

MEDICAL EMERGENCIES IN THE DENTAL OFFICE

OSUR 343

FINAL EXAM

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1. A 58 y/o slightly obese white male with no reported relevant medical history is being treated by you. You have successfully achieved local anesthesia of his lower left quadrant and are preparing to place amalgam in tooth #19 when the patient suddenly loses consciousness. Your most probable diagnosis is:
  - a. Orthostatic hypotension.
  - b. Acute myocardial infarction with possible cardiac arrest.
  - c. Vasopressor syncope.
  - d. Petit mal seizure.
  - e. Diabetic coma.
  
2. With regard to Grand Mal seizures it is advisable to:
  - ~~a.~~ Restrain the patient, physically, in order to prevent his/her from self inflicted injuries.
  - ~~b.~~ Place a block and or prop in the patient's mouth to prevent injury to his/ her tongue.
  - ~~c.~~ Pull the patient's tongue forward to maintain a patent airway.
  - d. Multiple such seizures (3 or more) occurring one after another in a continuous pattern is called *status epilepticus*.
  - ~~e.~~ Give the patient his/her regular dose of phenobarbital p/o immediately.
  
3. The Good Samaritan Statutes of the State of Illinois protect you from litigation in the event of a medical emergency occurring in your office to a patient of record whom you are treating.
  - a. True.
  - b. False.
  
4. With respect to preparing your office to deal effectively with medical emergencies, which of the following statement(s) is/are true?
  - a. You must have appropriate emergency equipment.
  - b. You and your staff must set up protocols for handling medical emergencies.
  - c. You must have taken sufficient training to be familiar with the various types of emergencies that can occur in the dental office.
  - d. You and your staff must be trained in basic life support.
  - e. All of the above.
  
5. Which of the following articles would not be found in the emergency kit of a general practitioner dentist with no additional hospital or emergency training beyond dental college?
  - a. Injectable Narcan.
  - b. Oropharyngeal airways ✓
  - c. Aromatic spirits of ammonia. ✓
  - d. Injectable hydrocortisone acetate (Solu - Cortef). ✓
  - e. Injectable epinephrine. ✓

6. Patients in late pregnancy or who are grossly obese should be positioned on their ~~right~~<sup>LEFT</sup> side if they become unconscious in your dental chair, for which of the following reason(s)?
- The anatomy of the right main bronchus.
  - The position of the liver in relation to the diaphragm.
  - The position of the inferior vena cava.
  - The position of the right pulmonary artery in relation to the heart.
  - The position of the uterus or the intestines in relation to the diaphragm.
7. Which of the following items would be considered the most indispensable for handling medical emergencies in the dental office?
- Laryngoscope.
  - Injectable epinephrine.
  - Injectable hydrocortisone acetate.
  - Oxygen.
  - Aromatic spirits of ammonia.
8. Chest pains in a patient may be due to which of the following causes?
- Intestinal gas.
  - Angina pectoris. ✓
  - Myocardial infarction. ✓
  - Anxiety. ✓
  - All of the above.
9. A patient in your chair becomes unconscious while you are working on him/her. He/she is breathing in a shallow fashion. Regardless of the cause, which of the following is an inappropriate step to take?
- Shake and try to rouse your patient.
  - Call for help and alert your office emergency team.
  - Begin CPR.
  - Position your patient with the head and heart at the same level and the hips and feet above the head.
  - Administer oxygen with a full face mask.
10. Which of the following is not generally thought of as a cause of unconsciousness?
- Vasopressor syncope. ✓
  - Cardiac arrest. ✓
  - Orthostatic hypotension. ✓
  - Angina Pectoris.
  - Acute adrenal insufficiency. ✓

11. A moderately obese 48 y/o white male with a history of insulin dependent diabetes mellitus is in your office for treatment of chronic periodontitis. During your treatment the patient begins to speak incoherently and in a disconnected fashion. After a few minutes he becomes unconscious. The smell of acetone is strong on his breath. The reason(s) for this event is most likely:
- a. Vasopressor syncope.
  - b. Hypoglycemia.
  - c. Excessively high insulin levels.
  - d. Renal failure.
  - e. Hyperglycemia.
12. The appropriate action(s) to take in the case described above (question 11) would include.
- a. Administer sugar or cake frosting into the buccal vestibule immediately.
  - b. Position the patient in a head lower than hips position immediately
  - c. Administer orange juice immediately.
  - d. Call 911 immediately.
  - e. All of the above.
13. A 52 y/o obese black male patient is in your chair for the placement of several composite restorations. The patient has no relevant medical history except for long standing hypertension controlled by medication. During the treatment, the patient complains of severe substernal pain. Managing this incident will include which of the following step(s).
- a. Administer nitroglycerine tablets sublingually. ✓
  - b. If the pain is not relieved with the initial dose of nitroglycerine, you may repeat 3 times within 10 minutes. ✓
  - c. Place the patient in his/her most comfortable position. ✓
  - d. Call 911.
  - e. All of the above.
14. The most appropriate diagnosis for the above described patient (question # 13) is:
- a. Cirrhosis of the liver.
  - b. Cardiac arrest.
  - c. Acute adrenal insufficiency.
  - d. Acute myocardial infarction. ✓
  - e. Acute indigestion.

15. A 15 y/o female with a history of bronchial asthma requiring several emergency room visits/year is being treated in your office when she begins to wheeze on exhalation, perspire, complain of difficulty breathing and become slightly cyanotic. Which of the procedures listed below is/are the most inappropriate to use in treating this patient correctly managing this emergency.
- a. Administer a bronchodilator (via inhaler). ✓
  - b. If problem persists use epinephrine (1:10,000). ✓
  - c. Position patient with her hips higher than her head. ✓
  - e. Reassure the patient to relieve her stress. ✓
  - f. Take the patient's vital signs. ✓
16. A 32 y/o male is in your office for cementation of a 5 unit fixed bridge. As you are placing the bridge on the abutments, it slips out of your hands and is lost from sight. In a matter of seconds, the patient makes a whistling sound with each inspiration. The most likely explanation for these sounds is the following.
- a. The patient has swallowed the bridge.
  - b. The bridge has lodged above the larynx in the region of the uvula.
  - c. The bridge has partially obstructed the airway by lodging either in the trachea or one of the main bronchi. ✓
  - d. The bridge has completely obstructed the airway by lodging in the trachea.
  - e. None of the above.
17. Appropriate treatment for patient described above (question #16) would **not** include which of the following.
- a. Use a finger sweep very carefully. ✓
  - b. Call 911. ✓
  - c. Strike the patient sharply on the back to dislodge the bridge. ✓
  - d. Utilize the Heimlich maneuver. ✓
  - e. Transport the patient to the hospital for diagnostic radiographs. ✓

18. A 62 y/o. female is in your office to have 4 surgical extractions. You have informed her of the difficulty of this procedure and the stormy post op period she may have. The patient's medical history is negative except that she is severely osteoarthritic and has been on corticosteroid therapy for the past 6 years (prednisone 20mg./day). As you assemble the needed instrumentation on your bracket table your patient becomes unconscious and her pupils roll upward in their sockets exposing only the white sclera. An appropriate diagnosis of this patient's condition would be:
- a. Vasopressor syncope. ✓
  - b. Acute adrenal insufficiency
  - c. Cardiac arrest. ✓
  - d. Petit mal seizure. ✓
  - e. Hyperventilation syndrome. ✓
19. Patients with altered consciousness are probably **not** suffering from which of the following medical problems?
- a. Hyperglycemia. ✓
  - b. Hypoglycemia. ✓
  - c. Cerebrovascular accidents or transient ischemic episodes. ✓
  - d. Hyper or hypo thyroidism. ✓
  - e. Orthostatic hypotension.
20. A 22 y/o male patient is in your chair for dental prophylaxis. His medical history is negative for any illnesses. The patient is ASA I. You and he have been chatting during the procedure about his work at college and his final exams. Approximately half way through the procedure, the patient suddenly ceases speaking and becomes unconscious. You can observe no signs of pathology. Which of the choices below should **not** be high on your list of possible diagnoses?
- a. The patient has fallen into a natural sleep. ✓
  - b. The patient has suffered a cerebrovascular accident.
  - c. The patient has fallen into a drug (alcohol etc. ) induced sleep. ✓
  - d. The patient has fallen into a boredom induced sleep (from your conversation). ✓
  - e. None of the above.