

MISSOURI DENTAL ASSISTING EDUCATORS BASIC SKILLS MASTERY EXAMINATION OUTLINE

I. Law and Ethics in the Dental Field

- A. Dentist-Patient relationship
 - 1. Due of Care/ Standard of Care
 - 2. Abandonment
 - 3. Patient responsibilities
 - 4. Informed consent
 - 5. Implied consent
 - 6. Written consent

- B. State Dental Practice Act
 - 1. Board of Dentistry
 - a. direct supervision
 - b. indirect supervision
 - c. general supervision
 - d. contract
 - e. expressed contract

 - 2. Expanded Functions and Supervisions
 - 3. Unlicensed Practice of Dentistry

- C. Malpractice
 - 1. Act of Omission and Commission
 - 2. Respondeat superior

- D. Patient Records
 - 1. Correcting a chart entry
 - 2. Ownership of dental records and radiographs
 - 3. Patient of record

- E. Dental Ethics
 - 1. Basic principles of ethics
 - a. Regard for self-determination (autonomy)
 - b. To “Do No Harm”
 - c. Promotion of Well-Being
 - 2. Confidentiality
 - a. HIPAA

II. General Anatomy of the Oral Cavity

- A. Anatomy of the teeth
 - 1. number and locations of roots
 - 2. number and location of cusps
 - 3. enamel

4. dentin
5. cementum
6. pulp
7. bifurcation/ trifurcation
8. cervix
9. cementoenamel junction
10. apex/ apical foramen
11. adjacent teeth
12. antagonist teeth
13. numbers and types of deciduous and permanent teeth
14. function of teeth
15. teeth surfaces
16. anatomic crown
17. clinical crown

B. Anatomy of supporting tissues

1. periodontal ligament
2. alveolar process
3. interdental papilla
4. gingival sulcus
5. interproximal embrasure
6. free gingiva
7. attached gingiva
8. lining mucosa
9. healthy gingival tissue
10. gingivitis
11. tooth mobility
12. pointed papillae

C. Basic oral anatomy

1. frenum
2. maxillae
3. mandible
4. dentinal tubules
5. dentinal fibrils
6. foramen
7. canal
8. Stensen's duct
9. pits and fissures
10. salivary glands
11. trachea
12. esophagus
13. mucobuccal/ mucolabial fold
14. hard/ soft palate
15. uvula
16. deciduous dentition

17. permanent dentition
18. mixed dentition
19. interproximal contacts
20. fossa

C. Pathology associated with the oral cavity

1. aphthous stomatitis/ canker sores
2. herpes simplex
3. caries/ carious lesions
4. pulpitis
5. pulpal necrosis
6. periapical abscess
7. candidiasis
8. periodontitis
9. periodontal pocket
10. Xerostomia
11. diastema
12. Bruxism
13. root/ internal resorption
14. avulsed tooth
15. mesial/ distal drifting of teeth
16. supereruption of teeth
17. tooth impaction
18. cellulitis

III. Medical Emergencies

A. Heart conditions

1. angina pectoris
2. congestive heart failure
3. myocardial infarction
4. cardiac arrest
5. rate of breathe

B. Respiratory emergencies

1. airway obstruction
2. anaphylaxis
3. asthma
4. hyperventilation
5. respiratory arrest
6. antihistamines
7. bronchodilator

C. General medical emergencies

1. cerebrovascular accident
2. insulin shock
3. syncope/ postural hypotension

4. Anaphylactic shock
5. Acute hypertension/ use of the sphygmomanometer
6. seizure disorders (grand mal, petite mal, convulsive episodes)
7. monitoring vital signs, carotid, brachial, radial arteries
8. blood pressure
9. pulse rate
10. respiration rate
11. body temperature
12. CPR

IV. Pharmacology

A. Terminology associated with medications

1. Routes of drug administration
 - a. parenteral
 - b. inhalation
 - c. sublingual
 - d. subcutaneous

B. Medications used during medical emergencies

1. epinephrine injection
2. antihistamines
3. epinephrine aerosol spray
4. aromatic ammonia
5. amyl nitrate
6. nitroglycerine
7. oxygen

C. Medications used in routine dental treatment

1. topical anesthetic
2. local anesthetic
3. side effects of nitrous oxide
4. analgesics
5. antibiotics prophylaxis
6. anti-inflammatory agents
7. signs of abusing prescription
8. contraindications for use of epinephrine
9. common adverse drug reactions
10. barbiturate
11. narcotic

V. Radiographs

A. Types of radiographs

1. bitewings
2. periapical
3. panoramic
4. cephalometric

- B. Film position
 - 1. vertical
 - 2. horizontal

- C. Dental radiographs
 - 1. contrast
 - 2. blurred image
 - 3. density
 - 4. sharpness
 - 5. radiolucency
 - 6. film fog
 - 7. scatter radiation
 - 8. developer
 - 9. fixer
 - 10. dot convex
 - 11. size of film
 - 12. dental darkroom
 - 13. herringbone pattern
 - 14. radiopaque
 - 15. clear film

- D. Safety of Radiation & Effects
 - A. Sensitive cells
 - 1. young growing cells
 - 2. reproductive cells
 - 3. blood- forming cells
 - 4. lead apron

 - B. Limits of radiation
 - 1. exposure time
 - 2. secondary radiation
 - 3. film badge
 - 4. film speed
 - 5. kVp

VI. Dental Materials

- A. Liners, bases, and temporary fillings
 - 1. calcium hydroxide
 - 2. zinc oxide and eugenol
 - 3. glass ionomer
 - 4. temporary cements

- B. Luting cements & mixing
 - 1. zinc phosphate
 - 2. polycarboxylate
 - 3. glass ionomer

4. resin

C. Impression materials

1. types of impression trays
2. positive reproduction
3. negative reproduction
4. taking upper and lower alginate
5. rubber bowel
6. correct method of mixing alginate
7. mechanical vibrator
8. bite registration
9. regular-body polysulfide
10. light-body polysulfide

VII. OSHA Regulations

A. Bloodborne pathogens standard

1. Personal protective equipment (P.P.E.)
 - a. lab coats/ protective clothing
 - b. filtration mask
 - c. protective eyewear
 - d. gloves
 - e. mouth guards for CPR
2. Occupational exposure
 - a. Exposure incident
 1. parenteral
 2. enteral
 3. inhalation
 4. aerosol
 5. occupationally-exposed employees
 6. blood or other potentially infectious materials
 7. universal precautions
 8. droplet or airborne
 9. direct
 10. liquid
 - b. Post-exposure evaluation and follow up
 1. confidential medical records
 2. baseline blood testing
 3. source individual
 4. confidential medical opinion
 - c. Sharps
 1. disposable and reusable
 2. recapping needles
 3. sharps containers

4. instrument presoak

d. Hepatitis vaccination

1. Hepatitis B virus
2. Hepatitis antibodies
3. Hepatitis B surface antigen
4. Hepatitis B vaccination sequence

3. Recordkeeping requirements

- a. confidential employee medical records
- b. training records
- c. records surrounding exposure incidents

4. Housekeeping requirements

- a. hazardous waste
- b. personal habits and eating
- c. laundering personal protective equipment
- d. precleaning contaminated surfaces
- e. handwashing

5. Sterilization and disinfection

- a. precleaning instruments and surfaces
- b. surface barriers
- c. handling contaminated sharps
- d. sepsis

6. Training requirements

- a. initial training
- b. retraining

7. Labeling requirements

- a. sharps containers
- b. hazardous waste
- c. lab cases/ impressions

B. Hazard communications standard

1. Material safety data sheets (MSDS)

- a. contents
- b. employers' responsibilities
- c. manufacturers' responsibilities

2. Training requirements

- a. initial training
- b. retraining

3. Labeling requirements

- a. emergency exits
 - b. fixed hazards
 - c. containers
4. Recordkeeping requirements
- a. training records
 - b. material safety data sheets (MSDS)

VIII. Infection Control

A. Disinfection

1. Surface disinfection
 - a. precleaning
 - b. disinfection
 - c. barriers
2. Types of disinfectants
 - a. Isopropyl alcohol
 - b. Sodium hypochlorite
 - c. Glutaraldehyde
 - d. E.P.A. registered disinfectants
 - e. chlorine dioxide

B. Prevention of cross- contamination

1. Barriers
 - a. rubber dam
 - b. surface barriers
 - c. overgloves
 - d. hand washing
 - e. computer keyboards
2. Routine prevention
 - a. high volume evacuation (HVE)
 - b. disinfection of impressions
 - c. disinfection of lab equipment
 - d. patient charts and areas outside lab/operator
 - e. appropriate use of personal protective equipment
 - f. antimicrobial soap
 - g. exposed radiographs
3. Precleaning reusable supplies
 - a. instrument presoak
 - b. ultrasonic cleaning
 - c. manual scrubbing
4. Modes of disease transmission
 - a. direct

- b. indirect
- c. vectors

C. Sterilization

1. Types of sterilization
 - a. liquid sterilants
 - b. dry heat (time & temperature)
 - c. chemical vapor (time & temperature)
 - d. steam under pressure (time & temperature)
 - e. ethylene oxide
 - f. live spore tests
 - g. biological indicators
 - h.. sporicidal test
2. Sterilization of handpieces
 - a. precleaning and lubrication
 - b. post-sterilization lubrication
 - c. fiberoptic light surface

D. Water line asepsis

1. biofilm
2. flushing dental lines

IX. Microbiology

A. Types of pathogenic microorganisms

1. bacteria/bacterial spores
2. viruses
3. fungi
4. protozoa

B. Diseases of dental significance caused by microorganisms

1. Bacteria
 - a. caries/periodontal disease
 - b. tetanus
 - c. syphilis
 - d. tuberculosis
 - e. streptococcal infection/ rheumatic fever
 - f. subacute bacterial endocarditis
 - g. periapical/ periodontal abscess
 - h. acute necrotizing ulcerative gingivitis
2. Viruses
 - a. hepatitis
 - b. herpes simplex
 - c. HIV/ AIDS related complex
 - d. mumps

3. Fungi
 - a. candidiasis

X. Preventive Dentistry

A. Toothbrushing & brushing techniques

1. Bass technique
2. Modified Stillman technique
3. Rolling stroke technique

B. Soft Deposits

1. bacterial plaque
2. stages of plaque formation
3. materia Alba
4. dental stains
 - a. extrinsic stains
 - b. intrinsic stains
5. coronal polishing

C. Hard Deposits

1. calculus
2. formation of calculus
3. stages of periodontal disease

D. Oral Devices

1. dental floss
2. mouthrinse
3. disclosing agents
4. perio aids
5. rubber tips
6. water irrigator

E. Fluorides

1. mineral nutrient
2. fluoridation of water supply
3. fluoride application
4. topical fluoride
 - a. sodium fluoride
 - b. acidulate phosphate fluoride
 - c. stannous fluoride
 - d. neutral sodium

F. Dental Examination

1. medical & dental history
2. vital signs
3. intra and extraoral examination
4. radiographs

G. Vitals Signs

1. factors that will increase blood pressure
2. systole
3. diastole
4. sphygmomanometer
5. normal blood pressure
6. average pulse rate
7. normal oral temperature

XI. Nutrition & Diet Analysis

A. Nutrition

1. proteins
2. carbohydrates
3. fats
4. minerals
5. vitamins
6. water

B. Five food groups

C. Snacks food that aid in the maintenance of good oral health

XII. Dental Office Management

A. Patient records

1. confidential
2. active files
3. inactive files
4. parts of the patient's records

B. Communication

1. nonverbal communication
2. informed consent
3. red-flag words
 - a. "pain"
 - b. "shot"
 - c. "oops"

C. Recall systems

1. computer generated
2. recall file cards
3. failure to maintain recall system

D. Charting

1. color-coding system
2. universal numbering system
3. abbreviation of tooth surfaces

4. chart entries

XIII. General Terminology Used in Dentistry

A. General terms

1. usual, customary & reasonable (UCR)
2. office manual
3. MSDA sheets
4. invoices
5. computer management
6. confidentiality
7. insurance carrier
8. exfoliation
9. edentulous
10. congenitally missing teeth
11. supernumerary teeth
12. premedication
13. decalcification
14. demineralization
15. mobility
16. attrition
17. abrasion
18. resorption
19. calculus
20. pit and fissure sealants
21. purpose of bonding agents for sealants
22. supine position
23. malocclusion
24. centric occlusion
25. secondary dentin
26. concave
27. convex

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