developmental age after correction? **(One is correct)**
    a. one month
    b. 2 months
    c. 3 months
    d. 4 months
    e. 5 months

Answer: D

84. One of the following is characteristic of partial complex seizures: **(Choose one correct)**
    a. Loss of consciousness

b. Change in the level of consciousness
c. No change in level of consciousness
d. The patient can remember the event during the attack.
e. It is startle like

Answer: B

85. Electro-encephalogram (EEG) is important in all of the following, **except**:
    a. Treatment of epilepsy
    b. Diagnosis of epilepsy
    c. Prognosis of epilepsy
    d. Classification of epilepsy
    e. Prognosis of cataplexy

Answer: E

86. All of the following regarding cerebral palsy are correct **except:**
    A. It is a non-progressive disorder.
    B. Spastic type is the most common type.
    C. Motor or postural abnormality is necessary for diagnosis.
    D. The most common cause of cerebral palsy is asphyxia at birth.
    E. Limb spasticity may not be apparent in the first months of life.

Answer: D

87. All of the following regarding global developmental delay in children are correct **except:**
    A. It is defined as delay in 2 or more domains of developmental milestones.
    B. Definite causes can be identified in around half of the patients.
    C. Ophthalmology evaluation is mandatory.
    D. Hearing test is mandatory.
    E. Chromosomal analysis is not indicated if there are no dysmorphic features.

Answer: E

88. Neurological clinical features in chromosomal disorders tend to be accompanied by all of the following, **except**:
    a. Regressive clinical course
    b. Improvement with time
    c. Dysmorphism
    d. Involvement of other systems
    e. Hypotonia

Answer: A

89. All of the following are generalized seizures, **except**:
    a. Rolandic epilepsy
    b. Atonic seizures
    c. Petit-mal seizures
    d. Lennox-gestaut syndrome
    e. Juvenile myoclonic epilepsy of Janz

Answer: A

90. A 6-month-old male infant presents with one brief generalized febrile seizure. The chance that this infant is going to develop epilepsy is **closest** to: **(Choose one correct)**
    a. 2%
    b. 5%
    c. 10%
    d. 15%
    e. 30%

Answer: A

91. Vagal nerve stimulation is mostly used for one of the following: **(Choose one correct)**
    a. Treatment of intractable epilepsy
    b. Treatment of intractable spasticity
    c. Treatment of intractable rigidity
    d. Treatment of intractable dystonia
    e. Treatment of intractable myotonia

Answer: A

92. All are types of neonatal seizures except:
    a. Tonic seizures
    b. Clonic seizures
    c. Myoclonic seizures
    d. Subtle seizures
    e. Absence seizures

Answer: E

93. A child walks into the clinic accompanied by his parents. He threw his ball to you when you asked him to do so, and when you threw it back he reached to catch it but his balance was disturbed and he felt down, then he managed to rise alone while he is laughing and smiling to parents. He could put 2 cubes together. He was able to draw a line:
    a. 12 months
    b. 15 months

Answer: A

94. Mother put her baby on the exam table, she pulled her foot to mouth, when her mother showed her a mirror, she grasped it and enjoyed looking at her mirror image:
    a. 6 months
    b. 9 months

Answer: A

95. Patient with kernicterus, most common type of cerebral palsy:
    a. 1. diplegic
    b. 2. Quadriplegic
    c. 3. Choreathetosis

Answer: C

96. Seizures and paroxysmal non-epileptic episodes are differentiated by?
    a. -EEG
    b. -Hx and physical

Answer: B

(Often all that is needed to differentiate nonepileptic paroxysmal disorders from epilepsy is a careful and detailed history in addition to a thorough clinical examination, but sometimes an electroencephalogram (EEG) or more advanced testing may be necessary)

97. Child with a fever of 38 developed generalized tonic clonic seizure lasting over 5 min which is true:
    a. he is more likely to have a recurrence when he gets febrile
    b. likely to develop epilepsy
    c. fever not high enough to cause febrile seizure

Answer: A

98. A 6-year-old girl is brought to clinic by her mother. She speaks 6 words, points to body parts, eats with a spoon, and runs stiffly. Her developmental age is:
    a. 15 months
    b. 18 months
    c. 24 months
    d. 30 months
    e. 36 months

Answer: B

99. Wrong combination:
    a. Hops on one foot 4 years
    b. Names heavier of two objects at 3 years

Answer: B

100. Case of status epilepticus, what is wrong?
    a. associated with 5% mortality rate
    b. can cause focal neurological deficits

c. you should intubate and ventilate the patient

Answer: C

101. You are in the nursery, upon evaluating child primitive reflexes you are unlikely to look for:

A. Moro

B. Grasp

C. Tonic neck

D. Truncal incurvation

E. Parachute

Answer: E

102. Associated with cerebral palsy:

a. brain parynchemal injury

b. bronchopulmonary dysplasia

Answer: A

103. A newborn can do all of the following except:

a. eye fixation

b. Smells perfume

Answer: B

104. True about Absence seizure?

a. Characteristic EEG

b. Poor prognosis

Answer: A

105. A mother brought her child to hospital for evaluation, she is afraid he's not growing well , on evaluation the child skips and draws a triangle and walks alternating foot , you will said to mom that child age is :

A. 2 years

B. 2.5 years

c. 3 years

D. 4 years

E. 5 years

Answer: E

106. One of the following combinations is wrong :

A. 18 months draws horizontal line

B. 4 years draws crosses

C. 4 years draws square

D. 5 years draws triangle

Answer: A

107. One of the following combinations is wrong

A. 1 week: social smile

B. 10 months: waves bye bye

C. 10 months: plays peek-a-boo

D. 12 months: points toward object

Answer: A

108. A one year old child presented with recent onset of seizures. On examination of the skin, there were multiple hypopigmented lesions. The mother is healthy however she has a big ash leaf spot on her back. Among the following, the most likely diagnosis for this child is: (one is correct)

a. Child abuse with intracranial bleeding

b. Congenital cytomegalovirus infection

c. Sturge-Weber syndrome

d. Tuberous sclerosis

e. Vitiligo

Answer: D

109. Asphyxia in 28 wk GA. What is the pattern of CP?

a) hemiplegic

b) diplegic

c) chorioathetotic

d) ataxic

Answer: B

110. A 10 year old had a seizure for 5 mins. His temperature is 38 axially. Which of the following is true?

a) 2nd attack in 40%

b) This is a case of febrile convulsion

c) Start anti-epileptic drugs

d) Anti-pyretics prevent seizure

e) Patient has 10 times risk of epilepsy

Answer: A

111. A one year old child presented to your clinic with history of developmental delay , poor visual fixation and excessive startle to noises .Eye examination showed cherry red spots .The most likely diagnosis for his condition is:

A. Beckwith Weidmann syndrome

B. Tay sach syndrome

C. Nonketotic hyperglycinemia

D. Neimann pick syndrome

E. Hyperkeplexia

Answer: B

112. 25. A 17 month old infant presented to your clinic because of developmental delay ..On examination he was found to have coarse features , hepatosplenomegaly and limited joint movement .The most likely diagnosis for this infant is:

A. Beckwith weidmann syndrome

B. Tyrosinemia

C. Galactosemia

D. Trisomy 18 (Edward syndrome)

E. Hurler syndrome

Answer: E

113. 26. A five year old girl presented to the emergency room because of sudden onset of weakness on the right side of her body .She also has mild developmental delay .Brain MRI showed evidence of stroke .Her brother has similar clinical history but in addition he also has lens sublaxation. The most likely cause for this girl's stroke is:

A. Citrullinemia

B. Homocystinurea

C. Maple syrup urine disease

D. Phenylketoneurea

E. Tyrosinemia

Answer: B

OTHER COLLECTED PAST PAPER QUESTIONS:

114. Rides a tricycle? (2022)

- 3 years old

115. Draw a square?

- 4 years old

116. Developmental age for boy walking with his mother and released object on demand?

- 12 months

117. Parachute reflex appears at:

- 9 months

118. Developmental age at which the child can go upstairs with alternation of feet?
- 30 months.

119. Which is something a child can't do at 10 months?
- Speak 3 words

120. Which is something a child can't do at 3 years?***
- Cut pictures with scissors

121. Seizure affecting the lower limb, and the patient is conscious, most appropriate term is:
- focal

122. A case of epilepsy, motor delay and port-wire hemangioma, Dx?
- Sturge-Weber syndrome.

123. Wrong about primitive reflexes
- tonic neck reflex disappears at 12 months

124. Child with sudden right arm clonic movement and lack of response, description
- focal seizure with impaired awareness

125. Child with generalized seizure of 10 minutes, next step after ABCs
- Give midazolam

126. Child with first time generalized tonic-clonic seizure, normal examination and neurological development, most useful test
- Serum electrolytes

127. Child with developmental delay at age 3, has hypopigmented skin lesions and MRI shows subependymal calcification, most likely
- Tuberous sclerosis

128. Child with spastic diplegia and hx of prolonged jaundice, not a test to be used
- MRI

129. Age when child knows his name
- 2.5 years

130. One is true in dx of global developmental delay:
- ECG is not needed if there is no hx of seizures.

131. Mother put her baby gently on the examination table, baby smiles to you but made no voices, hands closed:
- 2 months

132. 2-year-old patient, says 100 words but not sentences, tip toes, has weakness in his left arm, can scribble when given a paper, was premature and was admitted to the nicu as a baby, most likely cause of his developmental delay:
- CP

133. Child at 10 months, cannot sit alone, has spastic lower limbs, had birth asphyxia. Which statement is wrong:
- His motor deficit will improve with time

134. Most common cause of language delay (otherwise normal)?
- Deafness

135. Wrong about simple febrile seizures
- Focal neurological deficits

136. Age of at which a child can see colours
- Birth (the doctor said babies see all colours and shapes at birth, Internet says 5 months)

Infectious

1. Which of the following vaccines is a live virus? (2022)
    a. MMR
    b. Dtap
    c. HBV
    d. IPV
    e. PCV

Answer: A

2. Contraindication for DTaP vaccine: (2022)
    a. Fever with 3 days
    b. Severe anaphylaxis within 48 hours from vaccine or its parts
    c. Intense crying for 3 hours
    d. Hypotonia and shock-like
    e. Seizure within 3 days

Answer: B

3. Which of the following vaccines is not given at 6 months: (2022)
    a. a. DTaP
    b. b. OPV
    c. c. HAV

d. d. Hib
e. e. HBV

Answer: C

4. Newborn, mother was hepB positive, what to give (2022)
    a. Only HepB vaccine immediately
    b. Only IVIG immediately
    c. IVIG immediately + HepB vaccine immediately with total 3 doses in 6 months)
    d. IVIG immediately + HepB vaccine immediately with total 2 doses in 6 months)

Answer: C

5. Wrong about varicella: (2022)
    a. the virus is characterized by latency
    b. reactivation in previously infected individuals leads to Herpes zoster
    c. outcome of chickenpox is worst in the newborn and immunocompromised individuals
    d. the disease is milder in adults
    e. chickenpox rash appears first on the trunk

Answer: D

6. All of the following are correct about diphtheria except:
    a. immunized individuals may carry the organism in their pharynx and may be contagious to others
    b. suspected cases should receive antitoxin as soon as possible without waiting for culture confirmation
    c. the diphtheria vaccine is a killed whole cell bacterial vaccine
    d. diphtheria vaccine prevents the disease in more than 90% of recipients
    e. Diphtheria vaccine administered to adults contains a smaller amount of antigen.

Answer: C

7. All of the following are correct about poliomyelitis, except:
    a. The neurological deficit is limited to the motor neurons
    b. there is little cross immunity between the three serotypes
    c. the virus infects humans only
    d. adults have a higher rate of paralysis than children
    e. oral polio vaccine is contraindicated after the age of six years

Answer: E

8. All of the following are correct about hepatitis A infections except:
    a. It is rarely acquired by blood transfusion
    b. Hepatitis A vaccine is contraindicated in children with chronic hepatitis
    c. Patients are most contagious in the pre-icteric phase
    d. Hepatitis A infection is more likely to be severe in adults
    e. Immune globulin is effective in preventing infection in the exposed household contacts

Answer: B

9. All of the following carry poor prognosis in acute bacterial meningitis, except:
    a. Very high protein in the CSF
    b. Seizure occurring on seventh day after treatment
    c. Focal neurological deficit
    d. Gram negative meningitis
    e. Development of brain abscess

Answer: A

10. All of the following are correct about polysaccharide vaccines except:
    a. they are effective when administered in the newborn period
    b. they do not induce long term immunity in infants
    c. they are best administered conjugated with a protein
    d. they can safely be administered to patients with hypogammaglobulinemia
    e. they are safe to adolescents and adults

Answer: A

11. All of the following are correct about chickenpox except:
    a. it is more severe in adults than children
    b. chickenpox vaccine is contraindicated after the age of seven years
    c. chickenpox vaccine is effective in preventing infection if administered within four days of exposure
    d. chickenpox infection in pregnancy may be transmitted to the fetus
    e. acyclovir is effective in the treatment of chickenpox encephalitis

Answer: B

12. All of the following are correct about meningococcal infection except:
    a. immunity is type specific
    b. the organism is carried in the nasopharynx of less than 5% of the population
    c. rifampicin is the drug of choice for treatment of meningococcal infections
    d. it is more severe in patients with complement deficiency
    e. patients with meningococcemia have a worse outcome than those with meningitis

Answer: C

13. All of the following are correct about acute bacterial meningitis except:
    a. the disease is most common in the first five years of life
    b. papilledema is frequently seen at presentation
    c. convulsions in the first four days do not affect ultimate prognosis
    d. the current empiric antibiotic therapy should include third generation cephalosporin and vancomycin
    e. to be effective dexamethasone should be administered within four hours of giving the antibiotics

Answer: B

14. All of the following are correct about Hemophilus influenza type b (HIB) except:
    a. it is the most common cause of epiglottitis
    b. HIB meningitis is preventable by vaccination
    c. Otitis media is most commonly associated with non-typable Hemophilus influenza
    d. HIB vaccine is composed of the outer membrane protein
    e. Hemophilus type b vaccine is not indicated after the age of 5 years

Answer: D

15. All of the following are correct about pneumococcal vaccine EXCEPT:
    a. pneumococcal vaccine is contraindicated before the age of six weeks
    b. only the conjugated vaccine is indicated in infants less than one year of age
    c. conjugated vaccines prevent the nasopharyngeal carriage of pneumococcus
    d. pneumococcal vaccine is contraindicated in pregnancy
    e. pneumococcal meningitis is the most common of acute bacterial meningitis in all age groups after the newborn period

Answer: D

16. All of the following are correct about Hemophilus influenzas (H flu) EXCEPT:
    a. Anticapsular antibodies are protective
    b. H. flu type b is a common cause of otitis media
    c. H flu vaccine is contraindicated before the age of six weeks
    d. H flu b vaccine is not needed in children older than five years
    e. Ceftriaxone is the drug of choice for h flu b meningitis

Answer: B

17. All of the following are correct about streptococcus pneumonia EXCEPT:
    a. vancomycin is the drug of choice for treatment of penicillin resistant pneumococci
    b. only a few serotypes are implicated in invasive disease
    c. streptococcus pneumonia is the most common cause of occult bacteremia in children in Jordan

d. contacts of pneumococcal meningitis do not need antibiotic prophylaxis
e. pneumococcal vaccine is contraindicated after the age of five years.

Answer: E

18. All of the following are correct about Pertussis EXCEPT?
    a. Bacteremia frequently occurs
    b. pertussis vaccine is indicated for pregnant women in order to prevent pertussis in the newborn
    c. acellular pertussis vaccine is less effective than whole cell vaccine in long term protection
    d. pertussis vaccine is contraindicated in patients with progressive CNS disease
    e. vaccinating contacts of premature infants is indicated to protect them from pertussis

    Answer: A

19. All of the following are correct about rotavirus vaccine EXCEPT?
    a. it is contraindicated for children after the age of eight months
    b. it prevents severe dehydration but may not be totally protective from rotavirus infection
    c. Rotavirus is not transmitted from one person to another
    d. it is contraindicated in siblings of patients with leukemia
    e. It is contraindicated in pregnancy

    Answer: C+D

    (**Note:** *Both C and D are incorrect. Rotavirus is highly contagious and it Is not contraindicated in siblings of patients with leukemia)*

20. A one-year-old child is hospitalized with fever and cough of one day duration. One day after admission the laboratory reports the growth of gram-negative pleomorphic coccobacilli in the blood stream. You suspect Hemophilus influenza (HIB). All of the following are correct about this infection EXCEPT?
    a. H flu b is very rare in children who are fully immunized to Hemophilus
    b. IF HIB is confirmed, all contacts of this patient regardless of age should receive rifampicin prophylaxis if there are any unvaccinated siblings who are less than four years of age
    c. HIB vaccine is not effective in children before the age of six weeks
    d. HIB vaccine prevents the carriage of Hemophilus influenza B in the nasopharynx
    e. Beta-lactamase producing HIB can be treated with vancomycin

    Answer: E

21. A six-month-old infant is seen with fever and diarrhea. He was well till two days earlier when he developed high fever and started having severe vomiting followed by severe diarrhea. On examination he appeared listless and had sunken eyes with poor skin turgor.

His capillary refill time was 3 seconds. You suspect rotavirus diarrhea. All of the following are correct about this condition EXCEPT?

a. oral rotavirus vaccine is contraindicated after the age of 8 months
b. the first dose of rotavirus vaccine can be given as early as six weeks of age
c. the rotavirus vaccine is effective in decreasing the occurrence of severe diarrhea
d. dehydration is the most serious complication of rotavirus
e. patients are rarely contagious to others.

Answer: E

22. A four-year-old child is seen with fever and skin rash of twelve-hour duration. The child was well until one day earlier when he started complaining of fever and headache. The mother had difficulty waking up the child and took him to the emergency room. On examination he had fever of 39, was not fully arousable, and had a dark red non-blanching rash on the trunk. You suspect meningococcemia. All of the following about this condition are correct EXCEPT?
    a. all contacts regardless of age should receive rifampin prophylaxis
    b. the only safe antibiotic to be used for prophylaxis in pregnant women is ceftriaxone
    c. the risk to health care workers who are not in close contact with the patient is very small
    d. vancomycin is the drug of choice for treatment of penicillin resistant meningococci
    e. the presence of a low platelet count is a bad prognostic sign

    Answer: D

23. A one-year-old infant is admitted with fever and tachypnea. She was unwell for two days prior to admission with fever and cough which worsened on the day of admission. On examination she was tachypneic with retractions. CXR revealed right middle lobe pneumonia. All of the following about this condition is correct EXCEPT?
    a. Hemophilus influenza b is an uncommon cause of pneumonia in children less than two years of age in Jordan
    b. The pure polysaccharide pneumococcal vaccine is effective in preventing pneumococcal infections in infants less than two years of age
    c. Vancomycin is the recommended treatment for both penicillin resistant pneumococci and MRSA
    d. pneumococcal vaccine protects against most serotypes leading to invasive disease
    e. Empyema is an important complication of pneumococcal pneumonia

    Answer: B

24. The only absolute contraindication to subsequent administrations of acellular pertussis vaccine is:
    a. History of anaphylaxis to egg or egg proteins
    b. Collapse or shock-like state within 2 days of pertussis vaccination
    c. Persistent, inconsolable cry lasting 3 hours or longer within 2 days of pertussis vaccination

d. An anaphylactic reaction to a previous dose of whole-cell pertussis vaccine
e. Convulsions with or without fever within 3 days of pertussis vaccination

Answer: D

25. Patient groups that should be targeted for annual influenza vaccination include all of the following EXCEPT:
    a. Persons aged 65 year and older
    b. Persons with cardiovascular disease
    c. Otherwise healthy children with asthma
    d. Women who will be in the second or third trimester of pregnancy during influenza season
    e. Healthy adults between 18-25 years

Answer: E

26. According to the national vaccination schedule in Jordan, Rota vaccine is given at:
    a. Birth, 2 and 4 months
    b. 2,3, and 4 months
    c. 1,2, and 3 months
    d. 4,6 and 8 months
    e. Birth, 1 and 2 months

Answer: B

27. A 10-year-old girl is brought to the ER by her mother complaining of fever, headache and photophobia. On physical examination she is febrile, ill-looking, has positive meningeal signs and weakness on the left side of her body. Papilledema was identified on careful eye exam. The most appropriate next step to do for this patient is to:
    a. Administer the first doses of antibiotics as soon as possible
    b. Arrange for an emergency room CT scan to rule out increase intracranial pressure
    c. Administering intravenous fluid boluses to restore the blood volume
    d. Plan for MRI as inpatient to rule out intracranial mass
    e. Re-evaluate the patient examination in 2 hours under close observation in the ER

Answer: A

28. The diagnostic test of choice for aseptic meningitis caused by the Enterovirus group is:
    a. ELISA
    b. Enterovirus-specific antibodies
    c. PCR
    d. Viral culture
    e. Western blot test

Answer: C

29. All of the following vaccines are live attenuated EXCEPT:
    a. Measles Mumps Rubella vaccine
    b. Oral Polio Vaccine
    c. BCG vaccine
    d. Hepatitis A vaccine
    e. Varicella vaccine

Answer: D

30. A two-year-old is brought to the emergency room by her mother who states that she has been looking very tired and not well since this morning. She has history of fever on and off for the last three days. Her vital signs are: Temp 39.0, HR 150, RR 20, BP 80/50, SPO2 97% on room air. All the following are important in her initial evaluation, EXCEPT:
    a. Obtaining her Capillary refill time
    b. Obtaining her Blood glucose
    c. Obtaining an arterial blood gas
    d. Giving her a fluid bolus
    e. Giving her a dose of Ceftriaxone

Answer: C

31. All of the following regarding Neisseria meningitides are true, EXCEPT:
    a. Gram negative diplococcus
    b. May cause adrenal hemorrhage
    c. Aminoglycosides is the treatment of choice
    d. The most common clinical manifestation is meningitis
    e. Antibiotic prophylaxis is necessary to be given for household contacts of meningitis patients.

Answer: C

32. A 7-year-old female patient presented with fever, purpuric rash, and decreased level of consciousness. Which one of the following regarding Neisseria meningitides infection is TRUE?
    a. Gram positive pleomorphic organism
    b. May cause adrenal hemorrhage
    c. Aminoglycosides is the treatment of choice
    d. Meningitis is a rare manifestation
    e. Antibiotic prophylaxis is not given for household contacts if they are younger than 5 years old

Answer: B

33. One of the following is an absolute contraindication for further pertussis vaccination:
    a. Prolonged (more than 3 hours) inconsolable crying within 48 hours of the previous dose

b. Fever 40.5 or higher within 48 hours of the previous dose?
c. Encephalopathy within 7 days of the previous dose
d. Febrile seizures within 48 hours of the previous dose
e. Hypotonic hyporesponsive episode with the previous dose

Answer: C

34. A mother brings her 18-month-old child for routine checkup and vaccination, she tells you that his older brother is currently being treated for leukemia, you are counseling her regarding vaccinating her 18-month-old child; you explain that he can receive all of the following vaccines EXCEPT:
    a. Pertussis Vaccine
    b. Tetanus vaccine
    c. Measles Mumps Rubella vaccine
    d. Diphtheria vaccine
    e. Oral polio vaccine

Answer: E

35. All of the following vaccines are routinely administered in the Jordanian program of immunization, **except**:
    a. Hepatitis B vaccine
    b. Varicella vaccine (chicken pox)
    c. Inactivated polio vaccine
    d. Mumps vaccine
    e. Oral polio vaccine

Answer: B

36. All of the following are correct about diphtheria **EXCEPT**.
    A. Diphtheria vaccine is composed of a protein antigen.
    B. Diphtheria vaccine content in adults is smaller than that for children.
    C. The vaccine has been associated with a significant number of cases of encephalopathy.
    D. The vaccine should be administered to patients who recovered from diphtheria.
    E. Diphtheria vaccine can be administered in combination with other antigens.

Answer: C

37. All of the following are correct about tetanus **EXCEPT?**
    A. neonatal tetanus maybe prevented by maternal immunization.
    B. tetanus vaccine is contraindicated in immune compromised individuals.
    C. patients with tetanus are not contagious to others.
    D. tetanus vaccine content for infants and adults is the same.
    E. tetanus vaccine is composed of the inactivated tetanus toxin only.

Answer: B

38. All of the following are correct about HIB **EXCEPT**?
    A. it is easily transmitted by droplets.
    B. HIB vaccine is contraindicated in adults.
    C. HIB meningitis is easily treated by ceftriaxone.
    D. HIB meningitis has decreased in incidence in Jordan.
    E. Rifampin prophylaxis should be offered to contacts of patients if there are unvaccinated children less than four years of age in the household.

Answer: B

39. All of the following are correct about polio **EXCEPT**.
    A. patients are contagious by the fecal oral route.
    B. most infections are subclinical.
    C. oral polio vaccine is safe in the newborn.
    D. OPV is the recommended vaccine in outbreaks.
    E. IPV is contraindicated after the age of 18 years.

Answer: E

40. All of the following are correct about measles **EXCEPT**?
    A. The measles prodrome is an essential part of the infection.
    B. Measles is contagious by the respiratory route.
    C. measles vaccine is contraindicated after the age of 25 years.
    D. measles vaccine can be administered to patients on inhaled steroids.
    E. measles infection is most serious in malnourished and very young children.

Answer: C

41. All of the following are correct about rotavirus **EXCEPT.**
    A. rotavirus vaccine is contraindicated in children older than eight months of age.
    B. rotavirus vaccine is a live attenuated vaccine.
    C. rotavirus vaccine can be administered to children in day care.
    D. rotavirus vaccine can be administered to children with a history of intussusception.
    E. rotavirus vaccine is effective in preventing severe diarrhea.

Answer: D

42. All of the following are correct about hepatitis b EXCEPT.
    A. the vaccine is composed of inactivated core antigen only.
    B. the vaccine can be safely administered to the newborn.
    C. hepatitis b virus is highly infectious and is stable in the environment.

D. hepatitis b infection in infancy is usually subclinical.
E. the chronic carrier state is associated with hepatocellular carcinoma.

Answer: A

43. Regarding neonatal sepsis all are true **EXCEPT:**
    A. early sepsis is defined as sepsis in the first 72 hours of life.
    B. coagulase negative staph causes early sepsis.
    C. Ampicillin and an Aminoglycoside is the empirical treatment for early sepsis.
    D. Neonatal sepsis has a high mortality rate.
    E. Gram negative sepsis with meningitis should be treated for at least three weeks.

    Answer: B

44. Infant botulism can be prevented by **not giving** one of the following to infants:
    A. vaccines
    B. intramuscular injections
    C. grapefruit juice
    D. honey
    E. mushroom

    Answer: D

45. All of the following are correct about pneumococcal infections **except:**
    A. The polysaccharide capsule determines the invasiveness of the bacterium.
    B. The current vaccines protect against the most common serotypes.
    C. Pneumococcal vaccine is contraindicated in pregnant women.
    D. Penicillin resistant pneumococcal meningitis should be treated with Vancomycin.
    E. Patients with pneumococcal meningitis should receive steroids in the first two days of therapy.

    Answer: C

46. All of the following are the most appropriate post-exposure measures when administered early after exposure **except:**
    A. Hepatitis A and hepatitis A vaccine.
    B. Tetanus and tetanus immune globulin
    C. Chickenpox and chickenpox vaccine
    D. Measles and immune serum globulin
    E. Diphtheria and antidiphtheric antiserum

    Answer: E

47. A one-year-old child has diarrhea. He also had a fever from vomiting one day earlier. The diarrhea is watery, and he attends day care. You suspect rotavirus. all of the following are correct **except**
    A. Dehydration is the major complication of rotavirus infection.
    B. Rotavirus is not easily transmitted among children.
    C. Rotavirus vaccine cannot be administered after the age of 8 months.
    D. Rotavirus causes osmotic diarrhea.
    E. There are few or no polymorphonuclear cells in the stool of infected children.

    Answer: B

48. All of the following are correct about mumps **except**
    A. It is transmitted by droplets.
    B. Aseptic meningitis is commonly seen.
    C. Orchitis is less common in children than adolescents.
    D. The mumps vaccine is contraindicated in post pubertal males.
    E. Antiviral therapy is of no value in mumps meningitis.

    Answer: D

49. All of the following are correct about measles **except**
    A. Immunity following disease is lifelong.
    B. Measles vaccine is contraindicated in patients on inhaled steroids.
    C. Measles vaccine is contraindicated in pregnant women.
    D. The disease is highly contagious.
    E. Vitamin A is effective in decreasing the complications of measles.

    Answer: B

50. All of the following are correct about rotavirus infection **except:**
    A. The virus is very contagious.
    B. Immunity is not lifelong.
    C. Most people are infected before the age of three years.
    D. Rotavirus vaccines are contraindicated in children with severe combined immune deficiency.
    E. It is a rare cause of nosocomial diarrhea.

    Answer: E

51. A five-month-old infant is seen with fever and seizure. He had been well till two days earlier when he developed a fever and irritability. On the day of admission, he had a generalized seizure. On examination he appeared sick looking, you suspect meningitis. All of the following are correct about this condition **except**
    A. The most likely organism in this age group is group b beta hemolytic streptococcus.

B. The patient should receive Ceftriaxone and Vancomycin

C. Steroids should be administered in the first four hours in order to prevent nerve deafness.

D. Seizures on the first day do not impact on prognosis.

E. A sodium of 125 meq/L is associated with a more severe illness.

Answer: A

52. A ten-year-old child is brought with a wound that he sustained while playing. When examined the wound was three centimeters wide with some scratches and dirt on the abraded skin. The child had received no vaccines after the age of one year. All of the following are correct about the management of this child **except:**

A. He should receive tetanus immune globulin.

B. He should receive tetanus vaccine.

C. He should have the wound cleaned and take antibiotics.

D. Immunity to tetanus vaccine is not lifelong.

E. It is preferred that he receives tetanus vaccine combined with diphtheria toxoid if available.

Answer: ?

53. All of the following are correct about diphtheria **except:**

A. Anti-diphtheric antiserum is indicated as soon as possible after diagnosis.

B. Diphtheria vaccine is contraindicated in the immune compromised host.

C. Diphtheria vaccine dose should be decreased for children older than seven years of age.

D. Myocarditis is the most serious complication of diphtheria.

E. Diphtheria toxin production is phage induced.

Answer: B

54. All of the following are correct about Hemophilus Influenza b (HIB) **except:**

A. It is a very important cause of meningitis in children less than four years of age if there is no vaccination.

B. It is rarely carried in the nasopharynx of normal children.

C. Rifampin prophylaxis is necessary for young contacts of a meningitis case.

D. Hemophilus Influenza b is a very important cause of neonatal sepsis.

E. HIB vaccine is contraindicated before the age of six weeks.

Answer: D

55. All of the following are correct about pertussis **except:**

A. It is highly contagious.

B. Most cases are asymptomatic.

C. Azithromycin is the preferred drug in infants less than one month of age.
D. Patients have lymphocytosis.
E. Bacteremia rarely occurs.

Answer: B

56. All of the following are correct about meningococcal infections **except:**
    A. Meningococcemia has a worse outcome than meningococcal meningitis.
    B. A low platelet count is associated with a worse outcome.
    C. Contacts should receive rifampin prophylaxis regardless of age.
    D. Meningococcal infections are most severe in patients with complement deficiency.
    E. Ceftriaxone is effective in the treatment of meningitis.

Answer: C

57. All of the following hospitalized patients require some form of isolation, **except**:
    a. 4-month-old child who has pertussis.
    b. 6-month-old child who has pulmonary tuberculosis.
    c. 8-month-old child who has rotavirus gastroenteritis.
    d. 18-month-old child who has pneumococcal bacteremia.
    e. 2-year-old child who has measles.

Answer: D

58. Which of the following statements is correct about meningococcal infections? **(One is correct)**
    a. It is acquired mainly through blood and blood product transfusion.
    b. Patients with meningococcemia have a better outcome than patients with meningococcal meningitis.
    c. Rifampin prophylaxis to household members is indicated for all contacts regardless of age.
    d. There is no reported resistance to penicillin.
    e. Polysaccharide meningococcal vaccine is effective in children as young as three months of age.

Answer: C

59. Which of the following statements is correct about Rotavirus? **(Choose one correct)**
    a. Rotaviral vaccine is recommended to children between 8-12 months of age.
    b. Rotavirus is a common cause of hemolytic uremic syndrome in infants.
    c. Rotavirus causes diarrhea mainly in school age children.
    d. Rotavirus vaccine is a live attenuated vaccine.

e. Infections with Rotavirus results in immunity against all serotypes

Answer: D

60. Which of the following statements is correct about mumps? **(Choose one correct)**
    a. Infection is more severe in younger children than older children.
    b. The most common complication is aseptic meningitis.
    c. Orchitis is most common in pre-pubertal boys.
    d. Mumps vaccine is contraindicated in patients with thalassemia major.
    e. Mumps vaccine should not be given to adults.

Answer: B

61. Which of the following statements is correct about poliovirus infections? **(Choose one correct)**
    a. Most infected children are symptomatic.
    b. It usually results in reversible paralysis.
    c. Oral poliovaccine should not be given to contacts of patients with leukemia.
    d. It causes paralysis through infection of the brain (encephalitis)
    e. The first dose of vaccine should be given at age of 9 months.

Answer: C

62. All of the following statements about rubella are correct, **except**:
    a. There is only one serotype.
    b. Rubella vaccine can be given to adults.
    c. Only primary maternal infection leads to fetal infection.
    d. Rubella fetal infection is most common if the mother is infected during the first trimester of pregnancy.
    e. Rubella is almost always clinically apparent.

Answer: E

63. A true statement regarding rubella immunization is: **(Choose one correct)**
    a. Administration of a second dose of rubella vaccine is advised.
    b. Patients with leukemia should receive a booster dose of Rubella vaccine.
    c. Rubella vaccine is effective following recent treatment with immune globulins.
    d. Rubella vaccine should not be administered simultaneously with other vaccines.
    e. The initial dose of rubella vaccine should be given before 12 months of age.

Answer: A

64. All of the following are correct about rubella EXCEPT:
    a. it is contagious by the droplet route
    b. the maximal risk to the fetus is in the first two months of pregnancy
    c. Rubella vaccine is contraindicated in patients on high dose steroids

d. The congenital rubella syndrome is characterized by macrocephaly with intracranial calcifications
e. The rash typically starts on the face

Answer: D

65. A tuberculin skin test is placed on a 15-month-old child. Of the following, the factor that is **most** likely to affect the test result is: **(Choose one correct)**
    a. Administration of measles-mumps-rubella vaccine 8 weeks ago
    b. An uncle living in the home who has human immunodeficiency virus infection.
    c. Concomitant administration of Haemophilus influenzae type b vaccine
    d. History of receiving bacillus Calmette-Guerin (BCG) vaccine at birth
    e. Oral corticosteroid therapy administered 6 months ago.

    Answer: D

66. All of the following are correct about diphtheria, **except**:
    a. It is carried only by humans.
    b. Diphtheria vaccine can be given with other vaccines.
    c. Only toxigenic strains produce disease.
    d. Diphtheria vaccine is made of polysaccharide.
    e. Immunized individuals may carry the organism in the nasopharynx.

    Answer: D

67. All of the following are correct about pertussis **except:**
    A. It is most severe in the first six months of life.
    B. Adults are a common source of infection in newborn infants.
    C. Pertussis vaccine is contraindicated in children on large dose steroids.
    D. Pertussis is easily transmitted between individuals.
    E. Pertussis antitoxin has been proved to be of benefit in the treatment of infants with pertussis.

    Answer: C

68. All of the following are correct about pneumococci **except:**
    A. Immunity is type specific.
    B. Penicillin resistance is increased with excessive use of antibiotics.
    C. Pneumococci are the most common cause of meningitis in the newborn.
    D. Pneumococci are the most common cause of meningitis in patients with basal skull fracture.
    E. Patients with asplenia are at risk of overwhelming sepsis with pneumococci.

    Answer: C

69. All of the following bacteria are most often associated with acute neonatal meningitis/sepsis **except:**
    A. Escherichia coli
    B. Klebsiella sp
    C. Group B streptococcus
    D. Neisseria meningitides
    E. Listeria monocytogenes

Answer: D

70. Lumbar puncture is clearly indicated in first febrile convulsion at which one of the following age groups? **(One is correct)**
    a. 6-12 months
    b. 18-24 months
    c. 30-36 months
    d. 40-46 months
    e. 60-72 months

Answer: A

71. All of the following are correct about hepatitis A infection, except:
    a. Hepatitis A vaccine is composed of killed virus
    b. Hepatitis A vaccine is contraindicated after the age of twelve years
    c. Elevated liver enzymes may occur in the absence of hyperbilirubinemia
    d. Children are frequently the source of infection to their adult contacts
    e. The disease is acquired from humans only

Answer: B

72. Hepatitis A, which is wrong:
    a) recommended to give vaccine after the age of 12 months.
    b) usually asymptomatic in those less than 3 months.
    c) you can get it from cat feces.

Answer: C

73. All of the following are correct about polio myelitis **except**
    A. The overwhelming majority of infections are asymptomatic.
    B. Immunity to polio is type specific.
    C. The chronic carrier state has been described in patients with hypogammaglobulinemia.
    D. Polio may be transmitted from cats to man.
    E. Polio affects the motor neurons only.

Answer: D

74. Not a live vaccine:
    A. MMR
    B. Rota
    C. Hep A

Answer: C

75. What is the most common side effect of DTaP vaccine?
    a) Pain and induration at the site of injection
    b) Anaphylaxis reaction
    c) Seizure
    d) Fever

Answer: A

76. Which is correct regarding mumps:
    a) more severe in young children than older children.
    b) most common complication is asepetic meningitis.
    c) the vaccine can't be given to thalassemic patients.

Answer: B

77. All of the following are correct about salmonella infections **EXCEPT**.
    A. S. typhi may be acquired from contact with dogs.
    B. S. enteritides maybe transmitted from contaminated eggs and poultry.
    C. Infants develop bacteremia more frequently than older children.
    D. antibiotic treatment of salmonella gastroenteritis is not necessary in older children and adults.
    E. invasive salmonella infections including osteomyelitis is more common in patients with sickle cell disease.

Answer: A

78. A 20-year-old primigravida has a normal prenatal course until ultrasound at 19 weeks gestation reveals an enlarged fetal heart and swelling of soft tissues. The infant is born prematurely at 36 weeks gestation. On newborn examination the infant is severely hydropic. Laboratory studies show oxygen saturation >90%, severe anemia, but no hyperbilirubinemia. The most likely cause for the infant's findings is. (**One is correct**)
    A. Tetralogy of Fallot
    B. Parvovirus infection
    C. Rh antigen incompatibility
    D. Down Syndrome
    E. Preeclampsia toxemia

Answer: B

79. Child presented with irritability, fever 103.4 & obtundation. You did an LP which revealed increased WBC with lymphocyte predominance, which of the following investigation is correct:
    A. Bacterial culture
    B. PCR to diagnose HSV
    C. Viral culture of CSF
    D. Viral blood culture

Answer: C

80. M.c.c of neonatal sepsis at term:
    a. S. Pneumonia
    b. Staph aureus
    c. Lestieria
    d. S. Agalactiae

Answer: D

81. All of the following are correct about poliomyelitis except:
    A.The disease is transmitted by the fecal oral route
    B. Paralysis involves the major muscle groups
    C. Most patients have asymptomatic infection
    D.The paralysis is usually symmetrical
    E. The virus infects the anterior horn cell only

Answer: D

82. All of the following are correct about tetanus except
    a. no recognizable entry wound maybe found in a minority of cases
    b. a short incubation period is associated with severe illness
    c. maternal immunization during pregnancy prevents neonatal tetanus
    d. tetanus is treated with antitoxin and penicillin
    e. patients should be placed on strict isolation in order to prevent infection to others

Answer: E

83. All of the following are correct about tetanus except:
    a. The disease is toxin mediated
    b. Patients recovering from tetanus should receive the tetanus vaccine
    c. Bacteremia does not occur
    d. Patients who received more than three doses of tetanus vaccine do not require tetanus immune globulin following clean wounds

e. anti tetanus antibodies do not cross the placenta

Answer: E

84. All of the following are correct about measles EXCEPT?
    a. patients are contagious by contact only
    b. measles vaccine should be administered to all susceptible individuals regardless of age
    c. measles vaccine is contraindicated in patients undergoing chemotherapy
    d. encephalitis may occur in up to one in one thousand infants
    e. vitamin A is indicated in all patients in the acute phase

Answer: A

OTHER COLLECTED PAST PAPER QUESTIONS:

85. Contraindication to vaccine?
    - Severe anaphylactic shock

86. Wrong about chickenpox:
    - Milder in adults

87. Which of the following is contraindicated if a sibling of the child has ALL and is on chemotherapy?
    - OPV vaccine

88. A 6-year-old child comes to Jordan and had no vaccines in his country, which of the following vaccines is not indicated?
    - Hib vaccine *(The vaccine is not needed after 5 years of age).*

89. Which of the following is not contraindicated in severe T-cell immunodeficiency? ***
    - Hepatitis A vaccine (killed virus vaccine).

90. Varicella Zoster vaccine is indicated in all of the following except
    - A child with ITP who has been off IVIG for only one month *(There must be a 9-month period after stopping IVIG to give live-attenuated vaccines).*

91. True about meningitis
    - Hib is a rare cause of meningitis in Jordan

92. Pseudomonas infection is not suspected in
    - Community acquired meningitis

93. Wrong about Neisseria meningitis
    - Vancomycin is drug of choice

94. Not a cause of neonatal sepsis/meningitis
    - Neisseria meningitis

95. Vaccine not in Jordanian system
    - Hepatitis A

96. Follow up after recovery from meningitis
    - Hearing assessment

97. Not contraindication for MMR vaccine:
    - Previous febrile seizure

98. A 1-year-old child came to take the MMR vaccine. What other vaccine can he take that is not a part of the Jordanian vaccination program?
    - Varicella

99. Not in Jordanian vaccine programme
    - Pneumococcal vaccine

100. A contraindication of a vaccine
    - Anaphylactic reaction to that vaccine

101. Not an adverse effect of MMR
    - Encephalopathy

102. Vancomycin is added to empiric therapy of post-neonatal meningitis to cover
    - Resistant S pneumoniae

103. Empirical therapy for neonatal sepsis at 2 days of age***
    - Ampicillin and gentamycin

104. OPV is superior to IPV in all except?
    - Less risk of paralysis

105. Not to be given < 1 year?
    - MMR

106. HiB schedule?
    - 2,3, and 4 months

107. Wrong about pneumococcal pneumonia***
    - Purified capsular polysaccharides vaccine can be used for children under 2 years

108. A vaccine that can be given to a newborn:
- Hep B *(recall it is given to newborns of HBsAg positive mothers along with HbIg)*

109. Vaccine not given at 4 months:
- Varicella

110. Not true about OPV:
- Not given to patients taking inhaled corticosteroids

111. Wrong about varicella vaccination:
- Safe to give in pregnancy

112. Wrong about tetanus:
- Whole cell bacterium vaccination

113. Which is not true about OPV in comparasion with IPV:
- can cause polio in 1/1000 vaccinated children *(incidence of paralytic polio post vaccination is much less)*

114. What vaccine is commonly associated with seizures?
- MMR

115. Wrong about measles?
- No long term complications

116. Wrong about hepatitis A
- Is appropriate for all ages

Nephrology

1. 5-year-old child with moderate dehydration, his weight is 20 Kgs, what would be his total fluid requirement for the next 24 hrs? (2022) ***
    a. 2500 ml
    b. 2900 ml
    c. 1500 ml
    d. 1000 ml
    e. 3500 ml

Answer: B

2. Clinical scenario with first episode of UTI, which is wrong about dysuria? (2022)
    a. Treatment with ceftriaxone for at least 7 days for all babies
    b. Pyuria is not specific for dysuria
    c. Nitrate is specific for dysuria
    d. Renal ultrasound + MCUG is done to all babies with first episode of dysuria

    Answer: D

3. In hypotonic dehydration presentation, which of the following complications do we fear the most? (2022)
    a. Cerebral thrombosis
    b. Cerebral hemorrhage
    c. Cerebral edema
    d. Central pontine demyelination

    Answer: C

4. All of the following are causes of hypokalemia except: (2022)
    a. RTA
    b. Addison
    c. Alkalosis

    Answer: B

5. Nephrotic syndrome easy case, causes all of the following except: (2022)
    a. Scrotal edema
    b. Hyperlipidemia
    c. Increased bleeding tendency
    d. Spontaneous Bacterial Peritonitis
    e. Use of diuretics causes acute renal failure

    Answer: C

6. A 2-year-old boy presented with high grade fever, persistent vomiting and loin pain. There is no history of previous episodes. You suspect pyelonephritis. The empirical choice of therapy is?
    a. Oral cefuroxime
    b. Oral amoxicillin-clavulanic acid
    c. IV amikacin
    d. IV imipenem
    e. IV ceftriaxone

    Answer: E

7. A 7-month-old boy who weighs 15 kg presented to the emergency department with protracted vomiting. On exam he was tachycardic and was capillary refill time was 4 seconds. The first step of management is:
    a. Fluid bolus of 150 ml normal saline
    b. Fluid bolus of 300 ml normal saline
    c. Fluid bolus of 150 ml GS0.45%
    d. Fluid bolus of 300 ml GS0.45%
    e. Fluid bolus of 300 ml ringer lactate

Answer: B

8. All of the following statements are correct regarding urinary tract infections (UTI) in children, except:
    a. Negative urinalysis rules out UTI in children below 2 years of age
    b. Children with multiple UTI's should be evaluated by imaging studies
    c. Infants younger than 3 months of age with UTI should be admitted for intravenous antibiotics
    d. Neonatal boys are more prone to UTI than girls
    e. Well-appearing children older than 3 months of age with pyelonephritis may be treated on outpatient basis

Answer: A

9. Which of the following characterizes asymptomatic bacteriuria? (one is correct)
    a. Hematuria and pyuria are present
    b. Most commonly caused be pseudomonas aeruginosa
    c. Antibiotic treatment is indicated
    d. Can be a normal finding in children with neurogenic bladder
    e. Increased risk of scarring if antibiotic prophylaxis is not used

Answer: D

10. What is the appropriate 24-hour fluid maintenance for a 16-month-old infant with a body weight of 12 Kg?
    a. 240 mL
    b. 600 mL
    c. 800 mL
    d. 1100 mL
    e. 1500 mL

Answer: D

11. All of the following are causes of hyponatremia with low urinary sodium, except:
    a. Gastroenteritis
    b. Nephrotic syndrome
    c. Congestive heart failure
    d. Syndrome of inappropriate anti-diuretic hormone
    e. Third space losses

Answer: D

12. A mother brings her febrile one year old child with gastroenteritis to the emergency room. His weight was 7 kg; he had sunken eyes, heart rate 165 per minute, capillary refill 4 sec. The next step is:
    a. Allow the mother a trial of oral rehydration solution before initiating intravenous fluid
    b. Give a shot of ceftriaxone before obtaining a blood culture
    c. Send a stool sample for analysis
    d. Place the child on 10 % dehydration intravenous formula over 24 hours.
    e. Give the child 140 ml of normal saline

Answer: A

13. All of the following are true statements about urinary tract infection (UTI) in children, except: ***
    a. 5 % of febrile infants have UTI
    b. Chronic constipation is a risk factor for recurrent UTI
    c. Prolonged jaundice can be a presentation of UTI in infants
    d. Asymptomatic bacteriuria is treated with a 5-day course of oral antibiotics
    e. Highest incidence of UTI is in the first year of life

Answer: D

14. Of the following, which is the most specific test for urinary tract infection (UTI) by dipstick? ***
    a. Leukocyte esterase and blood
    b. Nitrite and sugar
    c. Protein and blood
    d. Leukocyte esterase and nitrite
    e. Protein and leukocyte esterase

Answer: D

15. Which one of the following statements regarding urine culture for the diagnosis of urinary tract infections is correct?
    a. Clean catch urine sample can be used in all children

b. Urethral catheterization or suprapubic aspiration should be performed in infants and newborns
c. Urethral catheterization has a lower rate of contamination compared to suprapubic aspiration
d. Periurethral adhesive bag can be used in boys but not girls because of contamination risk
e. Any bacterial growth from a catheterized sample is considered significant

Answer: B

16. All of the following are causes of hyponatremia EXCEPT?
    a. Gastroenteritis
    b. Cystic fibrosis
    c. Diabetes insipidus
    d. Diuretics
    e. Nephrotic syndrome

Answer: C

17. All of the following are presentations of hypernatremic dehydration EXCEPT?
    a. Doughy skin
    b. Profound signs and symptoms of dehydration
    c. Irritability
    d. Fever
    e. Brain hemorrhage

Answer: B

18. A 1-year-old child presented with 6 episodes of vomiting and diarrhea. On exam he was thirsty but had no signs of dehydration. He weighs 10 kg. The fluid requirement for him in 24 hours is?
    a. 1000 ml
    b. 2000 ml
    c. 1700 ml
    d. 1500 ml
    e. 700 ml

Answer: D

19. Diabetes insipidus can be associated with all of the following EXCEPT?
    a. high serum osmolarity
    b. low urine osmolarity
    c. hyponatremia

d. polyuria and polydipsia
e. normal serum glucose

Answer: C

20. All of the following statements are true regarding urinary tract infections EXCEPT?
    a. High grade fever and high CRP favor the diagnosis of pyelonephritis rather than cystitis
    b. Duration of treatment is from 7-14 days
    c. MCUG is not routinely indicated after the first UTI
    d. DMSA scan should be done during the first month
    e. Recurrent UTI lead to scarring and chronic kidney disease

Answer: D

21. A previously healthy 6-yr-old child presents to the emergency department with a 3-day history of malaise, poor oral intake, diarrhea, and decreased urine output. Physical examination reveals tachycardia, dry mucous membranes, and sunken eyes. Results of initial laboratory studies include BUN 65 mg/dL, potassium 5.5 mEq/L, bicarbonate 14 mEq/L, and serum creatinine 3.0 mg/dL. The most appropriate next step in treatment is to:
    a. Order a renal ultrasound study
    b. Administer Kayexalate 1 g/kg per rectum
    c. Run intravenous replacement fluid at rate to replace insensible losses plus urine output
    d. Give NaHCO3 1 mEq/kg IV to correct acidosis
    e. Administer normal saline 20 mL/kg bolus over 30 min

Answer: E

22. Which of the following tests is the current gold standard for diagnosing renal scarring?***
    a. Ultrasound examination
    b. Intravenous pyelography
    c. DMSA renal scan
    d. CT scan
    e. Radionuclear cystography (RNC)

Answer: C

23. A 3-years-old boy was admitted with bacterial meningitis. His results showed a Na of 126, spot urine sodium was 40 (high), and urine osmolarity was high. The first line of treatment of his hyponatremia is?
    a. Intravenous hypertonic saline

b. Oral salt supplements
c. Fluid restriction
d. Diuretics
e. Steroids

Answer: C

24. An infant presents with a weight of 8 kg and a 3-day history of diarrhea and vomiting. He appears severely dehydrated with decreased sensorium, sunken fontanelle, poor skin turgor, and decreased urine output. Which of the following closely estimates the fluid deficit in this child?
    a. 2000 -2500 ml
    b. 800-1000 ml
    c. 600-700 ml
    d. 400-500 ml
    e. 200-300 ml

Answer: B

25. A 15 kg toddler with group A coxsackievirus infection is refusing to drink. His serum potassium is normal. For maintenance of intravenous fluids, what concentration of KCL should be added?
    a. 5 meq KCL/L
    b. 7 meq KCL/L
    c. 20 meq KCL/L
    d. 40 meq KCL/L
    e. 50 meq KCL/L

Answer: C

26. You have been working with the pediatric resident on call and admitted a 6-week-old with recurrent vomiting. There is no history of fever or diarrhea. The infant is dehydrated and seems eager to take the bottle when offered to him. His birth weight was 3 kg and now he weighs 4 kg. As part of his work up the resident orders a blood test. From the following results which ONE will be most likely for your patient:
    a. PH 7.3, PaCO2 28 mmHg, HCO3 14meq/L , CL104 mEq/L, Na 136 mEq/L
    b. PH7.3, PaCO2 45 mmHg, HCO3 20meq/L , CL114 mEq/L, Na 140 meq/L
    c. PH7.4, PaCO2 40 mmHg, HCO3 22meq/L , CL 96 meq/L , Na 140 meq/L
    d. PH7.5, PaCO2 45 mmHg HCO3 28meq/L, CL 84 meq/L , Na 136 meq/L
    e. PH 7.5, PaCO2 28 mmHg, HCO3 20meq/L, CL 104 meq/L , Na 136 meq/L

Answer: D

27. Which of the following is a cause of hypovolemic hyponatremia?
    a. Psychogenic polydipsia
    b. Adrenal insufficiency
    c. SIADH
    d. Meningitis
    e. Nephrotic syndrome

Answer: B

28. A child presents to the emergency room with lethargy and headache. His labs showed a serum sodium of 122. His urinary sodium was high. On exam he had signs of volume depletion. Which one of the following diseases can explain this child's electrolyte imbalance?
    a. SIADH
    b. Liver cirrhosis
    c. Gastroenteritis
    d. Cerebral salt wasting
    e. Hypothyroidism

Answer: D

29. A 2-month-old baby presented to the emergency room with seizures. On examination he was dehydrated and lethargic. His serum Na was 123 mmol/L. All of the following conditions can explain the child's presentation EXCEPT:
    a. Liver disease
    b. Renal tubulopathies
    c. Diarrhea
    d. Decrease in feeding
    e. Adrenal insufficiency

Answer: A

30. Which of the following is the most specific test for urinary tract infection?
    a. Pyuria
    b. High C reactive protein
    c. Leukocytosis
    d. Positive leucocyte esterase
    e. Positive nitrite test

Answer: E

31. A three-year-old child has vomiting, diarrhea and abdominal pain for the last three days. On exam he was febrile, tachycardic, his capillary refill was 5 seconds. He had abdominal tenderness. Your FIRST important step is:

a. Give vasopressors
b. Give inotropes
c. Give antiemetic
d. Give intravenous fluids
e. Give steroids

Answer: D

32. A 6-year-old boy is having surgery the following day. His weight is 25 kg. The maintenance fluids for him over 24 hours would be: **(Choose one correct)**
    a. 2500 ml glucose saline 0.18%
    b. 1000 ml glucose saline 0.45 %
    c. 1625 ml glucose saline 0.18%
    d. 1250 ml glucose saline 0.18%
    e. 500 ml normal saline 0.9%

    Answer: C

33. A 2-year-old boy was presented with gastroenteritis. Physical examination shows delayed capillary refill and sunken eyes. His investigations showed Na of 123, K of 3.0, Cr of 1.0 mg/dl. His urine spot for Na was 5 meq/L (normal). All of the following statements about the child's condition are true, **except**:
    a. The child is at risk of having seizures.
    b. Fluid bolus is the first line of management.
    c. His renal failure is mostly prerenal.
    d. Metabolic alkalosis is expected to be seen in his blood gases.
    e. Slow correction of his hyponatremia is needed to avoid central pontine myelinolysis.

    Answer: D

34. A 6-year-old boy presents to E/R with gastroenteritis. On examination, he was moderately dehydrated. Na 126, HCO3 15, creatinine was mildly elevated. The most likely associated lab finding is:
    A. elevated Atrial natriuretic peptide
    B. Fractional excretion of sodium less than 1%
    C. urine osmolarity less than 300
    D. proteinuria and hematuria
    E. polyuria

    Answer: B

35. A two-month-old boy presented to E/R with hypoactivity. On examination he was dehydrated, serum Na was 120, urinary sodium was elevated. Which of the following most likely explains the child's condition?
    A. cystic fibrosis

B. SIADH
C. gastroenteritis
D. congenital adrenal hyperplasia
E. nephrotic syndrome

Answer: D

36. A 5-year-old boy presented to E/R with gastroenteritis. On examination he was hypotensive and had tachycardia, his weight 20 kg. His estimated fluid requirements for the next 24 hour would be:
    A. 1700
    B. 1500
    C. 3500
    D. 2500
    E. 3000

    Answer: C

37. Risk factors for recurrent urinary tract infections include all of the following **EXCEPT**?
    A. high grade Vesicoureteral reflux
    B. enuresis
    C. Obstructive uropathy
    D. constipation
    E. detrusor overactivity

    Answer: B

38. Voiding cystourethrography in a 9-month-old boy who has new-onset febrile urinary tract infection reveals grade II vesicoureteral reflux (VUR). The parents ask you about their son's prognosis. Of the following, you are most likely to explain that (**One is correct**)
    A. Approximately 80% of children who have newly diagnosed febrile urinary tract infections have VUR when tested.
    B. Once VUR is established, no follow-up radiologic testing is indicated.
    C. Males have a worse prognosis than females.
    D. Referral to urology for ureteral reimplantation is warranted.
    E. Unilateral grade II reflux has a high likelihood of resolution within 5 years of the diagnosis.

    Answer: E

39. A 4-year-old boy has nighttime bedwetting since the birth of his 2-month-old sister. Normal growth and development. Circumcised and normal findings on scrotal examination. Urinalysis of a specimen obtained via clean catch urination shows normal results. Of the following, the next best step in the management of this boy is to (**One is correct**)
    A. Begin imipramine therapy at bedtime.
    B. Obtain urine for culture and sensitivity.

C. Perform renal ultrasonography.

D. Reassure the mother that this is most likely a temporary regression.

E. Refer the boy for voiding cystourethrography.

Answer: D

40. A four -year-old female presents with an upper urinary tract infection. Of the following, the most appropriate study to complete this child's evaluation is (**One is correct**)

A. Abdominal computed tomography scan

B. Cystoscopy

C. Intravenous pyelography

D. MAG-3 renal scan with furosemide

E. Voiding cystourethrography

Answer: E

41. A 3-year-old child was admitted with gastroenteritis. His laboratory results showed a Na of 170. Which of the following is the best treatment for his hypernatremia? (Choose one correct)

a. Correct his deficit over 24 h using glucose saline 0.18%

b. Correct deficit over 24 h using glucose saline 0.45 %

c. Correct deficit over 48 h using glucose saline 0.18 %

d. Correct deficit over 48 h using glucose saline 0.45 %

e. Correct deficit over 48 h using glucose saline 0.9 %

Answer: D

42. A 2-year-old boy presents with seizures and was found to have sodium of 115. All of the following statements are true **except:**

A. Hypertonic saline 2.7 % can be used to raise the sodium level.

B. Sodium level should be raised by 20 mmol/day.

C. Urine sodium level helps us in reaching the diagnosis.

D. High urine osmolality points to extrarenal losses of sodium

E. Syndrome of Inappropriate ADH can be one of the differential diagnoses if the child was euvolemic.

Answer: B

43. A 2-year-old boy was found to have a serum sodium of 160. All of the following can be a cause of the patients' condition **except**:

A. Diabetes insipidus

B. Gastroenteritis

C. Hypodipsia

D. Cystic fibrosis

E. Excessive salt intake

Answer: D

44. A 6-week baby has a fever. A urine specimen grew E coli with a count of 2000.These findings would be definite evidence of urinary tract infection if the urine is (**One is correct**)
    A. Catheter sample
    B. Collected through a bag.
    C. First morning sample
    D. From suprapubic tap
    E. Clean catch sample

Table 14–3. Probability of UTIs based upon urine culture.

Collection	CFU	Probability of infection (%)
Suprapubic	Gram negative any Gram positive >1000	>99
Catheterization	$>10^5$ 10^{4-5} 10^{3-4} $<10^3$	95 Likely Repeat Unlikely
Clean catch		
Male	$>10^4$	Likely
Female	3 specimens: $>10^5$ 2 specimens: $>10^5$ 1 specimen: $>10^5$ 5×10^4–10^5 1–5 $\times$ 10^4 symptomatic 1–5 $\times$ 10^4 nonsymptomatic $<10^4$	95 90 80 Repeat Repeat Unlikely Unlikely

UTIs, urinary tract infections; CFU, colony-forming unit.

Answer: D

45. All of the following are true in the acute management of nephrotic syndrome **except:**
    A. Steroids
    B. No added salt diet
    C. Fluid restriction if hyponatremia
    D. Angiotensin converting enzyme inhibitor.
    E. Albumin and Lasix

Answer: D

46. A 4-year-old boy was diagnosed with nephrotic syndrome. Regarding this condition which of the following is the most appropriate?
    A. renal biopsy is needed to determine the treatment.
    B. relapse is expected to occur in less than 25 % of those who achieved remission.
    C. remission is expected in more than 90% of those who received steroids.
    D. tacrolimus is the treatment of choice for patients who don't respond to steroids.
    E. patients who relapse have the same prognosis as those who don't respond to steroids.

Answer: C

47. A 5-year-old boy is known case of nephrotic syndrome on steroids. He presented with generalized abdominal pain and fever, examination showed tenderness and guarding all over the abdomen. The most likely cause of his abdominal pain is **(one is correct)**
    A. Urinary tract infection.
    B. Spontaneous bacterial peritonitis
    C. Tonsillitis
    D. Hypovolemia
    E. Gastritis from steroids.

Answer: B

48. All of the following are risk factors for recurrent urinary tract infections **except**:
    a. Vasico-ureteric reflux (VUR) grade 5
    b. Constipation
    c. Antenatal hydronephrosis
    d. Labial adhesions
    e. Neurogenic bladder

Answer: C

49. Which intravenous fluid should be used during the first 24 hours after birth for a baby with no specific complications? **(One is correct)**
    a. 10% dextrose water with 10% sodium bicarbonate added.
    b. Lactate ringer's solution
    c. 10% dextrose in 1/4 normal saline
    d. 10% dextrose water
    e. 10% dextrose in 1/4 normal saline with 2mEq of KCl added to each 100ml.

Answer: D

50. All of the following laboratory abnormalities are classically expected in a child with nephrotic syndrome, **except**:
    a. Hypoalbuminemia
    b. Hyperlipidemia
    c. Hyponatremia
    d. High levels of urinary sodium
    e. Low levels of antithrombin 3

Answer: D

51. Which of the following is the earliest sign of dehydration in a young child? **(Choose one correct)**
    a. Increased respiratory rate.

b. Increased heart rate
c. Decreased blood pressure.
d. Change in level of consciousness
e. Prolonged capillary refill

Answer: B

52. The age at which children who have normal renal function achieve the normal adult level of glomerular filtration rate (120 ml/min/1.73m$_2$) is: **(Choose one correct)**
    a. 6 months
    b. 1 year
    c. 2 years
    d. 5 years
    e. 10 years

Answer: C

53. Wrong about pediatric UTI?
    a. U/S is indicated after the first attack
    b. DMSA scan can detect scarring after two months

Answer: B

54. Acute gastroenteritis + septic shock, Na= 170. All is correct regarding fluid management except?
    a. Overcorrection should be corrected by decreasing the flow rate.
    b. Rapid decrease in Na will decrease the needed fluid
    c. Correction over 24hrs

Answer: B

55. All can be seen in hypokalemia except?
    a. Confusion
    b. paralytic ileus
    c. muscle paralysis
    d. U wave
    e. polyuria

Answer: A

56. All of the following cause hyponatremia except :
    a. Congenital adrenal hyperplasia
    b. Gastroenteritis

c. Vomiting
d. Nephrotic syndrome

Answer: All can cause hyponatremia

57. Most common cause of UTI?
    a. Proteus
    b. Enterococcus
    c. E.coli

Answer: C

58. 15 Kg child came with 5% dehydration, calculate maintenance + deficit that should be given to him in 24 hours:
    a. 1350mL
    b. 2000mL
    c. 2250mL

Answer: B

59. A 1-year-old boy presents himself with failure to thrive, frequent large voids of dilute urine, excessive thirst, frequent episodes of dehydration not associated with gastroenteritis. Other family members are affected by the same condition. The most likely diagnosis is. (One is correct)
    A. Psychogenic polydipsia
    B. Diabetes mellitus
    C. Diabetes insipidus
    D. Child abuse
    E. Cystic fibrosis

Answer: C

60. A one-month-old baby, known case of hypothyroidism, spina bifida, with VP shunt was admitted with recurrent vomiting and was found to have meningitis. His results showed Na of 122, serum osmolality of 260, spot urine Na 65, urine osmolality of 400, his urine output was decreased. The cause of his hyponatremia is: (one is correct)
    a. Cerebral salt wasting
    b. Syndrome of inappropriate antidiuretic hormone secretion SIADH
    c. Vomiting
    d. Hypothroidism
    e. Diabetes insipidus

Answer: B

61. The correct interpretation of the following blood gas is: pH=7.32 pCO_2=38 torr, HCO_3=14 meq/dL and base excess= - 10
    a. Compensated metabolic alkalosis
    b. Metabolic acidosis
    c. Respiratory acidosis
    d. Compensated respiratory acidosis
    e. Mixed respiratory and metabolic acidosis

Answer: B

OTHER COLLECTED PAST PAPERS QUESTIONS:

62. Not a risk factor for septic shock?
    - Cystic fibrosis

63. Wrong?
    - Do ultrasound and cystography after first attack of UTI.

64. Child with 100 HR, 90/50 BP, dry mucous, no tears and sunken eyes, what is the severity of dehydration?
    - Severe dehydration

65. A case of hyponatremia not associated with dehydration, Nat = 125, with high urine Na, Dx →
    - SIADH

66. Child with meningitis and Na of 126, and high urine sodium, treatment:
    - Fluid restriction

67. Child with sodium of 165, wrong about treatment
    - If sodium drops too rapidly, we increase fluid rate

68. Child 20kg with severe dehydration, given two boluses, what is his total fluid need in the next day
    - 3500 mL .45 NS over 24 hours

69. Not in hypernatremia
    - Cerebral edema

70. A urine test diagnostic of UTI
    - Pyuria with positive culture

71. Child with lethargy, sunken eyes and depressed fontanelle, with hyponatremia, low urine sodium, most likely cause

- Gastroenteritis

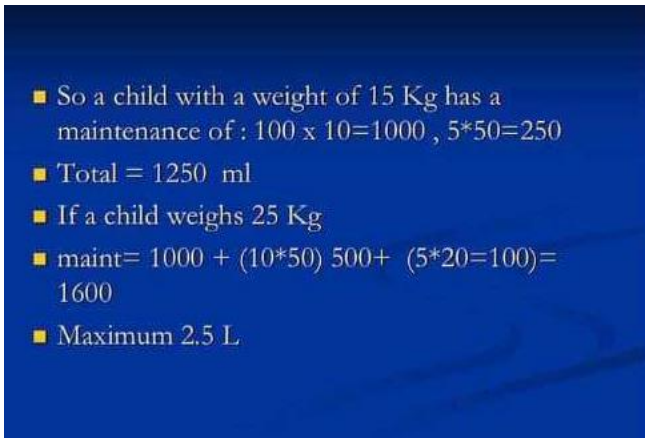
72. A 3 kg infant is undergoing a surgery tomorrow what is his maintenance fluid
    - 300 ml

73. Which isn't high risk for UTI
    - antenatal hydronephrosis

74. Test of choice to detect posterior urethral valve
    - MCUG

75. ABG, showing HAGMA, what is not in the DDx? S
    - Severe diarrhea

76. Question about measuring the deficit and maintenance (THE QUESTION WAS THE SAME ONE AS THIS SLIDE →)



Miscellaneous

1. All of the following are important in the diagnosis of Kawasaki disease, except:
    a. Fever of 5 or more days
    b. Presence of strawberry tongue
    c. Elevated liver enzymes
    d. Cervical lymph node enlargement
    e. Tender swollen hands and feet

    Answer: C

2. A 1.5 year old infant presents with fever and irritability for the last 8 days, on examination he has conjunctival inflammation, red tongue and lips, swollen hands and

diffuse maculopapular rash over the trunk and lower extremities. Of the following, the most likely diagnosis is:

a. Meningococcemia
b. Juvenile rheumatoid arthritis
c. Henoch-Schunlein purpura
d. Kawasaki disease
e. Infective endocarditis

Answer: D

3. A 2-year-old male presented with fever for 7 days with generalized maculopapular rash, red eyes and bleeding from the angles of the mouth. On examination there is strawberry tongue and an enlarged lymph node on the left side of the neck. One of the following statements about this child is correct:
    a. Anticoagulation is required for this child
    b. This child needs to be admitted for intravenous antibiotics
    c. This child is expected to develop chronic obstructive jaundice
    d. The child needs to be admitted for intravenous immunoglobulins
    e. If untreated, there is high risk of bleeding due to thrombocytopenia

Answer: D

4. All of the following are considered criteria for the diagnosis of Kawasaki disease, except:
    a. Peeling of skin of fingers
    b. Strawberry tongue
    c. Cracked lips.
    d. Subcutaneous nodules
    e. Tender swollen hands and feet

Answer: D

5. Regarding malnutrition, all of the following are true, EXCEPT:
    a. Severely malnourished patients should receive aggressive nutritional therapy with full caloric supplement immediately.
    b. Marasmus is the most common form of protein- energy malnutrition
    c. Kwashiorkor presents with pitting edema starting in the lower limbs.
    d. During nutritional rehabilitation of severe malnutrition, serum levels of calcium, magnesium, phosphorus, and potassium are carefully monitored.
    e. Vitamin D and iron deficiency are commonly encountered in patient with severe malnutrition.

Answer: A

6. All of the following regarding Kawasaki disease are true, EXCEPT:
    a. It is an acute febrile vasculitis predominately of the medium-sized arteries.

b. Coronary artery disease occurs in the majority of patients if not treated.
c. Fever persisting more than 5 days.
d. Non purulent conjunctivitis is one of its clinical manifestations
e. Desquamation occurs in the subacute phase.

Answer: B

(Approximately 20–25% of untreated children develop coronary artery abnormalities (CAA) including aneurysms, whereas <5% of children treated with IVIG develop CAA. Nonethless, KD is the leading cause of acquired heart disease in children in most developed countries.)

7. A one-year-old child presents with 5-day history of intermittent fever and irritability. Examination shows tachycardia, cracking at the angles of the mouth, a 2 cm cervical lymph node, generalized skin rash and peeling of the skin of fingertips. Which one of the following is the most likely diagnosis? **(One is correct)**
   A. Measles
   B. Acute rheumatic fever
   C. Infectious mononeucleosis
   D. Scarlet fever
   E. Kawasaki disease

   Answer: E

8. All of the following are true regarding Acrodermatitis enteropathica, **EXCEPT:**
   a. Caused by severe zinc deficiency.
   b. Is inherited as an autosomal recessive disease.
   c. Perianal dermatitis is a characteristic feature.
   d. Failure to thrive is usually absent.
   e. Alopecia is usually present.

   Answer: D

9. All of the following are uses of aspirin in pediatrics **except:**
   A. Thrombocytosis
   B. Rheumatic fever
   C. Kawasaki disease
   D. Antipyretic
   E. Congenital nephrotic syndrome

   Answer: D

10. All of the following complications might be seen in obesity, **except:**
    A. Insulin resistance
    B. Hypertension
    C. Elevated liver enzymes
    D. Sleep apnea
    E. Lower risk of malignancies compared to the normal population.

Answer: E

11. All of the following can be seen in anorexia nervosa, **except:**
    A. Osteoporosis
    B. Tachycardia
    C. Hypotension
    D. Arrhythmias
    E. Constipation

Answer: B

12. All of the following are true regarding Marasmus, except:
    A. Is due to sever caloric depletion.
    B. Is the most common form of primary Protein- Energy Malnutrition
    C. Manifests with loss of subcutaneous fat and muscle atrophy
    D. Pitting edema is a universal finding in this condition.
    E. Skin is dry, and hair is thin and sparse.

Answer: D

13. The most frequent physical abusers of children are:
    a. Babysitters
    b. Parents
    c. Relatives
    d. Teachers
    e. Friends

Answer: B

14. The most common clinical manifestation of child abuse is: ***
    a. Hot water burn
    b. Subdural hematoma
    c. Rupture liver
    d. Spiral fracture
    e. Bruises

Answer: E

15. Wrong match:
    a. Vit E def - hemolytic anemia
    b. Vit D def - rickets
    c. Vit C def - gingivitis
    d. Vit B12- megaloblastic anemia
    e. Vit A def – alopecia

Answer: E

16. All of the following are water soluble vitamins, except:

a. C
b. B6
c. B1
d. K
e. B2

Answer: D

17. A preterm infant has developed necrotizing enterocolitis and has undergone resection of 10 cm of the terminal ileum. Of the following, the nutrient that is most likely to become deficient in this patient is: (Choose one correct)
    a. Folic acid
    b. Thiamine
    c. Vitamin A
    d. Vitamin B12
    e. Vitamin K

Answer: D

18. 27- The nurse taking care of a 2-month-old infant calls you saying the infant has suddenly become unconscious. The first thing to do is:

a.check his blood sugar
b.start antibiotics immediately
c.Suction his nose and clear his airway
d.Insert a peripheral IV line
e.give a fluid bolus

Answer: C

OTHER COLLECTED PAST PAPERS QUESTIONS:

19. True about Kawasaki (2022) ***
    - IVIG is used to reduce risk of coronary aneurysm

20. Wrong about Kawasaki
    - Thrombocytopenia occurs in the second week of illness. *(The platelet count is generally normal in the first week of illness and rapidly increases by the second to third week of illness.)*

21. Picture of Kawasaki, what's wrong?
    - Caused by viral infection.

22. 13 year old obese female, hypertensive. The most likely skin finding is?
    - Acanthosis Nigricans