



Port-Said University
Faculty of Nursing
Pediatric Nursing department



Academic year: 2021/2022	Course title: Critical Pediatric Nursing (NUR302)
Academic level: third	First semester/ final exam
Date: 2/2/2022	Total marks: 50 marks
Time allowed: 2hrs	Course's teacher: ا.م.د/رحاب القزاز د/ عزة فتحي

QI: Choose the correct answer: Only one choice (15marks)

1. 1- day- old neonate , 32 weeks gestation ,is in an overhead warmer .The nurse assess the morning axillary temperature as 35°c which of the following could explain this assessment finding ?			
a. This is a normal temperature for a preterm neonate	b. Axillary temperatures are not valid for preterm babies	c. The supply of brown adipose tissue is incomplete	d. Conduction heat loss is clear in the baby
2.A 42-week gravida is delivering her baby. A nurse and pediatrician are present at the birth. The amniotic fluid is green and thick. The baby fails to breathe spontaneously. Which of the following actions should the nurse take next?			
a. Stimulate the baby to breathe.	b. Assess neonatal heart rate.	c. Assist with intubation.	d. Place the baby in the prone position
3. A baby was just born to a mother who had positive vaginal cultures for group B streptococcus. The mother was admitted to the labor room 2 hours before the birth. For which of the following should the nursery nurse closely observe this baby?			
a. Hypothermia.	b. Mottling.	c. Hypocalcemia	d. Stomatitis
4. A new born presenting with extreme prematurity, critical illness, and needing surgical intervention should be treated at what NICU level?			
a. Level I	b. Level II	c. Level III	d. Level IIII
5. A 30-week-gestation neonate, 2 hours old, has received surfactant. Which of the following would indicate a positive response to the medication?			
a..Axillary temperature 38° c	b.Oxygen saturation 96%.	c.Apical heart rate 154 bpm.	d. Serum potassium 4.0 mEq/L
6. When assessing the preterm infant the nurse understands that compared with the term infant, the preterm infant has:			
a.Concerned with first order change a. Few blood vessels visible through the skin.	b. More subcutaneous fat.	c. Well-developed flexor muscles.	d. Greater surface area in proportion to weight.
7. The commonest type of seizure in a newborn is?			



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a. Clonic	b. Tonic	c. Subtle	d. Myoclonic
<p>8. A term newborn in Delivery room resuscitation include endotracheal intubation and assisted ventilation with 100% oxygen , chest compression, intravenous epinephrine , and volume expansion. Apgar scores 1, 2 and 3 at 1, 5 and 10 minutes respectively. At 12 hours of age, the infant demonstrates tonic convulsive activity of the arms and legs with a decrease in heart rate and pulse oximetry saturation, of the following the most likely cause for this infant's seizure is:</p>			
a. Hyperglycemia	b. Hypercalcemia	c. Hypomagnesemia	d. Hypoxia
<p>9. A newborn whose estimated gestational age is 34 weeks has had worsening respiratory distress since birth. Maternal history is significant for prolonged premature rupture of membranes, urinary tract infection, and fever. Blood samples are obtained for white blood cell count with differential and culture, and antibiotic treatment is started. Of the following, the MOST appropriate initial combination of antibiotics is:</p>			
a. ampicillin and gentamicin	b. ceftazidime and tobramycin	c. trimethoprim-sulfamethoxazole	d. vancomycin and amikacin
<p>10. Four 38-week-gestation gravidas have just delivered. Which of the babies should be monitored closely by the nurse for respiratory distress?</p>			
a. The baby whose mother has diabetes mellitus.	b. The baby whose mother has lung cancer.	c. deny the reality of the change	d. sense of balance before change occur
<p>11. The most common manifestation of late-onset neonatal sepsis is</p>			
a. Meningitis	b. Disseminated Intravascular Coagulation	c. Pneumonia	d. Focal infections of bone and joints
<p>12. A nurse is called to the birthing room to assist with the assessment of a new born who was born at 32 weeks of gestation. The newborn's birth weight is 1,100 g. His Apgar scores are 3 at 1 min and 7 at 5 min. He is experiencing nasal flaring, grunting, and intercostal retractions. Which of the following are characteristics that the nurse may see at this birth?</p>			
a. Lanugo	b. Long hair	c. Long nails	d. Plump face
<p>13. Most common cause of seizure in the newborn is:</p>			
a. Hypoxia-induced ischemic encephalopathy	b. Hypocalcemia	c. Metabolic abnormality	d. Sepsis
<p>14. In neonatal seizure Presence of hepatosplenomegaly or an abnormal urine odor may be suggestive to</p>			
a. Inborn errors of metabolism	b. Tuberos sclerosis	c. Meningitis	d. Intracranial hemorrhage
<p>15. A nurse is assessing a neonate born 1 day ago to a mother who smoked one pack of cigarettes daily during pregnancy . Which finding is most common in neonates whose mothers smoked during pregnancy?</p>			
a. Post term birth	b. Large size for	c. Small size for	d. Appropriate size for



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	gestational age	gestational age	gestational
16. Which of the following are defects associated with Acyanotic.			
a. <u>Coarctation of aorta and patent duct arteriosus.</u>	b. overriding aorta, and right ventricular hypertrophy.	c. Tricuspid atersia and hypoplastic right ventricle	d. Aorta exits from the right ventricle, pulmonary artery exits from the left ventricle, and two no communicating circutations
17. The criteria for systematic venous congestion of heart failure			
a. weight gain.	b. Poor feeding.	c. Anorexia.	d. Meningitis
18. Which nursing intervention is most important to perform before administration digoxin (lanoxin) to a child ?			
a- a checking apical pulse for 1 minute	b- positioning the child with the head slightly elevated .	c- counting the child's respiratory rate for 1 full minute .	d- Calculated the child's urine output
19. A nurse is teaching the mother of an infant who will take digoxin (Lanoxin) at home to treat a chronic congestive heart failure. Which signs of digoxin toxicity should the mother be taught?			
a. Blurred vision	b. Heart rate of 180 beats/minute	c. Vomiting two or more feedings	d. Bulging of the anterior fontanel
20. Which sign best indicates the presence of acoarctation of the aorta			
a. clubbing the fingers and toes	b. generalized cyanosis ,especially with crying	c. Rapid and irregular apical heart beat	d. higher biracial pulse and weak femoral pulses
21. Which cardiac defect is associated with VSD ,right ventricular atrophy , right ventricular outflow obstruction and overriding aorta ?			
a- tricuspid atresia	b. Patent ducts arteriosus PAD	c- Tetralogy of fallot	Atrial septal defect (ASD)
22. When caring for a 3 year old with tetralogy of Fallot, he nurse expects to see fatigue and poor activity tolerance. This is caused by:			
a. Poor muscle tone	b. Inadequate oxygenation of tissues.	c. Restricted blood flow leaving the heart	d. Inadequate intake of food



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23. alopecia is common side effect of the management of cancer by-----			
a. Chemotherapy and radiotherapy	c. Chemotherapy	d. Radiotherapy	d. None of the above
24-A 15-month old with croup is admitted to the pediatric unit. The nurse is most concerned that: the child have			
a. stridor and barking cough	c. wheezing and wet cough	c. stridor and runny nose	d. wheezing and fever
25. Respiratory distress+ Sore throat+ Drooling = -----			
a. Epiglottitis	b. Anaphylactic shock	c. Asthma	d. RDS
26. the effects on the cardiac system of an anaphylactic reaction for the child could include _____ heart rate and _____ blood pressure.			
a. Decreased; decreased	b. Increased; increased	c. Decreased; increased	d. Increased; decreased
27. Child with renal failure must manage fluid intake because fluid...			
a. Retention can cause swelling and weight gain	b. Affects blood pressure	c. Overload can result in heart trouble	d. All of the above
28. Acute renal failure, which occurs as a result of kidney disease, is known as			
a. post-renal failure	b. pre-renal failure	c. intrinsic renal failure	d. hepatic failure
29. What is a common side effect for hemodialysis?			
a. Muscle cramps	b. alopecia	c. hypertension	d. All of the above
30. Which dietary mineral must be limited for a child on hemodialysis?			
a. Potassium	b. Iron	c. Zinc	d. Molybdenum

QII: Read the following situation and answer the questions (11 marks):

1- An infant scores at 32 weeks and weighs 1600 g at birth. The infant has bilateral cephalhaematomas and becomes jaundiced on day 2. On day 5 the infant becomes lethargic and hypotonic with high-pitched cry & poor suckling. The bilirubin level reached to 24mg/dl



Answer the following questions

1. Why do you think this infant became jaundiced? (1marks)
2. Why should you be worried if a jaundiced infant becomes lethargic and hypotonic with a weak cry? (1marks)
3. Determine the level of risk based on the Infant's hours of age and serum bilirubin result. On hour specific nomogram ? (1marks)
4. Design nursing care plan for this case? (4marks)
5. Apply infection control in NICU? (4 marks)

aOII: Read the following situation and answer the questions (7 marks):

A male infant is born at 32 weeks gestation in a level 1 hospital. Soon after delivery his respiratory rate is 80 breaths per minute with recession and expiratory grunting. The infant's tongue is blue in room air. The gastric aspirate collected 10 minutes after delivery contains no pus cells or bacteria on Gram stain.

Answer the following questions:-

1. Should this infant remain at the level **One** in NICU? (1 mark)
2. What are the infant's clinical signs which indicate that he has respiratory distress? (2 mark)
3. What is the best way to determine whether this infant is receiving the correct amount of oxygen? (1 mark)
- 4- Discuss Physiological handicaps of Premature? (3 marks)

QIII: Read the following situation and answer the questions (17 marks):

Basent 8yr old female child is admitted to the hospital for abdominal pain. The mother reports that the child has been bale and excessively tired. on physical examination , lymphadenopathy and hepatosplenomegaly are noted. Her diagnostic acute Lymphocytic Leukemia and start to receiving combination chemotherapy.

Answer the following questions

1. Define the leukemia(2marks)
It is a malignant disease in hematopoietic cells in bone marrow .
- Giving rise to uncontrolled clonal proliferation of cells.
With arrest of maturation at different stages.
With subsequent bone marrow failure.
Or
Results in an accumulation of dysfunctional cells because of a loss of regulation in cell division
Fatal if untreated
Progressive
2. list etiology of leukemia(2marks)
unknown



- 1-Higher risk in congenital disorders**
 - 2-Enviromental factors such as chemicals and radiation**
 - 3-Several genetic diseases including Down syndrome**
 - 4-Infection 5-Immunodeficiency**
- 3. Identify clinical manifestations of acute lymphocytic leukemia(3marks)**
- 1-Bone marrow Depression results in**
Decrease in mature WBC's - fever
Decrease RBC's, Anemia- pallor, lethargy, anorexia, tachycardia, dyspnea
Increase cell metabolism which deprives cells of nutrients (Weight loss)
Fracture
*Pain in joint &abdominal pain
 - 2-Decreased Platelets/ thrombocytopenia**
The symptoms depend on the degree of cytopenia:
leukopenia:infections, temperature elevation
- thrombocytopenia: petechiae, mucosal bleeding, epistaxes, prolonged menstrual bleeding
 - 3-Enlargement of organs infiltrated with blast cells results in:**
Bone pain
Splenomegaly. Hepatomegaly, Nephromegaly
Lymphadenopathy
 - 4-CNS infiltration – increased ICP**
leukemia with meningeal signs
 - 1-headache**
 - 2-vomiting**
 - 3-irritability**
 - 4-lethergy**
 - 5-coma**
 - 6-pain**
 - 7-stiff neck**
- 4. What is the effect of long term complications of leukemia on this child (2marks)**
- Growth failure**
 - 2. Endocrine failure**
 - 3. Neuropsychiatric**
- N.B. nowadays these complication become less common because decrease use of radiotherapy**
- 4. secondary malignancy**
- 5. Discuss expected Nursing care plan of this child at least 3 (5marks)**
- A-Nursing Diagnosis :**
- 1-High risk for infection related to depressed body defense**
****intervention**
 - 1-Private room**
 - 2-Hand washing is necessary**
 - 3-Screen all visitors and staff for infection**
 - 4-Use aseptic technique**
 - 5-Complete diet**
- B-Nursing Diagnosis**
High risk for injury (hemorrhage) related to interference with cell proliferation



****Intervention**

1-Use all measures to prevent infection

2-Stop bleeding

3-Limiting activity

4-Avoid accidental injury

5-Administer platelets as prescribed

C-Nursing diagnosis

Altered nutrition less than body requirement Related to loss of appetite

****intervention**

small frequent meals

foods child likes and are nutritious

attractively served

keep child company while eating

clean environment

good oral hygiene

D-Nursing Diagnosis

**Altered mucous membranes related to
administration of chemotherapeutic agent.**

**** intervention**

**1-Inspect mouth daily for oral ulcer ,avoid oral
temperatures**

2-Oral hygiene as soon as possible

3-Use soft sponge tooth brush

4-Moist soft diet and encourage fluids

5-Avoid juices containing lemon

E-Nursing Diagnosis :

Pain related to diagnosis and treatment

****Intervention**

1-Avoid excessive noise or light

2-Use gentle ,minimal physical manipulation

3-Use heat or cold on painful areas

4-Change position frequently

5-Avoid pressure on bony prominences

6-Administer analgesics

F-Anxiety: child and family

therapeutic communication

good listener

encourage family to help

allow them some control

use play therapy

anticipate grieving

6.List common side effects of chemotherapy (3marks)

anorexia

alopecia

infection



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bone marrow depression
mucous membrane
ulceration

Good luck
Dr.