# **Practice Exam Questions**



# **CPEN**

**Certified Pediatric Emergency Nurse** 



# **Total Question: 150 QAs**

Question No: 1

For an uncircumcised child, phimosis is a normal finding and usually resolves by approximately age

A. 2-3.

B. 4-5.

C. 5-7.

D. 8-10.

Answer: C

Explanation: For an uncircumcised child, phimosis is a normal finding and usually resolves by approximately age 5-7. Parents of male infants and young boys should be advised to never forcefully retract the foreskin because this can lead to tissue damage and scarring, although gentle retraction for cleaning is acceptable. Pathologic phimosis may occur as the result of infection or scarring. Treatment to release restrictive phimosis may include topical corticosteroids for 6-7 weeks. In rare cases, circumcision may be indicated.

### Question No: 2

The mother of a 6-month-old is worried that her infant frequently vomits after feedings, sometimes forcefully, but the infant is eating well and gaining weight appropriately, so gastroesophageal reflux disease (GERD) is suspected. What primary treatment does the nurse anticipate?

A. Proton-pump inhibitor.

B. H2-histamine blocker.

C. Metoclopramide.

D. Positioning and feeding modifications.

Answer: D

Explanation: If the mother of a 6-month-old is worried that her infant frequently vomits after feedings, sometimes forcefully, but the infant is eating well and gaining weight appropriately, so GERD is suspected, the primary treatment is positioning and feeding modifications. GERD is common in infants and is usually benign and resolves by approximately 12 months. Holding the child upright for 30 minutes after a feeding, feeding the child in small amounts, and avoiding feeding the child in the supine position often help to decrease the incidence of GERD.

#### Question No: 3

Which of the following is the MOST effective method for dealing with the "emotional contagion hypothesis" of distraught parents causing the child increased stress during an invasive procedure?

A. Keep the parents away from the child during the procedure.

B. Prepare the pa rents in advance.

C. Accompany the parents during the procedure.

D. Tell the parents they should stop upsetting their child.

Answer: B

Explanation: Although healthcare providers sometimes use the "emotional contagion hypothesis" as an excuse to keep parents away from the child during procedures, the most effective method is to prepare the parents in advance so they understand exactly what the procedure entails and the importance of their calm support of the child. Providing the parents with tools such as comfort measures and methods of distraction for the

child can help them to focus on the child rather than on their own anxiety.

#### Question No: 4

If a 4-year-old who swallowed a small toy presents with inspiratory stridor, the obstruction is likely

A. at or above the level of the vocal cords.

B. in the subglottic area.

C. within the trachea.

D. within the primary bronchi.

Answer: A

Explanation: If a 4-year-old who swallowed a small toy presents with inspiratory strider, the obstruction is likely at or above the level of the vocal cords. Other causes of obstruction at this level may include swallowed teeth, blood, and mucus. If an obstruction occurs below the vocal cords, then expiratory strider is more common. Typically, the child will appear agitated and may exhibit diaphoresis, retractions of the chest wall, and signs of cyanosis.

## Question No: 5

With supratentorial herniation of the brain, in addition to the level of consciousness, the three functions that are assessed to determine progress of the syndrome are

A. motor, cardiac, and hearing.

B. ocular, cardiac, and respiratory.

C. cardiac, ocular, and motor.

D. ocular, motor, and respiratory.

Answer: D

Explanation: With supratentorial herniation of the brain, in addition to the level of consciousness, the three functions that are assessed to determine the progress of the syndrome are ocular, motor, and respiratory. The stages of progression (based on increasing intracranial pressure [ICP]) are the early diencephalon, late diencephalon, midbrain upper pons, lower pons/upper medulla, and medulla. If the signs and symptoms stay at the early or late diencephalon stages (before the mid brain), then they are potentially reversible, but from the mid brain stage on, reversal is unlikely.

# Question No: 6

With post-cardiac arrest syndrome after resuscitation, the recovery phase typically does not begin until at least

A. 12 hours.

B. 48 hours.

C. 72 hours.

D. 96 hours.

Answer: C

Explanation: 72 hours. There are five phases to the post-cardiac arrest syndrome after resuscitation:

Phase		Duration	
1	Immediate	0-20 minutes	
2	Early	20 minutes to 6-12 hours	
3	Intermediate	12-72 hours	
4	Recovery	72 hours to 7 days	
5	Rehabilitation	Ongoing	

The goal of patient treatment is to support reperfusion, identify and treat the underlying cause, and monitor the patient carefully. Monitoring should include continuous blood pressure monitoring (likely invasive), cardiac telemetry/continuous ECG, blood glucose, blood gases, electrolytes, oxygen saturation, urinary output, serum lactate, central venous pressure, and neurological monitoring.

#### Question No: 7

The classic triad (the three Cs) of the prodromal phase of rubeola (measles) is

A. cough, conjunctivitis, and coryza.

B. cellulitis, congestion, and cough.

C. congestion, conjunctivitis, and choking.

D. chorioamnionitis, coagulopathy, and cough.

Answer: A

Explanation: The classic triad (the three Cs) of the prodromal phase of rubeola (measles) is cough, conjunctivitis, and coryza (inflamed nasal mucous membranes). During this phase, the child has a high fever, malaise, and lack of appetite. Some experience photophobia. Koplik spots appear on the inside of the cheeks, and the rash typically occurs 24-48 hours later. The rash appears first on the face and then spreads to the rest of the body. The rash usually occurs approximately 2 weeks after initial exposure, and the duration of illness is typically 7-10 days, although severe complications, such as encephalitis, can occur.

#### Question No: 8

A 17-year-old with cystic fibrosis has experienced frequent constipation and complains of weight loss, abdominal cramps, pain, and distension with an abdominal mass palpable in the right lower quadrant. The patient is at risk for

A. volvulus.

B. short bowel syndrome.

C. irritable bowel syndrome.

D. distal intestinal obstruction syndrome.

Answer: D

Explanation: If a patient with cystic fibrosis has experienced frequent constipation and complains of weight loss, abdominal cramps, pain, and distension with an abdominal mass palpable in the right lower quadrant, the patient is at risk for distal intestinal obstruction syndrome (aka meconium ileus equivalent). This disorder occurs in approximately 20% of adult patients with cystic fibrosis, especially associated with pancreatic insufficiency, when thick viscous stool collects in the distal portion of the small intestine and can lead to intestinal obstruction without treatment.

Question No: 9

An adolescent who was inebriated tried to pick up a rattlesnake and received a snakebite on the wrist. The initial intervention should be to

A. apply a tourniquet above the wound.

B. elevate the limb above the heart.

C. immobilize the limb and keep it below the heart.

D. cleanse the wound with alcohol.

Answer: C

Explanation: If a patient who was inebriated tried to pick up a rattlesnake and received a snakebite to the wrist, the initial intervention should be to immobilize the limb to prevent movement that may spread the venom and keep it below the level of the heart. A tourniquet should not be applied, the wound should not be suctioned (common previous practices), and alcohol should not be used to clean the wound. Applying ice may damage the tissue. The wound should be observed because many bites are dry (no venom is released), but if swelling and pain and other symptoms occur, the patient may need to receive antivenin.

Question No: 10

A 12-month-old with suspected bronchiolitis has an upper respiratory infection and developed a cough, tachypnea, low-grade fever, rhinorrhea, fine rales, and wheezing. The SpO2 is 92-94%.

Which of the following is the most appropriate intervention?

A. Corticosteroid.

B. Supportive care.

C. Antibiotics.

D. Albuterol.

Answer: B

Explanation: If a 12-month-old with suspected bronchiolitis has an upper respiratory infection and developed a cough, tachypnea, low-grade fever, rhinorrhea, fine rales, and wheezing and the SpO2 is 92-94%, the recommended treatment is supportive care. This may include nasal suctioning, flu ids, and humidified air. Supplementary oxygen is generally reserved for SpO2 values of 90% or less. Antibiotics are ineffective unless a secondary bacterial infection occurs, and corticosteroids are not indicated for routine treatment.

Question No: 11

Which of the following statements by an adolescent is most likely to indicate suicidal ideation and risk for suicide?

A. "My family would be better off without me."

B. "I can't stop crying when I think about my mother's death."

C. "My brother thinks he is so much better than I am."

D. "Sometimes I think therapy is totally pointless."

Answer: A

Explanation: The statement by an adolescent that is most likely to indicate suicidal ideation and risk for suicide is "My family would be better off without me." When a patient makes a statement indicating possible suicidal ideation, the nurse should address it immediately by asking if the patient has thoughts about dying and if the patient has a suicide plan. Patients who have formulated a plan (such as taking an overdose of medications) are at higher risk than those who simply think about wanting to die.

Question No: 12

If a child with a suspected brain tumor exhibits difficulty speaking, hearing loss, memory loss, and seizures, the most likely site of the tumor is the

A. frontal lobe.B. parietal lobe.

C. temporal lobe. G·lii4a•

D. occipital lobe.

Answer: C

Explanation: If a child with a suspected brain tumor exhibits difficulty speaking, memory loss, hearing loss, and seizures, the most likely site of the tumor is the temporal lobe.

Tumor site	Indications	
Temporal	As above.	
Frontal	Mood and behavior changes, lack of impulse control, impaired communication and language, hemiparesis.	
Parietal	Lack of coordinated movements, impaired recognition of faces/objects, impaired spatial awareness, difficulty understanding language, impaired sensory awareness.	
Occipital	Visual disturbances and hallucinations, loss of vision on one side.	
Cerebellum	Lack of coordination and balance, stiff neck, impaired fine motor skills, vomiting and difficulty speaking.	
Brain stem	Cranial nerve dysfunction, facial weakness and pain, dysphagia, double vision, difficulty speaking.	

Question No: 13

The purpose of the sick versus not sick visual assessment is to

A. triage patients during admission based on the level of interventions required.

B. allocate resources where they are most needed.

C. determine the need for transport.

D. differentiate the critically ill from those who appear stable.

Answer: D

Explanation: The purpose of the sick versus not sick visual assessment is to differentiate the critically ill from those who appear stable to prevent delays in providing lifesaving treatment. The nurse quickly reviews each patient, gathering a first impression and noting the airway, breathing and circulation (ABCs); level of consciousness; signs of bleeding; body alignment/position; and skin condition. Those who are considered "sick" exhibit life-threatening problems in these areas; those who are considered "not sick," do not, although they may have non-life-threatening injuries.

Question No: 14

An 8-year-old child has had severe nausea and vomiting from gastroenteritis and is at risk for hypokalemia. Which of the following signs or symptoms is(are) characteristic of hypokalemia?

A. Tachycardia.

B. Hyporeflexia.

C. Hypertension.

D. Numbness and tingling.

Answer: B

Explanation: Hypokalemia is a risk factor for those with severe nausea and vomiting as well as those on nasogastric suctioning. Symptoms of hypokalemia include muscle weakness, cramps, and hyporeflexia as well as hypotension, lethargy, and fatigue. Although this child has diarrhea, hypokalemia can lead to abdominal distension and constipation. Hypokalemia can eventually impair kidney function and result in polyuria and polydipsia. ECG changes characteristic of hypokalemia include premature ventricular complexes, prolonged QT interval, depressed ST segment, and flat or inverted T waves.

Question No: 15

If a newborn receives a glucose bolus as treatment for hypoglycemia, it must be followed by continuous infusion with

A. normal saline.

B. insulin.

C. albumin.

D. glucose.

Answer: D

Explanation: If a newborn receives a glucose bolus as treatment for hypoglycemia (less than 40 mg/dl), it must be followed by a continuous infusion of glucose. When a glucose bolus is administered, the body produces more insulin in response and, once the bolus is metabolized, the insulin will continue to use glucose stores, so a continuous infusion after the bolus prevents this. The brain of the newborn depends on glucose for energy and is sensitive to drops in glucose levels, increasing blood flow to the brain to compensate, but this increases the risk of cerebral hemorrhage.

Question No: 16

The most common cause of osteomyelitis in children is

A. infection in an adjacent site.

B. penetrating injury.

C. hematogenous seeding.

D. surgical site infection.

Answer: C

Explanation: The most common cause of osteomyelitis in children is hematogenous seeding (i.e., an infection that is spread through the blood). The most common infective agent in children of all ages is Staphylococcus aureus, although group B Streptococcus is most common in neonates. Osteomyelitis occurs approximately two and a half times more frequently in males than in females. Almost a third of those with osteomyelitis have a history of a recent trauma that led to bacteremia. Treatment typically begins with IV antibiotics and then transitions to oral antibiotics with treatment continuing for 3-6 weeks.

Question No: 17

A 12-year-old has a 2 cm laceration on the forehead sutured. When should the child return to have the sutures removed?

A. 2 days.

B. 5days.

C. 10 days.

D. 14 days.

Answer: B

Explanation: The 12-year-old with a 2 cm laceration on the forehead should return in 5 days to have the sutures removed. When considering removal of sutures, the nurse must consider the area involved, the circulation, and the degree of stress or pulling on the wound. The face is a vascular area, so healing is usually faster there than in other areas of the body where sutures may remain in place for up to 10 days. In areas with increased stress, such as over joints, sutures may stay in place for even longer periods.

Question No: 18

A 16-year-old female was bitten on the hand by a bat when trying to remove it from her apartment. She dropped the bat, which escaped, and sought treatment for a small puncture wound. Which treatment is MOST important?

A. Antibiotics.

B. Analgesia.

C. Wound irrigation.

D. Rabies postexposure prophylaxis (PEP).

Answer: D

Explanation: Rabies PEP is extremely important after a bat bite because bats have a high rate of rabies infect ion and even a slight puncture may transmit the disease, for which there is no effective treatment. Current rabies vaccines are administered in the deltoid or anterolateral thigh (for child ren) but not the gluteal muscle. PEP comprises a five-step protocol that extends over 28 days and includes an initial dose of rabies immune globulin infiltrated around the site of injury (which acts as a barrier to prevent the spread of infection) as well as a series of rabies vaccines on days 0-1, 3, 7, 14, and 28.

Question No: 19

A sexually active 16-year-old presents with uterine tenderness, mucopurulent vaginal discharge, and a temperature of 39 •c. Laboratory findings show elevated erythrocyte sedimentation rate and C-reactive protein. The nurse suspects

A. vaginitis.

B. syphilis.

C. pelvic inflammatory disease (PID).

D. cytomegalovirus infection.

Answer: C

Explanation: If a sexually active 16-year-old presents with uterine tenderness, mucopurulent vaginal discharge, a temperature of 39 °C and laboratory findings show an elevated erythrocyte sedimentation rate and C-reactive protein, these observations are consistent with PID. PID is common in females 16-19 and can lead to infertility if it is not adequately treated. Treatment may include IV and oral antibiotics. Any patient with PID should be provided information about safe sex practices and should be educated about the cause of PID and the risks involved.

Question No: 20

An 11-year-old suffered second-degree frostbite of the hands with full-thickness freezing. Initial rewarming includes

A. 10-30 minutes in a warm-water bath at 40-42 °C (104-108 °F).

B. 10-30 minutes in a warm-water bath at 36-39 °C (97-102 °F).

C. warm blankets around the hands and warmed IV fluids.

D. allowing the patient's body to warm slowly at room temperature.

Answer: A

Explanation: If an 11-year-old suffered second-degree frostbite of the hands with full-thickness freezing, initial rewarming includes 10-30 minutes in a warm-water bath at 40-42 °C (104-108 °F) or until the area is erythematous and pliable. There are four degrees of frostbite, and determining the degree can be difficult because some thawing may have occurred during transit. After rewarming, treatment includes debridement of clear blisters, applying aloe vera cream every 6 hours to blistered areas, dressings, tetanus prophylaxis, analgesia, and antibiotics (if indicated).

Question No: 21

The antidote for exposure to organophosphates is

A. flumazenil.

B. atropine and pralidoxime.

C. sodium bicarbonate.

D. deferoxamine.

Answer: B

Explanation: The antidote for exposure to organophosphates is atropine and pralidoxime. Antidotes include:

Substance	Antidote	Substance	Antidote
Acetaminophen	N-acetylcysteine	Ethylene glycol	Ethanol
Benzodiazepine	Flumazenil	Iron salts	Deferoxamine
Beta blockers	Glucagon	Methanol	Ethanol
Calcium channel blockers	Calcium	Opiates/Opioids	Naloxone
Carbon monoxide	O <sub>2</sub> (hyperbaric)	Organophosphates	Atropine and pralidoxime
Digoxin	Digoxin immune FAB	Tricyclic antidepressants, quinidine	Sodium bicarbonate

Question No: 22

Four weeks after birth, an infant presents with a distended abdomen, hepatomegaly, and clay-colored stool. Laboratory findings indicate direct hyperbilirubinemia. The most likely cause is

A. Wilson disease.

B. Autoimmune hepatitis.

C. Extrahepatic biliary atresia (EBA).

D. Cystic fibrosis.

Answer: C

Explanation: EBA is a cause of direct hyperbilirubinemia in the newborn. EBA is either the complete or partial absence of the bile duct that connects the liver to the duodenum, resulting in cholestasis because bile accumulates in the liver. This results in jaundice and liver scarring. Indications of EBA are usually obvious within 2-6 weeks: stools are clay-colored, and hepatomegaly is present. Surgical intervention is necessary, but some

children may have dysfunction of the liver and eventually require a liver transplant.

Question No: 23

If a term neonate develops vasodilation and sweating in response to hyperthermia, this can result in

A. hypotension and dehydration.

B. hypertension and dehydration.

C. hypotension and peripheral edema.

D. hypertension and peripheral edema.

Answer: A

Explanation: If a term neonate develops vasodilation and sweating in response to hyperthermia, this can result in hypotension and dehydration because of increased insensible water loss. The neonate may need extra fluids to compensate and volume expanders to increase the blood pressure. If the core temperature is elevated, the neonate may experience seizures and apnea, so cardiopulmonary monitoring is essential. The neonate may require ventilation for apnea.

Question No: 24

A 4-year-old with sickle cell disease has a right-sided stroke with left hemiplegia and is brought to the hospital

12 hours after the onset of symptoms. What treatment is indicated to reduce the risk of further strokes?

A. Thrombolytics.

B. Unfractionated heparin.

C. Hyaluronidase.

D. Exchange transfusion.

Answer: D

Explanation: If a 4-year-old with sickle cell disease has a right-sided stroke with left hemiplegia and is brought to the hospital 12 hours after the onset of symptoms, the treatment that is indicated to reduce the risk of further strokes is exchange transfusion with a target of hemoglobin 10 g/dl and maintenance of sickled hemoglobin (HbS) to less than 30%. Thrombolytics are sometimes administered to children, although there is an increased risk of intracranial hemorrhage, and administration should be done within 4.5 hours of the onset of symptoms.

Question No: 25

A child is stung by a bee and develops severe facial edema, dyspnea, and hypotension, indicating anaphylaxis.

The most important intervention is

A. diphenhydramine.

B. epinephrine.

C. prednisone.

D. oxygen.

Answer: B

Explanation: If a child is stung by a bee and develops severe facial edema, dyspnea, and hypotension, indicating anaphylaxis, the treatment that is most critical is epinephrine because it reverses the vasodilation and constriction of the airway. In addition to epinephrine, diphenhydramine and antihistamine, as well as steroids such as prednisone, may be administered. Prompt fluid resuscitation is also necessary to reverse hypotension. Oxygen may be administered to relieve dyspnea.