



# Silver Cross Emergency Medical Services System



## JULY 2014 - Burns

- 1) The three primary factors that determine the severity of radiation are:
  - A) Distance, shielding, and symptoms
  - B) Duration, shielding, and dose
  - C) Duration, distance, and shielding
  - D) Dose, symptoms, and shielding
  
- 2) Which of the following has contributed most significantly to the decline in US burn mortality?
  - A) Public service announcements on radio, television, and billboards
  - B) Paramedic involvement in public education
  - C) Visits to elementary schools by firefighters
  - D) Improved building codes and construction and sprinkler and smoke detector use
  
- 3) Which classification of burn is characterized mainly by blisters?
  - A) Full-thickness
  - B) Superficial
  - C) Partial-thickness
  - D) Minor
  
- 4) An area of burned tissue that is not painful is most likely a \_\_\_\_\_ burn injury.
  - A) Second-degree
  - B) Full-thickness
  - C) Superficial
  - D) Partial-thickness
  
- 5) You have been dispatched to a call for a burn patient. Upon arriving, you find a 23-year-old female who was sunbathing and fell asleep. She is alert and oriented and in moderate pain. She has blisters covering her extremities, abdomen, face, and chest. This patient's burns fall into which one of the following categories?
  - A) Superficial
  - B) Critical
  - C) Minor
  - D) Moderate
  
- 6) Which tissue layer(s) is (are) affected by partial thickness burns?
  1. Epidermis
  2. Dermis
  3. Subcutaneous
  4. Muscle
  - A) 1, 2, 3, and 4
  - B) 1 and 2
  - C) 1, 2, and 3
  - D) 1

7) Which of the following body areas warrant special attention when burned?

- A) Legs
- B) Arms
- C) Abdomen
- D) Feet

8) Which of the following patient factors increases the criticality of the patient's burn injuries?

- A) Taking antidepressants
- B) Male gender
- C) Prior history of burns
- D) Being in the geriatric age group

9) You are dispatched to a structure fire at which there is a report of a burned person. Your patient is a 32-year-old male with blisters on his anterior chest and circumferential superficial burns to both lower extremities. Using the "Rules of Nines," what percentage of burn does this patient have?

- A) 54
- B) 27
- C) 36
- D) 45

10) Which type of radiation particle can travel through 6 to 10 feet of air, penetrate a few layers of clothing, and cause external and internal injuries?

- A) Gamma
- B) Alpha
- C) Neutron
- D) Beta

11) Which of the following accounts for the most severe thermal burns of the airway?

- A) Inhalation of toxic gases
- B) Inhalation of radioactive particles in smoke
- C) Inhalation of superheated steam
- D) Inhalation of superheated air

12) For which of the following burn patients could you use local cooling?

- A) An 18-month-old child with partial- and full-thickness scald burns on both lower extremities, buttocks, genitalia, and lower abdomen
- B) A 19-year-old female with approximately 40 percent superficial and 45 percent partial-thickness burns from sunbathing
- C) A 15-year-old male with partial-thickness burns of his left upper extremity, anterior chest, and neck resulting from playing with gasoline and matches
- D) A 52-year-old male with a 1-inch-wide, full-thickness burn across the entire width of the palm of his right hand resulting from picking up a hot grate from a barbecue grill

13) A burn patient who has signs and symptoms of inhalation injury with associated respiratory compromise should be classified as:

- A) Serious
- B) Moderate
- C) Critical
- D) Minor

14) Cool-water immersion of a burned part effectively reduces burning only when done within which of the following time frames?

- A) The first 24 hours
- B) The first 10 to 15 minutes
- C) The first 1 to 2 minutes
- D) The first hour

15) The first step for treating a patient who has been contaminated with dry lime is to:

- A) Neutralize the lime with a mild acidic solution, such as vinegar and water
- B) Brush away as much of the powder as possible
- C) Flush the skin with large amounts of isopropyl alcohol
- D) Flush with copious amounts of tepid water

16) Which of the following represents the modified body surface area percentages in the “Rule of Nines” for pediatric patients?

- A) Posterior chest is 7 percent.
- B) Upper extremities are 13.5 percent each.
- C) External genitalia is 1 percent.
- D) Lower extremities are 13.5 percent each.

17) Most inhalation injuries in burn patients are due to which of the following?

- A) Toxic inhalation
- B) Radiation burns of the airway
- C) Thermal burns of the lower airway
- D) Thermal burns of the upper airway

18) During which phase of a burn injury does extravasation of proteins, water, and electrolytes occur, resulting in edema and potential hypovolemia?

- A) Emergent
- B) Hyperemia
- C) Hypermetabolic
- D) Fluid shift

19) Which of the following burns would be classified as moderate?

- A) Superficial < 50 percent BSA
- B) Full-thickness < 2 percent BSA
- C) Partial-thickness < 30 percent BSA
- D) Partial-thickness > 30 percent BSA

20) Patients who survive the first several days of a moderate to critical burn are most likely to die from which of the following complications?

- A) Hypovolemia
- B) Organ failure
- C) Infection
- D) Hypothermia

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21) You are assessing a 37-year-old woman who was rescued from an apartment fire. She has a harsh, stridorous, “brassy”-sounding cough productive of sooty sputum. Her eyebrows and the hair around her face are singed. Respirations = 28, heart rate = 108, and blood pressure = 124/84. You have a 30-minute transport time. Which of the following is the best intervention for this patient?

- A) One hundred percent oxygen by nonrebreathing mask
- B) IV/fluid resuscitation, cardiac monitor, pulse oximetry, blood glucose level
- C) A nebulized albuterol treatment
- D) Conscious sedation and endotracheal intubation

22) Your patient has circumferential full-thickness burns of the thorax. He is intubated, and you have noticed an increase in resistance as you bag him. His skin is very tight and inflexible as you try to ventilate. Which of the following is required to improve this patient’s ventilatory status?

- A) IV sedation
- B) Needle thoracostomy
- C) Escharotomy
- D) Fasciotomy

23) Your patient is a 23-year-old female who was rescued from a burning house. She was asleep in a back bedroom when the fire started, and there was no smoke alarm. She has a pulse oximetry reading of 99 percent after receiving oxygen by nonrebreathing mask. What is the most appropriate interpretation of this finding?

- A) Effects of smoke inhalation have been resolved by oxygen administration.
- B) You cannot rely on this alone to assess oxygenation.
- C) There was minimal smoke inhalation.
- D) Carboxyhemoglobin is less than 1 percent.

24) Which of the following agents is the best choice for analgesia in a patient with 9 percent partial-thickness burns involving the right lower extremity?

- A) Naproxen sodium, 500mg PO
- B) Morphine, 5mg IM
- C) Acetaminophen, 500-1000mg PO
- D) Morphine, 5-10mg IVP

25) You are caring for a patient with 30 percent full- and partial-thickness burns. He is an 80 kg male. According to the Parkland formula, he should receive \_\_\_\_\_ liters of fluid over 24 hours, with \_\_\_\_\_ liters infused in the first 8 hours.

- A) 10.6, 5.3
- B) 5, 3
- C) 8.2, 2
- D) 4.5, 1.25