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APRIL 2019 LEARNING OBJECTIVES:

After completing this course, the participant will have:

1. Knowledge concerning the peak growth for the anteroposterior relationships of the maxilla and mandible in Class I subjects.
2. An appreciation for the stress that various types of orthodontic tooth movement creates for the pulp and neurovascular bundle at various levels of bone loss.
3. An awareness of the effect on the self-esteem, sensitivity to criticism, and social appearance anxiety after orthognathic surgery for skeletal Class III patients.
4. Familiarity with the difference in failure rates and bonding times between the use of Adhesive Precoated Flash-Free and Adhesive Precoated Plus brackets.

Article 1: Craniofacial growth spurt in Class I patients, by Mona A. Montasser

1. The objective of this study was to evaluate the growth spurt of Class I subjects, focusing on the ability to predict the peak of the growth spurt of the maxillary (Co-A) and mandibular (Co-Pog) lengths from the maturational changes of the cervical vertebrae (CVM).
 1. True
 2. False
2. Six cephalograms were evaluated for each subject in the study.
 1. True
 2. False
3. The authors reported a high coincidence in the occurrence of the peaks of mandibular and maxillary lengths, which means that the peaks occurred during the same CVM interval in most all subjects.
 1. True
 2. False
4. The authors concluded that in Class I subjects with balanced anteroposterior jaw relationships, presence of CVM 3 would indicate the peak growth spurt and CVM 2 would mean that the peak has not yet arrived.
 1. True
 2. False

Article 2: Finite element analysis of the dental pulp under orthodontic forces, by Radu-Andrei Moga et al

5. The primary aim of this study was to evaluate stress on the total pulp and neurovascular bundle (NVB) during 5 types of orthodontic tooth movement at different levels of bone loss.
 1. True
 2. False

6. The 10 patients used to create models for finite element analysis were divided between 5 men and 5 women with a mean age of 38.15 ± 1.93 years.
 1. True
 2. False
7. The authors reported that in situations with reduced periodontium, lower forces were needed to reach the maximum tolerable stress compared with intact periodontiums.
 1. True
 2. False
8. The authors concluded that stress manifested at the apical third of the pulp was smaller than at the NVB and that rotational movements induced the highest stress and translational forces the lowest stress related to the physiologic capillary blood pressure.
 1. True
 2. False

Article 3: The changes of self-esteem, sensitivity to criticism, and social appearance anxiety in orthognathic surgery patients: A controlled study, by Mukerrem Ozge Aginasligil

9. The purpose of the study was to evaluate the changes of psychologic parameters, such as self-esteem, sensitivity to criticism, and social appearance anxiety, in skeletal Class III patients undergoing orthognathic surgery and to compare them with the psychologic status of untreated skeletal Class III patients as control subjects.
 1. True
 2. False
10. The study's group 2 (longitudinal group) comprised 45 patients with skeletal Class III malocclusions, and they were evaluated before and after surgery.
 1. True
 2. False
11. The authors reported that social appearance anxiety levels for Class III patients remained much higher than for the control group after their surgery.
 1. True
 2. False
12. After the surgery for skeletal Class III patients, the authors concluded that the patient's self-esteem increased and their sensitivity to criticism and social appearance anxiety decreased.
 1. True
 2. False

Article 4: Comparison of clinical bond failure rates and bonding times between two adhesive precoated bracket systems, by Meriç Tümoğlu et al

13. The objective of this study was to compare the clinical bracket failure rate and bonding time differences between Adhesive Precoated Flash-Free (APCF) and Adhesive Precoated Plus (APCP) bracket systems.
 1. True
 2. False
14. The study's sample comprised 330 bracketed teeth.
 1. True
 2. False
15. The authors reported that the bonding time for the APCF and APCP brackets are clinically similar.
 1. True
 2. False
16. The authors concluded that the failure rate for APCF brackets is greater than for APCP brackets.
 1. True
 2. False