

Name:

Second Examination - D573 Periodontal Therapy and Treatment Planning I, fall, 2003

Instructions: Select the single best answer for each question and enter response onto the computer bubble sheet, onto which you also enter your name and social security number. You must turn in both this examination copy and your computer answer sheet. You have 75 minutes to complete the examination. No questions will be answered from the proctors during the examination.

1. Which of the following is correct relative to tobacco use and periodontitis?
 - A. Cigarette smoking, but not cigar and pipe smoking, is associated with an increased risk of periodontal attachment loss and tooth loss.
 - B. Cigars are associated with a greater risk of periodontal breakdown than pipe smoking and cigarette smoking.
 - C. A similar degree of risk to periodontal status and tooth loss is associated with cigarette smoking, cigar smoking, and pipe smoking.
 - D. Cigarette smoking, but not cigar and pipe smoking, is associated with an increased risk of periodontal attachment loss, but not tooth loss.
2. One of the factors associated with the adverse effect of smoking on the outcome of guided tissue regeneration therapy is:
 - A. increased pain caused by smoking in the surgical area.
 - B. greater risk of premature barrier membrane exposure post-treatment in smokers.
 - C. greater post-surgical bleeding in smokers.
 - D. decreased periodontal ligament elasticity seen in smokers.
3. Your patient tells you that he used to smoke but stopped many years ago. You identify severe periodontitis with deep periodontal pockets generalized onto all quadrants. The impact of the patient's past habit of smoking will have which of the following impacts on your periodontal treatment plan and/or expected outcomes?
 - A. No adverse effects on periodontal treatment outcomes would be expected.
 - B. No periodontal surgery using barrier membranes for periodontal regeneration should be used.
 - C. Systemic antibiotic prophylaxis should be given to better suppress subgingival bacterial plaque.
 - D. Only non-surgical periodontal therapy should be performed.
4. Those persons who show on average the least probing depth reduction and least periodontal attachment level gain following active periodontal therapy are most likely which of the following:
 - A. former light (less than 20 cigarettes per day) smokers
 - B. former heavy (20 or more cigarettes per day) smokers
 - C. current light (less than 20 cigarettes per day) smokers
 - D. non-smokers
5. You are treating a smoking patient with severe periodontitis and generalized deep probing depths. Which of the following is correct as to expected periodontal treatment outcomes on the patient?
 - A. More shallow post-treatment probing depths than would be found on a non-smoker.
 - B. Better post-treatment improvements on posterior teeth than on anterior teeth.
 - C. No reduction in tooth mobility from occlusal trauma.
 - D. Greater salivary bacterial counts than is found in untreated non-smoking periodontitis patients.

6. A periodontitis patient comes to you with many missing teeth and a heavy smoking habit.
The patient's smoking habit would have which of the following treatment planning impact?
- A. No impact once natural teeth are lost.
 - B. Orthodontic tooth movement to close space created by missing teeth is a preferred treatment plan in heavy vs. light smokers.
 - C. Systemic antibiotics will be needed to overcome the adverse effects of the patient's smoking.
 - D. The risk of dental implant failure is increased if they are used to replace the missing teeth.
7. Which of the following is correct relative to patterns of periodontal attachment loss in smokers with periodontitis?
- A. Significantly more periodontal attachment loss is found at interproximal & buccal premolar sites.
 - B. Significantly less periodontal attachment loss occurs at upper lingual sites and lower front teeth.
 - C. Maxillary lingual tooth surfaces and mandibular anterior teeth show significantly more periodontal attachment loss than other sites.
 - D. Mandibular posterior teeth exhibit significantly more periodontal attachment loss.
8. The more an individual smokes in terms of average number of cigarettes per day, the:
- A. higher the prevalence and extent of severe periodontitis.
 - B. higher the prevalence, but not the extent, of severe periodontitis.
 - C. lower the rate of progressive periodontal attachment loss.
 - D. higher the severity of occlusal trauma-mediated gingival suppuration.
9. Compared to smokers, persons who do not smoke have:
- A. more gingival recession
 - B. more tooth loss
 - C. more gingival bleeding
 - D. more radiographic alveolar crestal bone loss
10. Which of the following is correct relative to smoking and periodontal tissues?
- A. Smoking causes more increased subgingival temperature in inflamed gingival tissues as compared to non-smoking.
 - B. Gingival blood flow is significantly lower in healthy gingival tissues in smokers as compared to non-smokers.
 - C. Significantly less PGE₂ is released from monocytes in the presence of nicotine when challenged by *Porphyromonas gingivalis* lipopolysaccharide.
 - D. Periodontal pocket oxygen tension is significantly higher in non-smokers as compared to smokers, even when adjusting for differences in probing depth and oxygen saturation of hemoglobin.
11. Your patient with severe periodontitis is also a heavy smoker. Which of the following would likely be found in the patient as compared to a non-smoker?
- A. Decreased IgA salivary antibody levels.
 - B. Less dental calculus accumulations on supragingival tooth surfaces.
 - C. More gram-negative bacteria in supragingival plaque specimens.
 - D. More supragingival dental plaque.

12. You have a patient with desquamative gingival lesions, and following a biopsy, the entire epithelium is seen in histologic analysis to be separated from the underlying connective tissues in affected areas, with a linear pattern of IgG and complement C3 deposition along the basement membrane, as seen with direct immunofluorescence. Which of the following is the most likely diagnosis?
- A. pemphigus vulgaris
 - B. non-erosive lichen planis
 - C. mucous membrane pemphigoid
 - D. lupus erythematosus
13. In the patient described in question #12 (see above), which of the following medical consultation is most urgently needed on the patient.
- A. an ocular evaluation
 - B. a whole body examination for Wickham's striae
 - C. a fasting blood glucose test
 - D. examination of serum for anti-epithelial antibodies
14. Which of the following is not associated with non-plaque-induced gingival disease of specific bacterial origin?
- A. *Mycobacterium tuberculosis*
 - B. *Treponema pallidum*
 - C. *Neisseria gonorrhea*
 - D. *Porphyromonas gingivalis*
15. The most common viral disease affecting human gingival tissues is caused by:
- A. herpes zoster
 - B. cytomegalovirus
 - C. herpes simplex virus
 - D. shingles
16. Hereditary gingival fibromatosis is characterized by:
- A. Firm, dense, fibroblast-rich gingival tissues.
 - B. Soft, spongy, edematous, fibroblast-poor gingival tissues
 - C. Fibrous gingival tissues possessing dense collagen bundles
 - D. Marked plaque-induced bleeding on probing associated with thin gingival collagen bundles.
17. The most common inflammatory mucocutaneous disease appearing on the gingiva is:
- A. pemphigus vulgaris
 - B. lichen planus
 - C. mucous membrane pemphigoid
 - D. gingival histoplasmosis
18. Allergic lichenoid gingival tissue reactions can be caused by:
- A. dental restorations in close proximity to oral soft tissues
 - B. subgingival dental plaque rich in *Fusobacterium animalis*
 - C. a symblepharon
 - D. hot coffee

19. You have a patient from the Mediterranean region of the world with skin ulcerations and a painful, fiery red, desquamative gingivitis, both of which demonstrate on their surfaces a positive Nikolsky sign. Upon biopsy, suprabasal separation of epithelium is found along with direct immunofluorescence revealing IgG and complement C3 located in between adjacent epithelial cells. Which of the following is your most important concern for the patient if they are go untreated?
- A. unsightly gingival recession
 - B. development of conjunctival scarring
 - C. death from secondary infection of skin lesions
 - D. a high risk of periodontal attachment loss leading to tooth loss
20. Which form of lupus erythematosus exclusively affects mucocutaneous tissues and may cause a desquamative gingivitis in the oral cavity?
- A. systemic
 - B. discoid
 - C. subacute
 - D. chronic
21. Chronic red or red/white painful areas of gingival inflammation due to abrasives in dental polishing pastes are examples of:
- A. accidental gingival lesions
 - B. factitious gingival lesions
 - C. autoimmune gingival reactions
 - D. foreign body reactions
22. Which of the following gingival lesion will not respond favorably to intermittent topical or systemic corticosteroid therapy?
- A. cicatricial pemphigoid
 - B. mucous membrane pemphigoid
 - C. lichen planus
 - D. herpetic gingivostomatitis
23. An occlusal guard to control para-functional habits like bruxism should:
- A. be fabricated if possible for the mandibular teeth.
 - B. be made of a hard acrylic material.
 - C. be made to markedly increase the vertical dimension of the patient.
 - D. not have flat occlusal surface areas in molar tooth regions.
24. Tooth splinting on periodontitis patients is indicated:
- A. prior to plaque removal when tooth mobility is progressive and the PDL width is increased.
 - B. to stabilize teeth with increased tooth mobility that do not respond adequately to periodontal therapy treatment and occlusal adjustment.
 - C. to correct the effects of tipping or drifting of teeth
 - D. wear facets are present.

25. A balancing side interference is:

- A. occlusal contact on the non-working side.
- B. occlusal contact on the working side.
- C. occlusal contact in protrusive motion.
- D. found by having the patient separate their teeth.

26. Which of the following is not a possible sign of occlusal trauma?

- A. fremitus
- B. widened periodontal ligament space
- C. wear facets
- D. deep periodontal pockets

27. A reduced progression of periodontitis over time is associated with:

- A. Maxillary hard acrylic occlusal guards.
- B. Occlusal adjustment of periodontally healthy teeth with occlusal discrepancies receiving non-surgical periodontal therapy.
- C. Occlusal adjustment of periodontitis-affected teeth with occlusal discrepancies receiving non-surgical periodontal therapy.
- D. Occlusal adjustment prior to periodontal scaling and root planing, and oral hygiene training.

28. Occlusal adjustment is most effective:

- A. when increased tooth mobility is associated with an increased PDL width.
- B. when increased tooth mobility is associated with a narrowed PDL width.
- C. when firm tooth mobility is associated with an increased PDL width.
- D. when increased tooth mobility is caused by reduced height of alveolar bone and a normal PDL width is present.

29. In performing an occlusal adjustment, you find a balancing side interference where the centric contact point is located between the buccal cusp tip of the mandibular tooth, and the central fossa of the opposing maxillary tooth. Where would you best reduce tooth structure to eliminate the balancing side interference?

- A. The palatal cusp on the maxillary tooth
- B. The buccal cusp on the maxillary tooth
- C. The buccal cusp on the mandibular tooth
- D. The lingual cusp on the mandibular tooth

30. In performing an occlusal adjustment, you find a balancing side interference where the centric contact point is located between the palatal cusp tip of the maxillary tooth, and the central fossa of the opposing mandibular tooth. Where would you best reduce tooth structure to eliminate the balancing side interference?

- A. The palatal cusp on the maxillary tooth
- B. The buccal cusp on the maxillary tooth
- C. The buccal cusp on the mandibular tooth
- D. The lingual cusp on the mandibular tooth

31. Which form of occlusal trauma is potentially found on teeth exhibiting periodontitis and having a reduced crestal height of alveolar bone?

- A. primary
- B. secondary
- C. tertiary
- D. refractory

32. Which of the following is correct concerning occlusal trauma?

- A. Tooth migration is not related to occlusal trauma.
- B. Trauma from occlusion by itself causes periodontal attachment loss.
- C. Human studies clearly show that excessive occlusal forces cause a more rapid breakdown of the periodontium.
- D. Proper control of microbial plaque infection arrests periodontal breakdown even if occlusal trauma persists.

33. In removing a premature occlusal contact on the palatal cusp of a maxillary tooth, which of the following would be done?

- A. Grind away the centric occlusion contact point.
- B. Grind away the centric occlusion contact point and the occlusal slide marks going into centric occlusion.
- C. Grind away the premature occlusal contact point and the occlusal slide marks just short of the centric occlusion contact point.
- D. Grind away the buccal cusp tip on maxillary tooth.