

Final Examination - D-273 Introduction to Periodontology - spring 2007

Instructions: Select the single best answer for each question. Fill in your answers, name, and the last 4 digits of your student number on the computer sheet. Both this examination copy and the computer answer sheet must be turned in. You have until 11:30 am to complete the examination. No questions during the examination to supervising proctors will be answered. Questions #1-33 are worth three points each, and Question #34 is worth one point.

1. Which of the following are factors associated with an increased risk for periodontitis?
 1. female gender
 2. smoking
 3. family history of periodontitis
 4. high level of psychosocial stress

A. all of the above
→ B. #2, #3, and #4 of the above only
C. #2 and #3 of the above only
D. none of the above
2. According to the American Academy of Periodontology Practice Parameters of Care in Periodontics document, which of the following outcomes indicate a satisfactory result in the treatment of plaque-induced gingivitis?
 1. Reduction in tooth mobility
 2. Decrease in radiographic width of the periodontal ligament
 3. Gain in periodontal connective tissue attachment
 4. Absence of clinically-detectable dental calculus

A. all of the above
B. #3 of the above only
C. #3 and #4 of the above only
→ D. none of the above
3. In which histologic stage of plaque-induced gingivitis is the collagen loss in inflammatory cell infiltrated areas of connective tissue primarily involving circular and dentogingival fibers?

→ A. early lesion
B. initial lesion
C. advanced lesion
D. established lesion
4. The point where attached gingiva and alveolar mucosa meet together is known as the:

A. free gingival groove
B. junctional epithelium
→ C. mucogingival junction
D. none of the above
5. What is the first histologic change associated with the onset of plaque-induced gingivitis?

A. bleeding on probing
→ B. dilation of the microvasculature subjacent to the junctional epithelium
C. antibodies in the mucogingival junction
D. B-cell dominated inflammatory infiltrates into gingival connective tissues

6. In the human experimental gingivitis clinical study published by Loe et al. (1965), what was the outcome when plaque control was re-instituted after 21 days of no oral hygiene?
- A. An increase in gram-negative anaerobic bacteria in marginal dental plaques.
 - B. Re-establishment of periodontal health.
 - C. Removal of dental plaque, but persistence of gingival bleeding on probing in approximately 50% of patients.
 - D. A reduction of gingival inflammation, but a persistence of increased probing depths.
7. Which of the following are characteristic of plaque-induced gingivitis?
- 1. gingival bleeding on probing
 - 2. gingival swelling
 - 3. crestal alveolar bone loss
 - 4. gingival redness
 - 5. loss of clinical periodontal attachment
- A. all of the above
 - B. #1, #2, #3, and #4 of the above only
 - C. #1, #2, and #4 of the above only
 - D. #1 and #2 of the above only
8. Which of the following has the highest prevalence of gingivitis?
- A. prepubertal children
 - B. post-puberty adolescents
 - C. middle-aged (35-65 years old) females
 - D. adults above 65 years of age
9. Which of the following are useful in differentiating periodontal abscesses from endodontic abscesses?
- 1. coronal/apical location of the abscess
 - 2. presence of periodontal pocket communication into the abscess
 - 3. presence of tooth mobility
 - 4. amount of supragingival dental plaque growth
- A. all of the above
 - B. #1 and #2 of the above only
 - C. #1 and #3 of the above only
 - D. #2 of the above only
10. When treating a periodontal abscess your first step after diagnosis is:
- A. prescribe a systemic antibiotic.
 - B. debride and drain.
 - C. perform an anaerobic culture.
 - D. lavage with an antiseptic agent.
11. The pseudomembrane in ANUG is composed of:
- A. bacteria and fibrin
 - B. neutrophils and bacteria
 - C. lymphocytes and bacteria
 - D. neutrophils and fibrin

12. According to the NHANES-III national survey in the United States:

- A. initial gingivitis lesions are present in approximately one-half of the non-institutionalized USA civilian population aged 13 years or greater.
- B. females have gingivitis more than males in older age groups 45 years or greater.
- C. males have gingivitis more than females in all age groups.
- D. both answers A and C above are correct

(note - credit given to all students for question #12)

13. Microorganisms initiating periodontal abscesses:

- A. tend to be spirochetes and streptococci only.
- B. respond well to Vitamin C dietary supplements.
- C. are periodontal pocket microorganisms.
- D. are mostly aerobic bacteria.

14. Secondary herpes lesions often:

- A. are found on the tongue and sublingually.
- B. appear as large ulcers in the buccal vestibule.
- C. affect the hard palate.
- D. affect the soft palate.

15. Which of the following is associated with HIV infection?

- A. allergic lichenoid reactions on attached gingiva
- B. gingival shingles
- C. generalized linear gingival erythema in the presence of good oral hygiene
- D. all of the above

16. Candida lesions can appear as acute lesions:

- A. affecting most intraoral soft tissue sites.
- B. almost always with pseudomembrane formation.
- C. mainly on the gingiva.
- D. appear as small punctuate ulcerations.

17. Gingival hyperplasia:

- A. is usually treated with antibiotics.
- B. is easily reversible with plaque control.
- C. can be genetic.
- D. all of the above

18. The predominant type of cementum found in the cervical third of tooth roots is:

- A. acellular extrinsic fiber cementum
- B. cellular extrinsic fiber cementum
- C. cellular intrinsic fiber cementum
- D. cellular extrinsic fiber cementum

19. Malignant transformation in lichen planus:

- A. is more common in the non-erosive forms.
- B. occurs with changes that are easily seen clinically.
- C. is detected by biopsy confirmation of clinical changes.
- D. can be prevented with topical steroids.

20. Which of the following are characteristic of chronic periodontitis?

1. It is an infectious disease involving bacterial dental plaque microorganisms and possibly certain herpesviruses.
2. It induces inflammation within the supporting tissues around teeth.
3. It causes progressive periodontal connective tissue attachment loss on teeth.
4. It causes progressive crestal alveolar bone loss around teeth.

- A. all of the above
B. #2 and #3 of the above only
C. #2 and #4 of the above only
D. #3 of the above only

21. Aphthous stomatitis:

- A. responds to topical steroid rinses or ointments.
B. responds to systemic steroids.
~~C. appears with white reticular lesions.~~
→ D. Both A and B of the above are correct.

22. Which of the following is correct concerning dry mouth?

1. It is treated with topical sprays and rinses with wetting agents. ✓
2. It can occur as a result of certain cancer therapies. ✓
3. It can occur from benign mucous membrane pemphigoid. ✓
4. It can occur as a result of chronic oral inflammation. ✗

- A. all of the above.
B. #1 and #4 of the above only
→ C. #1, #2 and #3 of the above only
D. #2 of the above only

23. What is the minimum ridge width of alveolar bone that needs to be present in a jaw to accommodate a dental implant?

- A. 5 mm
B. 10 mm
C. 12 mm
D. 8 mm

24. The pyogenic granuloma is:

- A. a chronic inflammatory process.
B. eliminated by treating with antibiotics.
C. an excessive response to infections characterized by fibroblast proliferation.
→ D. treated by plaque/calculus removal and excision.

25. An infrabony pocket:

- A. has interproximal transeptal fibers arranged horizontally.
B. has the bottom of the periodontal pocket coronal to the alveolar crest.
→ C. usually exhibits vertical bone loss on a radiograph.
D. all of the above

26. D2 alveolar bone density is:

- A. more dense than D1 type alveolar bone.
→ B. similar in density as walnut wood.
C. similar in density as oak wood.
D. composed entirely of fine trabecular bone.

27. Osseointegrated dental implants:

- A. possess an apically-surrounding periodontal ligament.
- B. exhibit an intimate bone-to-implant contact at a light microscopic level.
- C. are usually slightly mobile in a buccal-lingual direction.
- D. have a vascular supply to peri-implant mucosal tissues equivalent to that found around natural teeth.

28. Pemphigus vulgaris is associated with:

- A. dental plaque-induced gingival lesions and a low patient mortality rate
- B. lichen planus
- C. drug-induced lichenoid reactions on attached gingiva only.
- D. non-dental plaque-induced gingival lesions and a high patient mortality rate

29. Marsupialization of a dental implant involves:

- A. downgrowth of epithelium between the dental implant surface and the surrounding alveolar bone.
- B. supraeruption of the dental implant when placed without an occluding tooth or other dental implant in the opposing arch.
- C. surgical removal of a failing dental implant.
- D. none of the above

30. The progression of chronic periodontitis occurs:

- A. at an equal rate in all affected sites throughout the mouth.
- B. more frequently at interproximal sites.
- C. initially only on first molars and incisor teeth.
- D. less frequently in furcation areas.

31. Clinical periodontal attachment loss on a tooth is measured:

- A. from the free gingival margin to the bottom of the periodontal pocket.
- B. on radiographs.
- C. from the mucogingival junction to the junctional epithelium.
- D. from the CEJ to the bottom of the periodontal pocket.

32. Dental plaque bacterial lipopolysaccharides (LPS) promote release of pro-inflammatory cytokines in periodontitis by:

- A. activation of host monocytes, lymphocytes and fibroblasts.
- B. activation of basal cells in host epithelium.
- C. activation of gram-positive bacterial species in dental plaque biofilms.
- D. all of the above

33. A _____ (select one of answers below to fill in blank) is characterized by an absence of alveolar bone over the surface of a tooth root, usually on its facial aspect, where the area of bone denudation extends completely through the marginal bone to the CEJ of the tooth.

- A. dehiscence
- B. periosteum
- C. fenestration
- D. hypercementosis

34. In human forms of periodontitis, the soft tissue wall of periodontal pockets may exhibit areas of localized necrosis and frank exposure of underlying connective tissues.

- A. The statement is true.
- B. The statement is false.