Physician Assistant Clinical Knowledge Rating and Assessment Tool (PACKRAT) 2 Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. **What is the most appropriate treatment for a suspected scaphoid fracture in a patient with tenderness in the anatomical snuff box?**

   A. No treatment necessary

   B. ACE wrap application

   C. Splint application

   D. Immediate orthopedic referral

2. **A 58-year-old male recovering from a myocardial infarction shows persistent ST segment elevation. What is the most likely diagnosis?**

   A. Left ventricular aneurysm

   B. Postinfarction ischemia

   C. Ischemic cardiomyopathy

   D. Constrictive pericarditis

3. **What is the most likely physical examination finding in a patient with acute pericarditis presenting with chest pain?**

   A. Elevated blood pressure

   B. Subungual hematoma

   C. Diastolic murmur

   D. Pericardial friction rub

4. **What is the recommended treatment to prevent secondary bacterial infection in a patient with conjunctivitis from swimming?**

   A. Ketorolac tromethamine

   B. Dexamethasone ophthalmic

   C. Naphazoline HCL

   D. Sulfacetamide ophthalmic

5. **What classification describes a vaginal laceration involving the perineal body but not the rectal mucosa?**

   A. First degree

   B. Second degree

   C. Third degree

   D. Fourth degree

6. Which phase of the menstrual cycle is characterized by an estrogen peak and an LH surge?

A. Follicular phase

B. Proliferative phase

C. Ovulation

D. Secretory phase

7. Which tumor marker is most useful for identifying early relapse in testicular cancer?

A. Carcinoembryonic antigen (CEA)

B. Prostate specific antigen (PSA)

C. CA 125 glycoprotein

D. Alpha fetoprotein (AFP)

8. What is the best treatment for household contacts of a patient with bacterial meningitis?

A. Amoxicillin

B. Ciprofloxacin

C. Tetracycline

D. Vancomycin

9. Which presentation of constipation is most concerning for colorectal malignancy in a 72-year-old patient?

A. Fewer than one stools per week

B. Weight loss

C. Recurrent hemorrhoids

D. Scybala

10. An O2 saturation of 90% corresponds to which PO2 value?

A. 90 mmHg

B. 80 mmHg

C. 70 mmHg

D. 60 mmHg

Answers

1. C
2. A
3. D
4. D
5. B
6. C
7. D
8. B
9. B
10. D

Explanations

1. What is the most appropriate treatment for a suspected scaphoid fracture in a patient with tenderness in the anatomical snuff box?

A. No treatment necessary

B. ACE wrap application

C. Splint application

D. Immediate orthopedic referral

The most appropriate treatment for a suspected scaphoid fracture in a patient with tenderness in the anatomical snuff box involves the application of a splint. Scaphoid fractures are particularly important to identify and manage correctly due to the potential for complications such as nonunion or avascular necrosis, which can arise from inadequate treatment. When there is tenderness in the anatomical snuff box, it is indicative of possible scaphoid injury, which should be immobilized promptly. A splint restricts movement and helps to stabilize the wrist and thumb, allowing for the healing process to begin. This immobilization is critical, as there is a risk of further injury or complications if the wrist is not supported properly. While some options may seem appropriate under certain conditions—such as no treatment if the fracture is very unlikely or an ACE wrap for swelling—these do not provide the necessary stability or protection required for suspected scaphoid fractures. Immediate orthopedic referral is more suitable if there are signs of complicated fractures or if surgical intervention is likely, but in the initial management of a suspected fracture, splinting is the key first step.

2. A 58-year-old male recovering from a myocardial infarction shows persistent ST segment elevation. What is the most likely diagnosis?

A. Left ventricular aneurysm

B. Postinfarction ischemia

C. Ischemic cardiomyopathy

D. Constrictive pericarditis

The diagnosis of left ventricular aneurysm is supported by the presence of persistent ST segment elevation in a patient recovering from a myocardial infarction (MI). Following an MI, especially one involving substantial myocardial necrosis, the heart may remodel structurally. An aneurysm can develop in the area of the damaged myocardium, leading to bulging during systole. This change can manifest as ST segment elevation on an electrocardiogram (ECG), even after the acute phase of the MI has resolved. In contrast, postinfarction ischemia typically presents with angina and may lead to changes in the ST segment, but it usually does not cause persistent elevation in the absence of ongoing ischemic changes. Ischemic cardiomyopathy refers to chronic heart failure stemming from prolonged ischemia and is characterized by ventricular dysfunction rather than isolated ST segment elevations. Constrictive pericarditis can cause diastolic dysfunction and may lead to other ECG changes, but it is not primarily associated with persistent ST segment elevation following an MI. Thus, in the context of the clinical scenario, persistent ST segment elevation after an MI is most consistent with the development of a left ventricular aneurysm.

3. What is the most likely physical examination finding in a patient with acute pericarditis presenting with chest pain?

A. Elevated blood pressure

B. Subungual hematoma

C. Diastolic murmur

D. Pericardial friction rub

In a patient with acute pericarditis, the most characteristic physical examination finding is a pericardial friction rub. This sound is produced by the inflammation of the pericardial layers rubbing against each other during the cardiac cycle. The friction rub is typically best heard with the patient sitting up and leaning forward, and it is described as a high-pitched, scratchy sound that may have multiple components, similar to the sound of leather being rubbed together. This finding is particularly significant in acute pericarditis because it reflects the pathophysiological process of pericardial inflammation, which distinguishes it from other causes of chest pain. Other examination findings in acute pericarditis may include signs of cardiac effusion or dynamic changes in heart sounds, but the pericardial friction rub is the most specific and classic finding associated with this condition. The other options present findings that do not typically correlate with acute pericarditis. Elevated blood pressure might occur in a variety of conditions but is not a specific finding for pericarditis. Subungual hematoma is more indicative of trauma or other systemic issues and does not relate to the heart. A diastolic murmur could suggest valvular heart disease or other cardiovascular

4. What is the recommended treatment to prevent secondary bacterial infection in a patient with conjunctivitis from swimming?

A. Ketorolac tromethamine

B. Dexamethasone ophthalmic

C. Naphazoline HCL

D. Sulfacetamide ophthalmic

The recommended treatment to prevent secondary bacterial infection in patients with conjunctivitis resulting from swimming is sulfacetamide ophthalmic. This medication is a sulfonamide antibiotic that works by inhibiting bacterial growth, thereby providing a preventive measure against infections that may occur when the conjunctival surface is irritated or compromised, such as from exposure to contaminated water. Using sulfacetamide helps address the specific concern of bacterial conjunctivitis or secondary infections, which can arise after exposure to bacteria in swimming environments. This makes it particularly effective in managing and preventing bacterial complications associated with conjunctivitis resulting from swimming-related irritation. In contrast, ketorolac tromethamine is primarily an anti-inflammatory medication used for managing pain and inflammation rather than serving as an antibiotic. Dexamethasone ophthalmic is a corticosteroid that helps reduce inflammation, but it does not address bacterial infections directly and could potentially worsen an underlying infection if used alone without appropriate antibiotic treatment. Naphazoline HCL is a decongestant that reduces redness but has no role in treating or preventing infections. Thus, sulfacetamide ophthalmic is the most appropriate choice for preventing secondary bacterial infection in this context.

5. What classification describes a vaginal laceration involving the perineal body but not the rectal mucosa?

A. First degree

B. Second degree

C. Third degree

D. Fourth degree

A vaginal laceration that involves the perineal body but does not affect the rectal mucosa is classified as a second-degree laceration. This type of laceration extends through the vaginal epithelium and perineal muscles, which are part of the perineal body, but it does not involve the anal sphincter or the rectal mucosa. First-degree lacerations only involve the vaginal mucosa without any muscular involvement, and third-degree lacerations extend through the vaginal tissue, perineal muscles, and also involve the anal sphincter. Fourth-degree lacerations go even further, involving the anal sphincter and the rectal mucosa itself. Recognizing these classifications helps in understanding the severity of tears and guides the appropriate management and repair strategies during and after childbirth.

6. Which phase of the menstrual cycle is characterized by an estrogen peak and an LH surge?

A. Follicular phase

B. Proliferative phase

C. Ovulation

D. Secretory phase

The phase of the menstrual cycle that is characterized by an estrogen peak and an LH surge is ovulation. During this phase, there is a significant rise in estrogen levels as the dominant follicle develops and prepares for ovulation. This increase in estrogen exerts a positive feedback effect on the anterior pituitary gland, stimulating the release of luteinizing hormone (LH). The LH surge is a critical event that triggers ovulation, leading to the release of the ovum from the ovary. The dynamics of hormone fluctuations during this time are essential for the reproductive cycle. After ovulation occurs, the corpus luteum forms and begins to secrete progesterone, which is characteristic of the subsequent phases. Understanding the hormonal changes during ovulation helps clarify the timing of fertility and the menstrual cycle overall.

7. Which tumor marker is most useful for identifying early relapse in testicular cancer?

A. Carcinoembryonic antigen (CEA)

B. Prostate specific antigen (PSA)

C. CA 125 glycoprotein

D. Alpha fetoprotein (AFP)

Alpha fetoprotein (AFP) is a tumor marker that is particularly useful in the context of testicular cancer, especially in identifying early relapse. In testicular cancer, especially non-seminomatous germ cell tumors, elevated levels of AFP can indicate the presence of disease or a recurrence after treatment. AFP is produced by the fetal liver and, under normal circumstances, is present in high levels in fetal blood but decreases to very low levels after birth. In adults, elevated AFP levels can suggest several pathological conditions, including liver disease and germ cell tumors. In the case of testicular cancer, healthcare providers monitor AFP levels post-treatment as a way to detect any resurgence of cancer early, which is crucial for timely intervention. By understanding that AFP is reliably associated with certain types of testicular tumors, clinicians can efficiently track the disease's progression or return. The other markers listed, such as carcinoembryonic antigen (CEA), prostate-specific antigen (PSA), and CA 125 glycoprotein, are associated with different types of cancers or conditions. CEA is primarily used in colorectal cancer monitoring, PSA is specific to prostate cancer, and CA 125 is primarily involved in monitoring ovarian cancer. Hence, they are not relevant or effective

8. What is the best treatment for household contacts of a patient with bacterial meningitis?

A. Amoxicillin

B. Ciprofloxacin

C. Tetracycline

D. Vancomycin

The best treatment for household contacts of a patient with bacterial meningitis is ciprofloxacin. This medication is effective in providing prophylaxis against Neisseria meningitidis, which is one of the most common pathogens that can lead to bacterial meningitis outbreaks. Ciprofloxacin is a fluoroquinolone antibiotic that is recommended for chemoprophylaxis in adults and is particularly useful because it is orally bioavailable and has a good safety profile in the target population. It is typically given to those who have had close contact with the infected individual to prevent the disease from spreading, especially in situations where the strain involved is meningococcal. The other medications listed do not serve as the primary prophylactic treatments for bacterial meningitis contacts. Amoxicillin is more effective for treating specific infections, while tetracycline is primarily used for other types of bacterial infections and is not indicated for meningitis prophylaxis. Vancomycin, while an important antibiotic for treating severe bacterial infections, is not used for chemoprophylaxis in the context of household contacts of someone with bacterial meningitis. Instead, vancomycin is used to cover resistant strains of bacteria in treatment scenarios rather than prevention.

9. Which presentation of constipation is most concerning for colorectal malignancy in a 72-year-old patient?

A. Fewer than one stools per week

B. Weight loss

C. Recurrent hemorrhoids

D. Scybala

Weight loss in a 72-year-old patient presenting with constipation is particularly concerning for colorectal malignancy because it may indicate a more systemic issue related to cancer. In older adults, unexpected weight loss can be a significant red flag that warrants further evaluation, especially when combined with other gastrointestinal symptoms like changes in bowel habits or persistent constipation. Colorectal malignancy can cause weight loss due to tumor burden, metabolic changes, and potential malabsorption. Additionally, the presence of a malignancy can lead to other gastrointestinal symptoms such as obstruction or changes in stool characteristics. Therefore, unexpected weight loss reflects not just localized changes but may indicate advanced disease or systemic effects of a cancer process. Other presentations, such as infrequent stools, recurrent hemorrhoids, or scybala (hard, pellet-like stools), may signal constipation issues but do not inherently carry the same level of concern for malignancy as unintentional weight loss does. Weight loss encourages clinicians to consider the possibility of serious underlying conditions, making it a critical factor in directing diagnostic evaluation and management for potential colorectal malignancy.

10. An O2 saturation of 90% corresponds to which PO2 value?

A. 90 mmHg

B. 80 mmHg

C. 70 mmHg

D. 60 mmHg

To determine the PO2 value that corresponds to an oxygen saturation (O2 saturation) of 90%, understanding the relationship between these two parameters is essential. Oxygen saturation is a measure of the percentage of hemoglobin binding sites in the bloodstream occupied by oxygen. PO2 refers to the partial pressure of oxygen dissolved in plasma. The oxygen-hemoglobin dissociation curve illustrates this relationship, showing how hemoglobin saturation with oxygen changes with varying PO2 levels. At a PO2 of approximately 60 mmHg, the oxygen saturation is about 90%, indicating that at this specific PO2, the hemoglobin is still capable of saturating sufficiently with oxygen while being at a critical level of partial pressure. Higher PO2 values, such as 70 mmHg or above, would result in a saturation higher than 90%, while lower values significantly below this range would lead to lower saturations well below 90%. Thus, the understanding of the climbing and then steepening phase of the saturation curve further clarifies that at a PO2 level of 60 mmHg, oxygen saturation is likely to be around 90%. Therefore, the correct correlation matches an O2 saturation of 90% to a PO2 value of 60 mmHg.