Special Care Dentistry Association/American Association of Hospital Dentists

SCDA/AAHD HOSPITAL DENTISTRY

OUTCOMES ASSESSMENT EXAMINATION
Pre-Test

MODULE 1 of 2

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Note:
Please be aware that on some pages the questions or answers may carry over to the next page.
Section 1: Physical Examination and Medical Evaluation

1. Asymmetrical protrusion of the tongue most likely results from a deficit from which of the following nerves:
   a. Glossopharyngeal.
   b. Hypoglossus.
   c. Lingual.
   d. Chorda Tympani.

2. The International Normalized Ratio (INR) was developed to allow comparison of anticoagulation values between hospitals. The INR is commonly used for routine coagulation evaluations and not just for patients on chronic Coumadin therapy.
   a. Both statements are correct.
   b. Both statements are incorrect.
   c. The first statement is correct. The second statement is incorrect.
   d. The first statement is incorrect. The second statement is correct.

3. Which of the following conditions would most likely produce the symptom of dyspnea when lying down (orthopnea):
   a. Congestive heart disease.
   b. Severe Hypertension.
   c. Ventricular septal defect.
   d. Aortic aneurysm.

4. Physiologic heart murmurs are pathologic and are caused by either disease or defect. Organic heart murmurs are not pathologic and typically arise from an altered metabolic state.
   a. Both statements are correct.
   b. Both statements are incorrect.
   c. The first statement is correct. The second statement is incorrect.
   d. The first statement is incorrect. The second statement is correct.
5. When assessing a patient for their bleeding potential, which of the statements is correct:
   
   a. Bleeding disorders such as von Willebrand’s Disease do not have a hereditary predisposition
   b. Long term antibiotic increases Vitamin K production which is needed for production of some coagulation factors
   c. Alcohol use does not potentiate the anticoagulant effects of aspirin when used concurrently
   d. Liver disease decreases platelet function before negatively impacting the coagulation pathways

6. Symptoms can be seen, felt, or heard by the examiner. The four methods employed during physical examination are inspection, palpation, percussion, and auscultation.
   
   a. Both statements are correct.
   b. Both statements are incorrect.
   c. The first statement is correct. The second statement is incorrect.
   d. The first statement is incorrect. The second statement is correct.

7. Upon examining a patient’s panoramic radiograph, a radiolucent lesion with a poorly defined margin is noted in the mandible suggestive of a malignancy. Which statement is incorrect regarding metastatic lesions in the maxilla and mandible:
   
   a. Metastatic carcinomas are the most common form of cancer involving bone.
   b. Breast and lung cancers are common sites of origin for the metastasis.
   c. Metastasis to bone are transmitted via the lymphatic route.
   d. The mandible is more often involved by a metastatic lesion than the maxilla.

8. The primary vital signs are blood pressure, pulse, temperature, and social habits. Vital signs are important for establishing base line values for patients and for detecting undiagnosed diseases.
   
   a. Both statement and reasoning are correct.
   b. Both statement and reasoning are incorrect.
   c. The statement is correct. The reasoning is incorrect.
   d. The statement is incorrect. The reasoning is correct.
Questions 9 & 10 are based on the following scenario:

You are asked to consult on a patient in your hospital’s intensive care unit (ICU) who recently suffered an ischemic stroke. The patient received fibrinolytic therapy for the ischemic stroke. The patient is intubed and sedated. The purpose of the dental consultation is an intraoral abscess potentially requiring drainage and extraction of the offending tooth. The patient’s past medical history is positive for ischemic stroke and cirrhosis.

9. An endotracheal tube is not an acceptable route for drug administration in an emergent situation. Due to the level of complications in endotracheal intubation, this procedure is limited to trained personnel.
   a. Both statement and reasoning are correct.
   b. Both statement and reasoning are incorrect.
   c. The first statement is correct. The second statement is incorrect.
   d. The first statement is incorrect. The second statement is correct.

10. During the physical examination, palpation and percussion could be utilized to determine the existence of hepatomegaly. Jaundice and scleral icterus are uncommon findings in cirrhosis patients.
   a. Both statement and reasoning are correct.
   b. Both statement and reasoning are incorrect.
   c. The first statement is correct. The second statement is incorrect.
   d. The first statement is incorrect. The second statement is correct.

Section 2: Pharmacology

11. Antibiotics are typically classified according to their mechanism of activity, either bactericidal or bacteriostatic. All of the following statements are correct regarding bactericidal antibiotics except:
   a. Bactericidal antibiotics kill bacteria by interfering with nucleic acid production or cell wall synthesis.
   b. Bactericidal antibiotics are less reliant on the host’s immune system than bacteriostatic antibiotics.
   c. Bactericidal antibiotics cure the infection, not the host’s immune system.
   d. Bactericidal antibiotics affect faster results than bacteriostatic antibiotics.

12. Select the correct statement regarding clindamycin:
   a. It enters soft and hard tissue readily due to the antibiotics small molecular size.
   b. It poses an increased risk for pseudomembranous colitis when given to immunocompetent patients.
c. It is bactericidal when combating oral infections.

d. Its pediatric dosing is not weight based.

13. Which of the following local anesthetics would be most appropriate for a pregnant patient:

a. 0.5% Marcaine with 1/100,000 epinephrine.
b. 3% Mepivacaine with no vasoconstrictor.
c. 4% Articaine with 1/100,000 epinephrine.
d. 2% Lidocaine with 1/100,000 epinephrine.

14. Which of the following anticonvulsant medications does not cause thrombocytopenia:

a. Phenobarbital.
b. Depakote.
c. Phenytoin.
d. Carbamazepine.

15. Which medications are commonly known to cause gingival hyperplasia?

a. Cyclosporine, digoxin, valproate.
b. Carbamazepine, phenytoin, valproate.
c. Tacrolimus, pentobarbital, lamotrigine.
d. Gabapentin, topiramate, prednisone.

16. Which of the following drugs are used most commonly for the treatment of severe SLE?

a. Cyclosporine, glucocorticoids.
b. Cyclophosphamide, prednisone.
c. Mycophenolate, tacrolimus.
d. Methotrexate, rofecoxib.

17. Which group of drugs is relatively contraindicated in patients with end stage liver disease?

a. Ibuprofen, codeine.
b. Acetaminophen, lidocaine HCl (local).
c. Clindamycin, diazepam.
d. Oxycodone, metronidazole.
e. Meperidine, azithromycin.
18. Zoledronic acid and pamidronate disodium has been used extensively in the treatment of hypercalcemia of malignancy and recently zoledronic acid has been approved for use in the treatment of osteoporosis too. Which statements best describe the dental impact of these drugs?

a. Remodeling capability of bone will be inhibited once the patient has received either drug. Therefore, any pre-prosthetic dental surgery should include alveoloplasty and primary closure of the surgical sites to facilitate better healing.
b. A thorough dental examination and cleaning should be done prior to the patient starting either drug since the patient will be prone to periodontal disease due to decreased osteoclastic activity. Patients should also have more frequent periodontal recall interval.
c. Extractions following treatment with zoledronic acid can be done safely if the patient has been given the drug for less than three years and has not taken it for three months prior to any dental surgical procedure. This is done because the concentration of the drug will not high enough to put the patient at risk for osteonecrosis of the jaw.
d. Extractions should be avoided if the patient has been treated with these drugs since there is a risk of osteonecrosis. If the patient develops osteonecrosis of the jaw, conservative therapy consists of removal of bony spicules and sequestrum.

19. Ketorolac has been used in the treatment of moderate to severe dental pain. Which of the following statements best describes its pharmacology and effects?

a. It irreversibly inhibits the action of cyclooxygenase and prostaglandin synthetase, which is responsible for platelet formation and aggregation.
b. It competitively inhibits both COX-1 and COX-2 isoenzymes as well as prostaglandin synthesis. Its peak analgesic effect is about 2-3 hours after oral administration.
c. It has better anti-inflammatory properties than analgesic effects and is therefore used widely in post-operative patients.
d. None of the above statements are true.

20. Evidence based research has shown that patients taking anticoagulant medications such as warfarin and needing minor dental surgical procedures such as extraction of teeth, biopsy, or intraoral soft tissue surgeries (such as a frenectomy) should discontinue taking their anticoagulation medication at least 72 to 96 hours prior to the dental procedure.

a. True.
b. False.
Section 3: Pathology

21. Which of the following is false about pemphigus vulgaris and mucous membrane pemphigoid (MMP)?

   a. Both pemphigus and MMP are autoimmune processes.
   b. Pemphigus targets the desmosomes, while MMP targets the basement membrane.
   c. Vesicles in pemphigus are subepithelial, while vesicle in MMP are intraepithelial.
   d. Pemphigus may be controlled with immunosuppressives, while MMP may be controlled with corticosteroids.

22. Select the true statement concerning erythema multiforme (EM).

   a. EM is commonly triggered by systemic drugs and seldom by infection.
   b. Between 60% and 80% of patients with cutaneous EM have oral manifestations.
   c. Stevens-Johnson Syndrome resembles, but is thought to be different than a severe form of EM.
   d. Immunopathologic studies are nonspecific for EM.

23. Lupus erythematosus is best described as:

   a. An autoimmune disease involving both humoral and cell-mediated arms of the immune system.
   b. Having a plaque form and atrophic form.
   c. A chronic mucocutaneous disease of unknown cause
   d. A self-limiting process not responsive to corticosteroids.

24. Which is characterized by soft white slightly elevated plaques that can be wiped away leaving a painful erythematosus, eroded, or ulcerated surface?

   a. Actinomyces.
   b. Actinobacillus.
   c. Candidiasis.
   d. Tuberculosis.
   e. Herpes simplex virus.

25. Which best describes potential causes for xerostomia?

   a. Radiotherapy, Sjogrens syndrome, diabetes mellitus, old age.
   b. Anxiety, autoimmune disease, chemotherapy, medications.
   c. Cholinergic agonists, radioactive iodine treatment, HIV/AIDS, depression.
   d. Sialometaplasia, renal disease, antihypertensive medications, radiotherapy.
26. Which of the following are potential risk factors for developing oral squamous cell carcinoma?

   a. Tobacco, alcohol, candida albicans, UV light, kidney transplant recipients on immunosuppression.
   b. Tobacco, alcohol, human papillomavirus (HPV), Epstein-Barr virus, total body irradiation.
   c. Tobacco, alcohol, candida albicans, HPV, bisphenol-A, chronic irritation.
   d. Tobacco, alcohol, Epstein-Barr virus, bone marrow transplant, chronic irritation.

27. The staging of head and neck cancer is based on the TNM system. T is tumor size, N is lymph node involvement, and M is presence or absence of distant metastasis. Select the most accurate statement from the following.

   a. Prognosis is more dependent on histologic subtype (grade) than the TNM stage of the tumor.
   b. Because of improved treatment interventions, today the overall survival rate for oral squamous cell carcinoma ranges from 60% to 70%.
   c. A T1N1M0 tumor has a better prognosis than T3N0M0.
   d. An M1 tumor is classified as a Stage IV tumor.

28. Which of the following statements is false?

   a. Bisphosphonate-associated osteonecrosis is improved better with combined HBO, antibiotics and surgery, than with any of these treatments alone.
   b. Pyrexia, painful lymphadenopathy and leukocytosis are present in acute osteomyelitis.
   c. Hyperbaric oxygen (HBO) has provided benefit for patients with osteoradionecrosis.
   d. Chronic osteomyelitis may represent a long-term, low-grade inflammatory reaction that never went through an acute phase.

29. Which of the following statements regarding alveolar osteitis is incorrect?

   a. Curettage provides added relief to the pain associated with alveolar osteitis.
   b. Packing the socket with an obtundant and antiseptic dressing is beneficial until granulation tissue has covered the exposed bone.
   c. The incidence of alveolar osteitis increases dramatically when considering impacted mandibular molars.
   d. Tobacco use and oral contraceptive use increase the incidence of alveolar osteitis.

30. All of the following statements regarding ameloblastomas are correct except:

   a. Ameloblastomas are incapable of undergoing malignant change.
   b. Ameloblastomas are tumors of odontogenic epithelial origin.
   c. The posterior mandible and ramus are the most commonly affected sites.
d. Ameloblastomas can appear unilocular or multilocular radiographically.

Section 4: Medical Emergencies

31. The most common cause of unilateral lung sounds on the right side after endotracheal intubation is:

   a. Esophageal intubation.
   b. Right mainstem bronchus intubation.
   c. Laryngospasms following intubation.
   d. Pneumothorax following intubation.

32. The narrowest portion of the pediatric airway is located at the:

   a. Vocal cords.
   b. Epiglottis.
   c. Cricoid ring.
   d. Oropharynx.

33. Select the following rhythm that could be treated with defibrillation:

   a. Pulseless electrical activity.
   b. Asystole.
   c. Ventricular fibrillation.
   d. Bradycardia.

34. Emergent treatment for patients suspected of having a stroke includes all the following except:

   a. Administering supplemental oxygen.
   b. Immediate neurological assessment.
   c. Obtaining vital signs and serum glucose.
   d. Placing patient in Trendelenburg position.

35. The first sign of malignant hyperthermia is:

   a. Bradycardia.
   b. Fever.
   c. Hypercarbia.
   d. Hypertension.
36. All of the following are signs or symptoms of hypoglycemia except:
   a. Acetone breath.
   b. Tachycardia.
   c. Profuse sweating.
   d. Behavioral changes.

37. Which of the following drug classes are the agents of choice in terminating most tonic-clonic seizures?
   a. Adrenergic agonists.
   b. Anticholinergics.
   c. Benzodiazepines.
   d. Hydantoin anticonvulsants.

38. Of the following drugs, which is the most appropriate for the treatment of acute respiratory arrest immediately following the administration of intravenous penicillin?
   a. Epinephrine.
   b. Diphenhydramine.
   c. Dexamethasone.
   d. Atropine.

39. Acute adrenal insufficiency is characterized by all of the following except:
   a. Signs and symptoms include nausea, extreme fatigue and confusion.
   b. Emergency management includes administration of corticosteroids.
   c. Patients with a history of chronic steroid use are at risk.
   d. Chronic steroid use increases the levels of endogenous glucocorticoids.

40. Ludwig’s Angina is characterized by all of the following except:
   a. Involves the sublingual, submandibular, and submental spaces bilaterally.
   b. Oral antibiotics are the primary treatment, not incision and drainage.
   c. May spread to lateral pharyngeal spaces and the mediastinum.
   d. Most likely originates from posterior mandibular teeth.
Section 5: Operative

41. Mercury exists in three forms: elemental, inorganic, and organic. The inorganic form of mercury is the main exposure risk for the general public.

a. Both statements are correct.
b. Both statements are incorrect.
c. The first statement is correct; the second statement is incorrect.
d. The first statement is incorrect; the second statement is correct.

42. Direct pulp capping exhibits the greatest potential for failure under which of the following situations:

e. Mechanical exposure of a vital tooth with no history of pain.
f. Carious exposure of a tooth with episodes of spontaneous pain.
g. Carious exposure of a vital tooth with transient pain when stimulated.
h. Mechanical exposure of a tooth with inadequate hemorrhage control.

Section 6: Fixed Prosthodontics

43. An articulator simulates the movement of the mandible. The principle employed by articulators is the mechanical replication of the posterior determinants of occlusion.

a. Both statements are correct.
b. Both statements are incorrect.
c. The first statement is correct, but the second statement is incorrect.
d. The first statement is incorrect, but the second statement is correct.

44. In the case of tilted abutments, which of the following choices are potentially acceptable when fabricating a fixed partial denture:

a. Orthodontic uprighting of the tilted abutments.
b. Telescoping crown with coping.
c. Fixed partial denture with nonrigid connector.
d. Cantilever fixed partial denture with multiple abutments.
e. All of the above.
45. A nonrigid connector is recommended when a fixed partial denture contains a pier abutment (example: abutment teeth #2, 4, & 6 with pontics for teeth #3 & 5). The most appropriate position for the nonrigid connector to ensure seating of the connector upon occlusal forces is:

a. Distal of the mesial abutment; mesial of the mesial pontic.
b. Mesial of the distal abutment; distal of the distal pontic.
c. Mesial of the middle abutment; distal of the mesial pontic.
d. Distal of the middle abutment; mesial of the distal pontic.
e. None of the above.

Section 7: Removable Prosthodontics

46. Papillary hyperplasia:

a. Is observed on the marginal gingival and associated with viral inflammation;
b. Is observed in the maxilla associated with chronic prosthesis wear;
c. Should require immediate biopsy due to high malignant transformation potential;
d. Is observed due to occlusal factors and responds favorably to occlusal adjustment;

47. In removable prosthodontics, resistance to displacement away from underlying hard and soft tissues is best described as:

a. Stability.
b. Support.
c. Retention.
d. Reciprocation.

48. Resistance to displacement in a mediolateral or anteroposterior direction of a complete or partial prosthodontic appliance is best described as:

a. Stability.
b. Support.
c. Retention.
d. Reciprocation.

Section 8: Periodontics

49. A graft from the same species but a different genotype is a/an _________; a graft that transfers tissue from one site of the recipient to another site is a/an _________.

a. Autograft; allograft.
b. Allograft; autograft.
c. Xenograft; autograft.
d. Xenograft; allograft.

50. Periodontal disease is now officially recognized as the sixth complication of diabetes. Acute viral and bacterial infections increase insulin resistance and exacerbate glycemic control.

a. Both statements are correct.
b. Both statements are incorrect.
c. The first statement is correct, but the second statement is incorrect.
d. The first statement is incorrect, but the second statement is correct.