

Periodontology III Practice Test (Sample)

Study Guide



Everything you need from our exam experts!

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SAMPLE

Questions

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- 1. What is one of the main advantages of using lasers in periodontal treatment?**
 - A. Increased healing time**
 - B. Reduction of collateral thermal damage**
 - C. Higher rates of pain for patients**
 - D. Increased risk of infection**
- 2. What feature characterizes the 12D surgical blade?**
 - A. Curved and beak-shaped with cutting edges on one side**
 - B. Curved and beak-shaped with cutting edges on both sides**
 - C. Has a thicker edge for cutting flaps**
 - D. Straight with a single cutting edge**
- 3. What type of motion is utilized by straight chisels in periodontal surgery?**
 - A. Pull motion**
 - B. Push motion**
 - C. Rotational motion**
 - D. Sliding motion**
- 4. What is a desirable outcome of periodontal surgery?**
 - A. increased gingival hyperplasia**
 - B. elimination of periodontal inflammation and bleeding**
 - C. longer healing time**
 - D. increased tooth sensitivity**
- 5. What characterizes active periodontal pockets?**
 - A. Attachment loss is ongoing**
 - B. They often heal with long junctional epithelium**
 - C. They can be maintained without attachment loss**
 - D. They have stable probing depths**

- 6. Which laser types were included in the analysis for peri-implant disease treatment?**
- A. Er:YAG, CO2, and diode lasers**
 - B. YAG, Nd:YAG, and fiber lasers**
 - C. CO2, alexandrite, and diode lasers**
 - D. Er:YAG, diode, and neodymium lasers**
- 7. During the follow-up period, what percentage of teeth with furcation involvement were lost?**
- A. 15.2%**
 - B. 31.6%**
 - C. 45.4%**
 - D. 60.3%**
- 8. What is observed one week after surgery in post-operative healing?**
- A. Superficial bone necrosis**
 - B. Established epithelial attachment**
 - C. Collagen fibers appear parallel to tooth surface**
 - D. Probing depth reduction**
- 9. What results from an infection in the sublingual space?**
- A. Displacement of the mandible**
 - B. Raising of the floor of the mouth**
 - C. Destruction of the alveolar bone**
 - D. Inflammation of the mental nerve**
- 10. What probing depth is noted for stage I periodontitis?**
- A. Less than 4 mm**
 - B. 4 mm to 6 mm**
 - C. Greater than 6 mm**
 - D. Only 1 mm**

Answers

SAMPLE

- 1. B**
- 2. B**
- 3. B**
- 4. B**
- 5. A**
- 6. A**
- 7. B**
- 8. B**
- 9. B**
- 10. A**

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Explanations

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1. What is one of the main advantages of using lasers in periodontal treatment?

- A. Increased healing time**
- B. Reduction of collateral thermal damage**
- C. Higher rates of pain for patients**
- D. Increased risk of infection**

Using lasers in periodontal treatment is beneficial primarily due to their ability to reduce collateral thermal damage. This advantage arises from the precision with which lasers can target specific tissues, allowing for surgical procedures that minimize injury to surrounding healthy tissues. Traditional surgical techniques often result in a broader area of thermal damage, which can complicate healing and lead to discomfort for the patient. The use of lasers allows for more precise cuts and vaporization of oral tissues, leading to less bleeding and inflammation. Consequently, the healing process can often be quicker and less painful compared to methods that employ conventional instruments. The reduction of collateral thermal damage is critical because it decreases the potential for complications such as prolonged recovery time and unnecessary tissue necrosis, making laser treatment particularly advantageous in periodontal therapy. In this context, it's important to note that the other options do not reflect the benefits associated with laser usage in periodontal procedures. For instance, increased healing time, higher rates of pain for patients, and increased risk of infection contradict the fundamental goals of periodontal treatment, which aim to promote healing, minimize discomfort, and reduce risks associated with surgical interventions.

2. What feature characterizes the 12D surgical blade?

- A. Curved and beak-shaped with cutting edges on one side**
- B. Curved and beak-shaped with cutting edges on both sides**
- C. Has a thicker edge for cutting flaps**
- D. Straight with a single cutting edge**

The 12D surgical blade is characterized by its curved and beak-shaped design, with cutting edges on both sides. This design allows for precise tissue retraction and cutting, making it particularly useful in periodontal and oral surgical procedures where access to confined spaces and the ability to manage delicate tissues are essential. The dual cutting edges increase its versatility and effectiveness, enabling the clinician to navigate around anatomical structures with greater ease and control. In contrast, other blades may have different shapes or edge configurations that limit their applications. For example, some blades may only have cutting edges on a single side or may be straight, which would not provide the same benefits in maneuverability and cutting efficiency in complex surgical environments. The 12D's specific attributes make it well-suited for delicate surgical tasks, enhancing the overall outcome of periodontal surgeries.

3. What type of motion is utilized by straight chisels in periodontal surgery?

- A. Pull motion**
- B. Push motion**
- C. Rotational motion**
- D. Sliding motion**

In periodontal surgery, straight chisels are specifically designed to use a push motion. This technique allows the clinician to effectively remove bone or soft tissue by pushing the chisel against the target surface. The chisel's sharp edge facilitates cutting through tissue as it is advanced forward, making the push motion the most efficient and effective for shaping and contouring the surgical area. Using a push motion helps in maintaining control and precision, which is critical in delicate periodontal procedures. This contrasts with other tools that may use different motion types, such as pull or sliding motions, which may not provide the same level of effectiveness when employed with straight chisels. Understanding the mechanics of these instruments and their motions is essential for successful outcomes in periodontal surgeries.

4. What is a desirable outcome of periodontal surgery?

- A. increased gingival hyperplasia**
- B. elimination of periodontal inflammation and bleeding**
- C. longer healing time**
- D. increased tooth sensitivity**

The elimination of periodontal inflammation and bleeding is a fundamental goal of periodontal surgery. This outcome is crucial for the overall health of the periodontal tissues, as it signifies that the infection and inflammatory processes that contribute to periodontal disease have been successfully addressed. Achieving this outcome allows the tissue to heal properly and helps to restore the periodontal structures, which can improve oral health and reduce the risk of tooth loss. The reduction or elimination of inflammation also contributes to more stable and healthier periodontal conditions, which are vital for maintaining good oral hygiene and supporting the long-term health of teeth and gums. By focusing on reducing inflammation and bleeding, periodontal surgery aims to create an environment conducive to healing, enhancing patient comfort and facilitating better periodontal maintenance in the future. In contrast, the other options—gingival hyperplasia, longer healing time, and increased tooth sensitivity—are generally undesirable outcomes that can complicate post-surgical recovery and management of periodontal health.

5. What characterizes active periodontal pockets?

- A. Attachment loss is ongoing**
- B. They often heal with long junctional epithelium**
- C. They can be maintained without attachment loss**
- D. They have stable probing depths**

Active periodontal pockets are characterized by ongoing attachment loss, which indicates that the supporting structures around the teeth are being destroyed as a result of periodontal disease. This continuous process of tissue breakdown leads to the deepening of the pockets where bacteria can persist and inflammation can occur. As attachment loss progresses, the tooth becomes less stable and more susceptible to further periodontal issues. In contrast, healing with long junctional epithelium pertains to how some pockets may respond to treatment, forming a new attachment that is not true connective tissue attachment but rather a compromise that lacks true periodontal structure. Maintaining pockets without attachment loss suggests a state of stability, which does not align with the definition of an active pocket. The condition of having stable probing depths also implies that there is no active disease occurring, as probing depths that remain constant typically indicate a non-progressive state. Thus, the characteristic of ongoing attachment loss is what sets active periodontal pockets apart from other conditions related to periodontal health.

6. Which laser types were included in the analysis for peri-implant disease treatment?

- A. Er:YAG, CO2, and diode lasers**
- B. YAG, Nd:YAG, and fiber lasers**
- C. CO2, alexandrite, and diode lasers**
- D. Er:YAG, diode, and neodymium lasers**

The inclusion of Er:YAG, CO2, and diode lasers in the analysis for peri-implant disease treatment is significant due to the unique properties and clinical applications of these laser types. The Er:YAG laser is particularly effective in periodontal and peri-implant therapies because it operates at a wavelength that is well absorbed by water, making it highly efficient for soft tissue procedures. This property allows precise cutting with minimal thermal damage, which is crucial for maintaining the health of surrounding tissues during implant treatments. CO2 lasers are also included due to their ability to effectively coagulate blood vessels and remove soft tissues. They have been widely used for surgical procedures in dentistry and are known for their precise cutting abilities and hemostatic properties, which help reduce bleeding during procedures. Diode lasers are commonly utilized in periodontal treatments because of their versatility and ability to penetrate tissues effectively. They are also useful for various soft tissue procedures due to their portable nature and relatively low cost compared to other laser types. Together, these three types of lasers provide a comprehensive approach to the treatment of peri-implant diseases, each contributing different strengths to the process, such as precision, coagulation, and tissue management. These factors make them appropriate choices for inclusion in studies focused on improving outcomes in peri

7. During the follow-up period, what percentage of teeth with furcation involvement were lost?

- A. 15.2%
- B. 31.6%**
- C. 45.4%
- D. 60.3%

The correct answer indicates that 31.6% of teeth with furcation involvement were lost during the follow-up period. This percentage underscores the significant impact furcation involvement has on tooth retention, highlighting its association with periodontal disease severity. Furcation involvement signifies that the periodontal disease has progressed to a stage where it affects the bone and tissue surrounding the roots of multi-rooted teeth. In such cases, the periodontal support is compromised, making these teeth more susceptible to loss, especially if left untreated or inadequately managed. The 31.6% figure reflects data collected from clinical studies that examine tooth loss rates in patients with varying degrees of periodontal disease severity, particularly in relation to furcation involvement. Understanding this statistic is crucial for practitioners, as it emphasizes the need for appropriate periodontal treatment and monitoring of patients with furcation involvement to prevent tooth loss. This information aids in patient management by stressing the importance of early intervention and consistent oral hygiene practices to maintain periodontal health.

8. What is observed one week after surgery in post-operative healing?

- A. Superficial bone necrosis
- B. Established epithelial attachment**
- C. Collagen fibers appear parallel to tooth surface
- D. Probing depth reduction

In the context of post-operative healing one week after periodontal surgery, the observation of established epithelial attachment is significant. By this stage in the healing process, the epithelial cells begin to migrate along the wound edges, leading to the re-establishment of the connection between the epithelium and the underlying connective tissues. This attachment is crucial for restoring the integrity of the periodontal attachment apparatus and is indicative of proper healing following surgical intervention. During the first week post-surgery, the wound environment is typically one of active healing, where the body works to close the surgical site and restore normal function. The formation of new epithelial tissue is a key part of this process, and once the epithelial attachment is established, it provides a foundation for further healing and regeneration of periodontal structures. In contrast, the other options represent either conditions that do not typically manifest at this early stage of healing or phenomena that occur later in the healing process. Superficial bone necrosis, for instance, may arise from inadequate blood supply or surgical trauma, but it is not a standard observation at this early time point. Similarly, while collagen fibers and their orientation will evolve over time, the parallel alignment to the tooth surface is more characteristic of later stages of healing. Probing depth reduction is a

9. What results from an infection in the sublingual space?

- A. Displacement of the mandible**
- B. Raising of the floor of the mouth**
- C. Destruction of the alveolar bone**
- D. Inflammation of the mental nerve**

An infection in the sublingual space often leads to the raising of the floor of the mouth. This occurs because the sublingual space is located under the tongue, and when it becomes infected, it can fill with pus and fluid, causing swelling. As the accumulation of infectious material increases, it pushes the floor of the mouth upwards, leading to a noticeable elevation. This finding is clinically important, as it can indicate the need for further investigation and potentially prompt surgical intervention to address the infection and prevent complications that may arise from the swelling. In this context, understanding the anatomical relationship of the sublingual space to surrounding structures helps clarify why an infection specifically affects the floor of the mouth in this manner.

10. What probing depth is noted for stage I periodontitis?

- A. Less than 4 mm**
- B. 4 mm to 6 mm**
- C. Greater than 6 mm**
- D. Only 1 mm**

In the classification of periodontal diseases, stage I periodontitis is characterized by mild inflammatory changes and minimal attachment loss. The probing depth associated with stage I periodontitis is typically measured as less than 4 mm. This depth indicates that the disease is in its early stages, where there is an initial loss of connective tissue attachment, but it is not severe. Probing depths of 4 mm to 6 mm would indicate a more advanced level of periodontal disease, as such measurements suggest a greater degree of attachment loss and deeper periodontal pockets. Similarly, probing depths greater than 6 mm are indicative of more advanced stages of periodontitis, typically aligning with stage II or higher, where significant periodontal destruction is ongoing. Probing depths of only 1 mm would not reflect any attachment loss and generally apply to healthy periodontal conditions rather than any stage of periodontitis. Thus, understanding the relationship between probing depth and the stages of periodontitis is essential for diagnosis and treatment planning in periodontal therapy.