

## Ch. 16 Review

- The acute abdomen is a medical emergency, requiring prompt but gentle transport.
- The pain, tenderness, and abdominal distention associated with an acute abdomen may be signs of peritonitis, which may be caused by any condition that allows pus, blood, feces, urine, gastric juice, intestinal contents, bile, pancreatic juice, amniotic fluid, or other foreign material to lie within or adjacent to the peritoneum.
- In addition to abdominal disease or injury, problems in the gastrointestinal, genital, and urinary systems may also cause peritonitis.
- Signs and symptoms of acute abdomen include pain, nausea, vomiting, and a tense, distended abdomen.
- Pain is common directly over the inflamed area of the peritoneum, or it may be referred to another part of the body. Referred pain occurs because of the connections between the two different nervous systems supplying the parietal peritoneum and the visceral peritoneum.
- Do not give the patient with an acute abdomen anything by mouth.
- A patient in shock or with any life-threatening condition should be transported without delay. Call for advanced life support assistance if your patient's condition deteriorates during transport.

## Ch. 17 Review

- Diabetes is a disorder of glucose metabolism or difficulty metabolizing carbohydrates, fats, and proteins.
- There are two types of diabetes. Type 1 diabetes typically develops in childhood and requires daily insulin to control blood glucose. Type 2 diabetes typically develops in middle age and often can be controlled with diet, activity, and oral medications.
- Both types of diabetes are serious systemic diseases, especially affecting the kidneys, eyes, small arteries, and peripheral nerves.
- Patients with diabetes have chronic complications that place them at risk for other diseases, such as heart attack, stroke, and infections. Most often, however, you will be called on to treat the acute complications of blood glucose imbalance. These include hyperglycemia (excess blood glucose) and hypoglycemia (insufficient blood glucose).
- Hyperglycemia is typically characterized by excessive urination and resulting thirst, in conjunction with the deterioration of body tissues.
- Hyperglycemia is usually associated with dehydration and ketoacidosis and can result in marked rapid (often deep) respirations; warm, dry skin; a weak pulse; and a fruity breath odor. Hyperglycemia must be treated in the hospital with insulin and IV fluids.
- Symptoms of hypoglycemia classically include confusion; rapid respirations; pale, moist skin; diaphoresis; dizziness; fainting; and even coma and seizures. This condition is rapidly reversible with the administration of glucose or sugar. Without treatment, however, permanent brain damage and death can occur.
- Because a blood glucose level that is either too high or too low can result in altered mental status, you must perform a thorough history and patient assessment to determine the nature of the problem. When the problem cannot be determined, it is best to treat the patient for hypoglycemia.
- Be prepared to give oral glucose to a conscious patient who is confused or has a slightly decreased level of consciousness; however, do not give oral glucose to a patient who is unconscious or otherwise unable to swallow properly or protect his or her own airway.
- Remember, in all cases, providing emergency medical care and prompt transport is your primary responsibility.
- Sickle cell disease is a blood disorder that affects the shape of red blood cells.
- Symptoms of sickle cell disease are typically characterized by pain in the joints, fever, respiratory distress, and abdominal pain.
- Hemoglobin A is considered normal hemoglobin; hemoglobin S is considered an abnormal type of hemoglobin and is responsible for sickle cell crisis.

- Patients with sickle cell disease have chronic complications that place them at risk for other diseases, such as heart attack, stroke, and infection. Most often, however, you will be called on to treat the acute complications of severe pain.
- Patients with hemophilia are not able to control bleeding because clots do not develop as they should.
- Emergency care in the prehospital setting is supportive for patients with sickle cell disease or a clotting disorder such as hemophilia.

### **Ch. 18 Review**

- An allergic reaction is a response to chemicals the body releases to combat certain stimuli, called allergens.
- Allergic reactions occur most often in response to five categories of stimuli: insect bites and stings, medications, food, plants, and chemicals.
- The reaction may be mild and local, involving itching, redness, and tenderness, or it may be severe and systemic, including shock and respiratory failure.
- Anaphylaxis is a life-threatening allergic reaction mounted by multiple organ systems, which must be treated with epinephrine.
- Wheezing and skin wheals can be signs of anaphylaxis.
- People who know that they are allergic to bee, hornet, yellow jacket, or wasp venom often carry a bee-sting kit that contains epinephrine in an auto-injector. You may help to administer this medication in this form with authorization from medical control.
- All patients with suspected anaphylaxis require oxygen.
- When assessing a person who may be having an allergic reaction, you should check for flushing, itching, and swelling skin, hives, wheezing and stridor, a persistent cough, a decrease in blood pressure, a weak pulse, dizziness, abdominal cramps, and headache.
- Always provide prompt transport to the hospital for any patient who is having an allergic reaction. Remember that signs and symptoms can rapidly become more severe. Carefully monitor the patient's vital signs en route; be especially alert for airway compromise.

### **Ch. 19 Review**

- Poisons act acutely or chronically to destroy or impair body cells.
- If you believe a patient may have taken a poisonous substance, you should support the ABCs and notify medical control.
- Management of the patient also entails collecting any evidence of the type of poison that was used and taking it to the hospital; diluting and physically removing the poisonous agent; providing respiratory support; and transporting the patient promptly to the hospital.
- Emergency treatment may include administration of an antidote, usually at the hospital, if an antidote exists.
- A poison can be introduced into the body in one of four ways:
  - . Inhalation
  - . Absorption (surface contact)
  - . Ingestion
  - . Injection
- It is difficult to remove or dilute injected poisons, a fact that makes these cases especially urgent.
- Always consult medical control before you proceed with the treatment of any poisoning victim.
- Move patients who have inhaled poison into the fresh air; be prepared to use supplemental oxygen via a nonbreathing mask and/or ventilatory support via a bag-mask device.
- With absorbed or surface contact poisons, be sure to avoid contaminating yourself. You should remove all contaminated substances and clothing from the patient, and flood the affected part.
- Approximately 80% of all poisonings are by ingestion, including plants, contaminated food, and most drugs. In general, activated charcoal should be used in these patients.
- People who abuse a substance can develop a tolerance to it or can develop an addiction.

- The most commonly abused drug in the United States is alcohol. It can depress the central nervous system and can cause respiratory depression. You must support the airway in such cases, and be prepared for the patient to vomit.
- Opioids, sedative-hypnotic drugs, and abused inhalants can also depress the central nervous system and can cause respiratory depression.
- Take special care with patients who have used inhalants because the drugs may cause seizures or sudden death.
- Sympathomimetics, including cocaine, stimulate the central nervous system, causing hypertension, tachycardia, seizures, and dilated pupils. Patients who have taken these drugs may be paranoid, as may patients who have taken hallucinogens.
- Anticholinergic medications, often taken in suicide attempts, can cause a person to become hot, dry, blind, red-faced, and mentally unbalanced. An overdose of tricyclic antidepressants can lead to cardiac arrhythmias.
- The symptoms of cholinergic medications, which include organophosphate insecticides, can be remembered by the mnemonic DUMBELS, for excessive Defecation, Urination, Miosis, Bronchorrhea, Emesis, Lacrimation, and Salivation; or SLUDGE, for Salivation, Lacrimation, Urination, Defecation, Gastrointestinal irritation, and Eye constriction/emesis.
- Two main types of food poisoning cause gastrointestinal symptoms.
  - In one type, bacteria in the food directly cause disease, such as salmonellosis; in the other, bacteria such as *Staphylococcus* produce powerful toxins, often in leftover food.
  - The most severe form of toxin ingestion is botulism; the first neurologic symptoms may appear as late as 4 days after ingestion.
- Plant poisoning can affect the circulatory system, the gastrointestinal system, and the central nervous system. Some plants, such as the dieffenbachia, irritate the skin or mucous membranes and may cause obstruction of the airway.

## Ch. 20 Review

- A behavioral crisis is any reaction to events that interferes with the activities of daily living or has become unacceptable to the patient, family, or community.
- During a psychiatric emergency, a patient may show agitation or violence or become a threat to himself, herself, or others. This is more serious than the more typical behavioral crisis that causes inappropriate behavior such as interference with activities of daily living or bizarre behavior.
- According to the National Institute of Mental Health, at one time or another, one in five Americans has some type of psychiatric disorder, an illness with psychological or behavioral symptoms that may result in impaired functioning.
- Psychiatric disorders have many possible underlying causes including social or situational stress such as divorce or death of a loved one; psychiatric disorders such as schizophrenia; physical illnesses such as diabetic emergencies; chemical problems such as alcohol or drug use; or biologic disturbances such as electrolyte imbalances. Sometimes these conditions can be compounded by noncompliance with prescribed medication regimens.
- As an EMT, you are not responsible for diagnosing the underlying cause of a behavioral crisis or psychiatric emergency.
- Your job is to diffuse and control the situation and safely transport your patient to the hospital. Intervene only as much as it takes to accomplish these tasks. Be caring and careful.
- To the person experiencing a psychotic episode, the line between their reality and fantasy is blurred.
- The threat of suicide requires immediate intervention. Depression is the most significant risk factor for suicide.
- Patients experiencing delirium are generally not dangerous, but if they exhibit agitated behavior they may strike out irrationally. One of the most important factors to consider in these cases is your personal safety.
- A patient in mentally unstable condition may resist your attempts to provide care. In such situations, request that law enforcement personnel handle the patient. Another reason for seeking law enforcement

support is for a patient who resists treatment; such a patient often threatens EMTs and others. Violent or dangerous people must be taken into custody by the police before emergency care can be rendered.

- Always consult medical control and contact law enforcement personnel for help before restraining a patient. If restraints are required, use the minimum force necessary. Assess the airway and circulation frequently while the patient is restrained.

## **Ch. 21 Review**

- Women's bodies are uniquely designed to conceive and give birth. This difference makes women susceptible to a number of problems that do not occur in men.
- If fertilization of the ovum does not occur within about 14 days of ovulation, the lining of the uterus begins to separate, and menstruation occurs for about 1 week.
- When a girl reaches puberty, she begins to ovulate and experience menstruation.
- Women continue to experience the cycle of ovulation and menstruation until they reach menopause.
- The causes of gynecologic emergencies are varied and range from sexually transmitted diseases to trauma.
- Pelvic inflammatory disease is an infection of the female upper organs of reproduction: the uterus, ovaries, and fallopian tubes. It is the most common gynecologic reason why women access emergency medical services.
- Sexually transmitted diseases can lead to more serious conditions, such as pelvic inflammatory disease.
- Because menstrual bleeding is a monthly occurrence in most females, vaginal bleeding that is the result of other causes may be initially overlooked. Some possible causes of vaginal bleeding include abnormal menstruation, vaginal trauma, ectopic pregnancy, spontaneous abortion, cervical polyps, ectopic pregnancy, miscarriage, and even cancer.
- There are very few interventions that can or should be done in the prehospital setting with a gynecologic emergency.
- Whenever you deal with patients who have gynecologic problems, you must be sure to maintain the patient's privacy as much as possible.
- EMTs called on to treat a victim of sexual assault, molestation, or actual or alleged rape face many complex issues, ranging from obvious medical ones to serious psychological and legal issues. You may be the first person the victim has contact with after the encounter, and how the situation is managed from first contact throughout treatment and transport may have lasting effects for the patient and you. Professionalism, tact, kindness, and sensitivity are of paramount importance.

## **Assessment in Action**

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