Import Settings:

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Information Field: Complexity

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Highest Answer Letter: D

Multiple Keywords in Same Paragraph: No

**Chapter: Immunologic Emergencies - Immunologic Emergencies - TBNK**

**Multiple Choice**

1. An antigen is MOST accurately defined as a:

A) chemical the immune system produces to destroy an allergen.

B) substance that causes the immune system to produce antibodies.

C) chemical mediator that deactivates foreign substances in the body.

D) harmless substance that the body does not recognize as being foreign.

Ans: B

Complexity: Moderate

Ahead: Anatomy and Physiology Review

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2. An abnormal immune response that the body develops when it is re-exposed to an allergen is called:

A) anaphylaxis.

B) secondary response.

C) hypersensitivity.

D) an allergic reaction.

Ans: D

Complexity: Easy

Ahead: Anatomy and Physiology Review

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Feedback: Anatomy and Physiology Review, page 1317

3. Anaphylaxis is classified as a response mediated by \_\_\_\_ antibodies.

A) IgD

B) IgE

C) IgG

D) IgA

Ans: B

Complexity: Moderate

Ahead: Anatomy and Physiology Review

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Feedback: Anatomy and Physiology Review, page 1317

4. Patients with \_\_\_\_\_\_\_\_\_\_\_\_\_\_ are at an increased risk for anaphylaxis.

A) strep infection

B) acute pharyngitis

C) immunosuppression

D) atopic dermatitis

Ans: D

Complexity: Moderate

Ahead: Anatomy and Physiology Review

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Feedback: Anatomy and Physiology Review, page 1319

5. The longer the time between exposure to a substance:

A) the greater the chance of massive IgE antibody production.

B) the less likely a severe anaphylactic reaction will occur.

C) the greater the chance that severe anaphylaxis will occur.

D) the less likely that any kind of allergic reaction will occur.

Ans: B

Complexity: Moderate

Ahead: Anatomy and Physiology Review

Subject: Immunologic Emergencies

Pages: 1319–1320

Feedback: Anatomy and Physiology Review, pages 1319–1320

6. In contrast to cellular immunity, humoral immunity:

A) involves the use of antibodies dissolved in the blood plasma to fight off invading organisms.

B) is the result of the body's production of leukocytes called T cells that attack and destroy invaders.

C) is an acquired form of immunity that involves desensitization through the use of immunizations.

D) protects the body against foreign substances by antibodies that are located exclusively in the lymph nodes.

Ans: A

Complexity: Moderate

Ahead: Anatomy and Physiology Review

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Feedback: Anatomy and Physiology Review, page 1316

7. Following the primary response to a foreign substance, the body:

A) recognizes the substance as foreign, but does not produce antibodies until subsequent exposure.

B) utilizes macrophages to immediately destroy the substance and eliminate it from the body.

C) develops sensitivity and is able to recognize the substance following subsequent exposure.

D) releases massive amounts of antigen-specific antibodies, which produce a severe allergic reaction.

Ans: C

Complexity: Moderate

Ahead: Anatomy and Physiology Review

Subject: Immunologic Emergencies

Page: 1320

Feedback: Anatomy and Physiology Review, page 1320

8. The chemical mediators that initiate and maintain the immune response are:

A) heparin and T cells.

B) basophils and mast cells.

C) macrophages and cytokines.

D) eosinophils and neutrophils.

Ans: B

Complexity: Easy

Ahead: Anatomy and Physiology Review

Subject: Immunologic Emergencies

Page: 1320

Feedback: Anatomy and Physiology Review, page 1320

9. Physiologic effects of histamine include all of the following, EXCEPT:

A) systemic vasodilation.

B) increased cardiac contractility.

C) severe bronchoconstriction.

D) increased vascular permeability.

Ans: B

Complexity: Moderate

Ahead: Anatomy and Physiology Review

Subject: Immunologic Emergencies

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Feedback: Anatomy and Physiology Review, page 1321

10. Histamine release causes all of the following effects, EXCEPT:

A) vasodilation, which results in flushed skin and hypotension.

B) contraction of the smooth muscles of the respiratory system.

C) increased cardiac contractility, which results in hypertension.

D) increased vascular permeability, which results in tissue edema.

Ans: C

Complexity: Moderate

Ahead: Anatomy and Physiology Review

Subject: Immunologic Emergencies

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Feedback: Anatomy and Physiology Review, page 1321

11. Hypotension secondary to histamine release is due to:

A) profound bradycardia and vascular dilation.

B) decreased cardiac filling because of tachycardia.

C) vasodilation and decreased cardiac contractility.

D) capillary leakage and increased cardiac afterload.

Ans: C

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

Subject: Immunologic Emergencies

Page: 1326

Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, page 1326

12. Which of the following statements regarding leukotrienes is correct?

A) In contrast to histamine, leukotrienes are less potent chemicals and do not cause vasodilation.

B) Leukotrienes compound the physiologic effects of histamine and cause additional bronchoconstriction.

C) Leukotriene release stimulates the release of histamine, which increases the severity of the allergic response.

D) Leukotrienes attempt to mitigate the negative effects of histamine by causing coronary vasodilation.

Ans: B

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

Subject: Immunologic Emergencies

Pages: 1326–1327

Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, pages 1326–1327

13. Early clinical manifestations of an allergic reaction include all of the following, EXCEPT:

A) pruritus.

B) stridor.

C) urticaria.

D) edema.

Ans: B

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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Pages: 1327–1328

Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, pages 1327–1328

14. Which of the following clinical signs or symptoms are MOST indicative of upper airway swelling in a patient experiencing a severe allergic reaction?

A) Hoarseness and stridor

B) Crackles and wheezing

C) Facial edema and coughing

D) Chest tightness and dyspnea

Ans: A

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

Subject: Immunologic Emergencies

Page: 1327

Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, page 1327

15. Cardiovascular effects of anaphylaxis include:

A) diaphoresis, bradycardia, and edema.

B) an irregular pulse, pallor, and pruritus.

C) peripheral vasoconstriction and cool skin.

D) tachycardia, flushed skin, and hypotension.

Ans: D

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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Pages: 1327–1328

Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, pages 1327–1328

16. Common central nervous system manifestations of anaphylactic shock include all of the following, EXCEPT:

A) anxiety.

B) headache.

C) confusion.

D) combativeness.

Ans: D

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

Subject: Immunologic Emergencies

Page: 1328

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17. What physiologic effect of anaphylactic shock is seen MOST commonly in patients with neurogenic shock?

A) Profound tachycardia

B) Decreased cardiac contractility

C) Widespread vasodilation

D) Fluid leakage into the tissues

Ans: C

Complexity: Easy

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, page 1327

18. The three MOST significant indicators of anaphylactic shock are:

A) hives, chest tightness, and restlessness.

B) dyspnea, hypotension, and tachycardia.

C) pruritus, peripheral swelling, and urticaria.

D) dizziness, flushed skin, and abdominal pain.

Ans: B

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

Subject: Immunologic Emergencies

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19. An unresponsive patient with signs of anaphylactic shock:

A) indicates cerebral hypoxia and hypercarbia.

B) requires immediate antihistamine therapy.

C) is often unable to be intubated successfully.

D) needs hyperventilation with a bag-mask device.

Ans: A

Complexity: Moderate

Ahead: Patient Assessment

Subject: Immunologic Emergencies

Pages: 1322–1323

Feedback: Patient Assessment, pages 1322–1323

20. The MOST ominous respiratory sign in a patient with anaphylactic shock is:

A) diminished lung sounds.

B) loud expiratory wheezing.

C) diffuse coarse crackles.

D) labored tachypnea.

Ans: A

Complexity: Moderate

Ahead: Patient Assessment

Subject: Immunologic Emergencies

Pages: 1322–1323

Feedback: Patient Assessment, pages 1322–1323

21. Which of the following statements regarding anaphylactic shock is correct?

A) In order to provide appropriate treatment, you must first determine what caused the allergic reaction.

B) In the presence of anaphylaxis, intervention takes precedence over identifying the offending antigen.

C) Anaphylactic shock would most likely occur following initial exposure to an offending antigen.

D) Most patients who carry a prescribed EpiPen are not completely aware of what substances they are allergic to.

Ans: B

Complexity: Moderate

Ahead: Patient Assessment

Subject: Immunologic Emergencies

Page: 1324

Feedback: Patient Assessment, page 1324

22. During the secondary assessment of a patient experiencing a severe allergic reaction, you should:

A) focus exclusively on the patient's blood pressure.

B) expect the patient to vomit, often without nausea.

C) apply the cardiac monitor to detect dysrhythmias.

D) recall that capnography will be a less reliable tool.

Ans: C

Complexity: Moderate

Ahead: Patient Assessment

Subject: Immunologic Emergencies

Pages: 1325–1326

Feedback: Patient Assessment, page 1325–1326

23. Transport of a patient in anaphylactic shock may be delayed for all of the following reasons, EXCEPT:

A) aggressive airway control.

B) epinephrine administration.

C) assessment of lung sounds.

D) a secondary assessment.

Ans: D

Complexity: Moderate

Ahead: Patient Assessment

Subject: Immunologic Emergencies

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Feedback: Patient Assessment, page 1324

24. The primary treatment for hypotension secondary to anaphylaxis is:

A) epinephrine.

B) diphenhydramine.

C) isotonic crystalloid.

D) a dopamine infusion.

Ans: A

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

Subject: Immunologic Emergencies

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Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, page 1329

25. In the absence of IV or IO access, the \_\_\_\_ route is the preferred route for the administration of epinephrine to a patient in anaphylactic shock.

A) IM

B) ET

C) SQ

D) intradermal

Ans: A

Complexity: Easy

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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26. Which of the following is considered the major contributing factor to fatalities in anaphylactic shock?

A) Inadequate delivery of IV fluids

B) Delayed epinephrine administration

C) Failure to recognize signs of shock

D) Failure to administer an antihistamine

Ans: B

Complexity: Easy

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, page 1329

27. The alpha-adrenergic effects of epinephrine produce:

A) bronchodilation.

B) decreased chronotropy.

C) vasoconstriction.

D) increased inotropy.

Ans: C

Complexity: Easy

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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28. When administering an EpiPen to a 30-year-old man with a severe allergic reaction, you should recall that:

A) a 1:2,000 solution is used because the patient is an adult.

B) the SQ route is used in order to achieve a rapid effect.

C) 0.15 mg is the usual dose delivered by the adult EpiPen.

D) the drug cartridge contains 0.3 mg of a 1:1,000 solution.

Ans: D

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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29. Which of the following statements regarding the EpiPen Jr is correct?

A) It is used for children who weigh less than 88 lb (40 kg).

B) It is contraindicated for children with a history of asthma.

C) It contains 0.15 mg of a 1:2,000 solution and is given IM.

D) Benadryl should be given before the EpiPen in children.

Ans: C

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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Page: 1329

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30. Systemic lupus erythematosus is a disease caused by:

A) a multisystem autoimmune disorder.

B) a marked deficiency of neutrophils.

C) primary immune system failure.

D) excessive IgE antibody production.

Ans: A

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

Subject: Immunologic Emergencies

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Feedback: Pathophysiology, Assessment, and Management of Specific Emergencies, pages 1331–1332

31. Patients with systemic lupus erythematosus:

A) are routinely treated with high-dose antibiotic therapy.

B) often take medications that suppress their immune system.

C) have increases in their red blood cell and platelet counts.

D) are typically males between the ages of 50 and 75 years.

Ans: B

Complexity: Easy

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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32. Assessment of patients with collagen vascular diseases should focus on:

A) ruling out life threats.

B) high-dose analgesia.

C) crystalloid fluid boluses.

D) high-flow oxygen therapy.

Ans: A

Complexity: Easy

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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33. Diphenhydramine (Benadryl) is used to treat allergic reactions because it:

A) binds to H2 receptors and blocks histamine release.

B) blocks the histamine effects at the H1 receptor sites.

C) destroys histamines and blocks their further release.

D) reverses the vasodilatory and bronchoconstrictive effects.

Ans: B

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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34. Which of the following medications has the SLOWEST onset of action when given to a patient with a severe allergic reaction?

A) Albuterol

B) Epinephrine

C) Diphenhydramine

D) Methylprednisolone

Ans: D

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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35. You have treated the same patient several times for a severe allergic reaction. While educating him about the prevention of future reactions, you should advise him to:

A) wear an identification bracelet.

B) avoid the substance he is allergic to.

C) carry at least two EpiPen injectors.

D) call 9-1-1 as soon as he is exposed.

Ans: B

Complexity: Moderate

Ahead: Patient Education

Subject: Immunologic Emergencies

Page: 1335

Feedback: Patient Education, page 1335

36. A 31-year-old man presents with diffuse hives, intense itching, and watery eyes that began acutely about an hour ago. He is conscious and alert, is breathing without difficulty, and tells you that he does not have any allergies or significant medical problems. His blood pressure is 126/76 mm Hg, pulse is 80 beats/min and strong, and respirations are 16 breaths/min and unlabored. What drug should you administer?

A) Oxygen

B) Albuterol

C) Epinephrine

D) Diphenhydramine

Ans: D

Complexity: Difficult

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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37. A 20-year-old woman complains of difficulty breathing and the feeling of a lump in her throat approximately 10 minutes after being stung by a wasp. Your assessment reveals that she is anxious, is in obvious respiratory distress, and has hives covering her arms and legs. Further assessment reveals diffuse wheezing, a blood pressure of 80/50 mm Hg, and a heart rate of 120 beats/min. You should:

A) immediately sedate and intubate her to protect her airway, administer Benadryl IM, and consider an epinephrine infusion.

B) administer albuterol via an inline nebulizer attached to a bag-mask device, assist ventilations, and consider administering epinephrine.

C) apply high-flow oxygen via nonrebreathing mask, administer epinephrine via the IM route, and establish vascular access.

D) administer high-flow oxygen, start a large-bore IV, infuse up to 2 liters of normal saline, and administer epinephrine SQ.

Ans: C

Complexity: Difficult

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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38. You are caring for a 40-year-old man in obvious anaphylactic shock after being stung by a scorpion. The patient is responsive to pain only, has poor respiratory effort, and is hypotensive and tachycardic. Which of the following represents the MOST appropriate treatment sequence for this patient?

A) Immediate intubation, epinephrine SQ, two large-bore IV lines with normal saline, a 250-mL normal saline bolus, and Benadryl IM

B) Assisted ventilation, intubation if necessary, at least one large-bore IV with normal saline, epinephrine IM or IV, and Benadryl IV or IM

C) High-flow oxygen via nonrebreathing mask, Solu-Medrol IV, two large-bore IV lines with normal saline, and 20-mL/kg boluses of normal saline

D) Assisted ventilation, i-gel insertion, Benadryl IM followed immediately by epinephrine SQ, and a large-bore IV with normal saline

Ans: B

Complexity: Difficult

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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39. You have administered the appropriate dose of epinephrine to a patient with a severe allergic reaction. Reassessment reveals that the patient's condition has improved markedly. The patient, who has a history of coronary artery disease, is receiving high-flow oxygen and is on a cardiac monitor. You should next:

A) start an epinephrine infusion, administer Benadryl IV or IM, and transport without delay.

B) transport immediately, monitor airway and breathing en route, and administer Benadryl IV or IM.

C) administer a half dose of epinephrine, begin transport, and give the patient Solu-Medrol en route.

D) transport immediately, monitor the patient's blood pressure en route, and give IV fluid boluses if symptoms recur.

Ans: B

Complexity: Difficult

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40. For which of the following reasons would a corticosteroid be administered to a patient who is experiencing an allergic reaction?

A) Prevention of idiopathic reactions or recurrent anaphylaxis

B) To block H1 receptors and terminate the allergic reaction

C) To cause vasoconstriction and improve the patient’s blood pressure

D) To cause bronchodilation and restore adequate breathing

Ans: D

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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41. A 26-year-old female presents with a fever, rash, and joint pain. What should you suspect?

A) Lupus

B) Anaphylaxis

C) Scleroderma

D) Allergic reaction

Ans: A

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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42. A middle-aged male who received a kidney transplant called EMS because he was not feeling well. Which of the following assessment findings is MOST suggestive of organ rejection?

A) Excessive urine output, shortness of breath, and a diffuse rash

B) Blood in the urine, diffuse abdominal pain, and hypothermia

C) Fever with swelling and tenderness over the implanted kidney

D) Bilateral flank pain that radiates to both shoulders and scapulae

Ans: C

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

Subject: Immunologic Emergencies

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43. What is the MOST common cardiac disorder associated with lupus?

A) Endocarditis

B) Pericarditis

C) Pericardial effusion

D) Valvular heart disease

Ans: B

Complexity: Easy

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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44. Chest pain in patients with a heart transplant is uncommon because:

A) the denervated heart cannot generate angina-like pain.

B) most patients with heart transplants have diabetes.

C) the newly-implanted heart is without atherosclerosis.

D) a ventricular assist device keeps the heart oxygenated.

|

Ans: A

Complexity: Moderate

Ahead: Pathophysiology, Assessment, and Management of Specific Emergencies

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45. A 49-year-old male who had a heart transplant presents with a heart rate of 40 beats/min. He is weak, dizzy, lightheaded, and hypotensive. Which of the following medications would be the LEAST beneficial?

A) Atropine

B) Epinephrine

C) Isoproterenol

D) Norepinephrine

Ans: A

Complexity: Moderate

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