

# Practice Exam Questions



## CWCA

Certified Wound Care Associate



## EXAMAIDES

PASS YOUR EXAM AT FIRST TRY

## Total Question: 50 QAs

### Question No: 1

A solid skin barrier wafer with a pouch is applied to a copiously draining wound, but the skin beneath the wafer has become denuded. The BEST initial solution is to

- A. apply a skin barrier powder to the denuded skin under the wafer.
- B. discontinue use of the pouch and apply topical dressing.
- C. apply a moisture barrier paste under the wafer.
- D. apply a moisture barrier ointment to the skin and absorbent dressings.

Answer: A

Explanation: A skin barrier powder is used as an initial barrier on denuded skin to provide an adherent base for ointments, pastes, or solid skin adhesive barriers. The powder is sprinkled over the denuded area and excess removed before application of second barrier. The powder should be applied thinly because excess will impair adhesion of other barrier products, and it should not be used on intact skin, as it will not properly adhere. Skin harrier powders contain powder pectin, karaya, gelatin, carboxymethyl cellulose, or combinations. Skin barrier powders are frequently used with ostomy products when the skin has become weepy.

### Question No: 2

During the phases of healing, which cell is responsible for beginning angiogenesis?

- A. Neutrophil
- B. Fibroblast
- C. Macrophage
- D. Myofibroblast

Answer: B

Explanation: During the inflammation phase, macrophages release growth factors which attract fibroblasts to the wound. Fibroblasts are responsible for beginning angiogenesis and are critically important during the proliferation phase of healing, which usually begins at about day 3 after trauma. In addition to angiogenesis, fibroblasts initiate formation of collagen (Type III) and initiate epithelization, which begins from the basement membrane of the skin or from the wound edges if the basement membrane is compromised.

### Question No: 3

A patient has a wound on the right hip with tunneling and fistulae. Which of the following is MOST indicative of an abscess formation?

- A. Increased purulent discharge
- B. Increased wound pain
- C. Increased erythema and swelling at wound perimeter
- D. Erythematous, painful swollen area 3 cm from wound perimeter

Answer: D

Explanation: An abscess often forms in conjunction with fistulae. Typical indications include erythema, pain, and swelling above the localized area of the abscess. However, if the abscess is deep within the tissue or within an internal organ, obvious signs of abscess formation may not be evident and symptoms may be less specific, including general malaise, abdominal pain, chills, fever, lethargy, diarrhea, and anorexia. Additional symptoms may be specific to the site of the abscess; for example, a perirenal abscess may cause flank pain.

Question No: 4

Which of the following laboratory tests is the MOST effective to monitor acute changes in nutritional status?

- A. Total protein
- B. Albumin
- C. Prealbumin
- D. Transferrin

Answer: C

Explanation: Prealbumin is most commonly monitored for acute changes in nutritional status because it has a half-life of only 2- 3 days. Prealbumin quickly decreases when nutrition is inadequate and rises quickly in response to increased protein intake. Protein intake must be adequate to maintain levels of prealbumin:

- Normal value: 16- 40 mg/ dL.
- Mild deficiency: 10- 15 mg/ dL.
- Moderate deficiency: 5-9 mg/dL.
- Severe deficiency: <5 mg/ dL.

Total protein levels and transferrin levels may be influenced by many factors, so they are not reliable measures of nutritional status. Albumin has a half-life of 10- 20 days, so it is sensitive to long-term protein deficiencies more than short-term.

Question No: 5

The BEST candidate for hyperbaric oxygen therapy is a patient with

- A. chronic venous ulcers, refractory to standard treatment.
- B. chronic diabetic ulcers (Wagner 3 classification), refractory to standard treatment.
- C. newly diagnosed osteomyelitis, recently started on standard treatment.
- D. acute wound from trauma to lower leg.

Answer: B

Explanation: The best candidate for hyperbaric oxygen therapy is the patient with chronic diabetic ulcers (Wagner classification 3 or higher), refractory to standard treatment. During treatment, patients breathe 100% oxygen in a pressurized environment. Hyperbaric oxygen therapy increases available oxygen to tissues by 10- 20 times. Blood that is saturated increases perfusion of the tissues.

Hyperbaric oxygen therapy is indicated for peripheral arterial insufficiency, compromised skin from grafts, and diabetic ulcers (usually Wagner 3 or higher). In 2003, Medicare approved payment for hyperbaric oxygen therapy to treat diabetic ulcers.

Question No: 6

On the eighth day of wound care, granulation tissue is evident about the wound perimeter, and the wound is beginning to contract. The wound is in which of the following phases of healing?

- A. Proliferation
- B. Inflammation
- C. Hemostasis
- D. Maturation

Answer: A

Explanation: Proliferation. Hemostasis (within minutes) occurs as platelets seal off the vessels and the clotting mechanism begins. Inflammation (days 1 to 4- 6) is characterized by erythema and edema as phagocytosis

removes debris. Proliferation (days 5- 20) is characterized by granulation tissue starting to form at wound perimeter, contracting the wound, and epithelization resulting in scar formation. During maturation or remodeling (days 21 +), scar tissue continues to form until the scar has about 80% of original tissue strength and the wound closes; however, the underlying tissue continues to remodel for up to 18 months.

Question No: 7

When calculating the ankle-brachial index (ABI), if the ankle systolic pressure is 90 and the brachial systolic pressure is 120, what is the ABI?

- A. 1.33
- B. 13.3
- C. 7.5
- D. 0.75

Answer: D

Explanation: The ankle-brachial index (ABI) examination evaluates peripheral arterial disease of the lower extremities. The ankle and brachial systolic pressures are obtained and then the ankle systolic pressure is divided by the brachial systolic pressure to obtain the ABI. If the ankle systolic pressure is 90 and the brachial systolic pressure is 120,  $90 \div 120 = 0.75$ . Normal value is 1 to 1.1 with lower values indicating decreasing perfusion. A value of 0.75 indicates severe disease and ischemia.

Question No: 8

Which of the following wound irrigation devices will provide approximately 8 psi in irrigant pressure to the wound surface?

- A. 35-mL syringe with 19-gauge angiocath
- B. 250-mL squeeze bottle
- C. Bulb syringe
- D. 6-mL syringe with 19-gauge angiocath

Answer: A

Explanation: A 35-mL syringe with 19-gauge needle provides irrigation pressure at about 8 psi. A squeeze bottle (250 mL) provides about 4.5 psi but a bulb syringe only about ~2 psi. Both syringe/catheter and needle size affect irrigant pressure. Pressures <4 psi do not provide adequate wound cleansing, but pressures > 15 psi can result in wound trauma.

- 6 mL/ 19 gauge= 30 psi
- 12 mL/ 19 gauge = 20 psi
- 12 mL/22 gauge= 13 psi
- 35 mL/21 gauge = 6 psi
- 35 mL/25 gauge= 4 psi

Question No: 9

According to the Modified Wagner Foot Ulcer Classification System, a full thickness ulcer that extends to the tendon or joint but without abscess or osteomyelitis is classified as

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

Answer: B

Explanation: A full -thickness ulcer that extends to the tendon or joint but without abscess or osteomyelitis is classified as grade 2. The Modified Wagner Foot Ulcer Classification System separates foot ulcers into six grades (grade 0 to grade 5). Classification is based on depth of lesion, presence of osteomyelitis, gangrene, infection, ischemia, and neuropathy but does not include ulcer size, so this grading system is not used in isolation; however, it is predictive of outcomes, with grades 3 to 4 indicating marked compromise.

Question No: 10

The sutures of a scalp wound are usually removed after about

- A. 3 to 5 days.
- B. 14 days.
- D. 10 days.
- D. 20 days.

Answer: C

Explanation: Sutures of a scalp wound are usually removed after about 10 days while those of facial wounds are removed in 3 to 5 days, from abdominal wall wounds in 7 to 10 days, and from wounds crossing joints, such as the elbow or knee, after 14 days. Sutures in vertical wounds of the torso are also removed after 14 days. Various suture materials may be used. Deep sutures are left in place and eventually dissolve while surface/skin sutures must be removed. Areas of high tension, such as over a joint, usually require thicker suture material, which can tolerate increased pressure.

Question No: 11

When doing the nylon monofilament test, how many test sites should be used?

- A. 2
- B. 4
- C. 8
- D. 10

Answer: D

Explanation: The nylon monofilament test is evaluated according to how many of 10 test sites the patient is able to detect, with <4 indicative of decreased sensation. Procedure:

- Ask the patient to indicate when the monofilament pressure is felt.
- Grasp a length of #10 monofilament in the instrument provided.
- Touch the monofilament against the bottom of the foot and then press the monofilament into the foot until the line buckles.
- Test the great, third, and fifth toes.
- Test the left, medial, and right areas of the ball of the foot
- Test the right and left of the arch.
- Test the middle of the heel.

Question No: 12

A chronic ulcer resulting from peripheral vascular insufficiency may remain in which stage of healing for prolonged periods?

- A. Hemostasis
- B. Inflammation