

After completing this course, the participant will have:

1. An understanding of the potential for anchorage reinforcement in maxillary premolar extraction space closures with either miniscrews or molar blocks.
2. An awareness of the levels of bisphenol A released in saliva of patients with either light-cured or chemically cured adhesives.
3. A familiarity with the effects of bone quality and quantity on the primary stability of palatal sites for orthodontic miniscrew insertion.
4. Knowledge concerning tooth widths in patients with missing or peg-shaped maxillary lateral incisors.

Article 1: Anchorage reinforcement with miniscrews and molar blocks in adolescents: A randomized controlled trial, by Niels Ganzer et al

1. The objectives of this study were to investigate the anchorage capacities of miniscrews placed on the facial aspect of the alveolar process, miniscrews placed on the palatal aspect of the alveolar process, and molar blocks.

TRUE

FALSE

2. The study's sample was randomly divided into 2 groups. Group A had no maxillary second molar brackets with 1 miniscrew per side for anchorage, and group B had maxillary second molar brackets connected with a steel ligature to the first molars and second premolars, thus creating the molar block for anchorage.

TRUE

FALSE

3. The authors reported that molar blocks did not increase the anchorage capacity and thus cannot be recommended for anchorage reinforcement.

TRUE

FALSE

4. The authors concluded that even though direct anchorage with miniscrews was better than molar block anchorage, it cannot be recommended for anchorage reinforcement.

TRUE

FALSE

Article 2: High-performance liquid chromatography analysis of salivary bisphenol A levels from light-cured and chemically cured orthodontic adhesives, by Madhav K. Manoj et al

5. The study's objective was to assess the levels of bisphenol A (BPA) released from light-cured and chemically cured resins used for orthodontic bracket bonding in 3 months of observation.

TRUE

FALSE

6. A requirement for inclusion in the sample was an Angle Class I skeletal malocclusion with mild to moderate crowding requiring no extraction of permanent teeth.

TRUE

FALSE

7. The authors reported that light-cured resins release BPA in much smaller quantities than do chemically cured resins.

TRUE

FALSE

8. The authors concluded that the release of BPA after bonding brackets for 1 month diminished to a negligible amount and had no clinical consequence.

TRUE

FALSE

Article 3: In-vivo comparison of different palatal sites for orthodontic miniscrew insertion: Effect of bone quality and quantity on primary stability, by Carine Bourassa et al

9. The aims of this study were to assess the primary stability of orthodontic miniscrews inserted at various sites in human cadaveric palatal bone for temporary skeletal anchorage and to determine the effect of bone quality and quantity on their primary stability using microcomputed tomography imaging.

TRUE

FALSE

10. The 130 miniscrews were inserted into 10 cadaveric bone samples in the most commonly reported palatal insertion sites that would not encroach on important anatomic structures such as nerves and blood vessels.

TRUE

FALSE

11. The authors reported an increased risk of miniscrew perforation into the nasal cavity at regions posterior to the second premolars.

TRUE

FALSE

12. The authors concluded that orthodontic miniscrew primary stability was not affected by either bone quality or quantity.

TRUE

FALSE

Article 4: New perspective for evaluation of tooth widths in patients with missing or peg-shaped maxillary lateral incisors: Quadrant analysis, by Erdal Bozkaya et al

13. The aims of this study were to evaluate the association between agenesis or size discrepancy of maxillary lateral incisors and the mesiodistal dimensions of the rest of the dentition, and to analyze the widths of adjacent teeth, and maxillary central incisors and canines.

TRUE

FALSE

14. The study's sample comprised the following groups: 35 patients with bilateral missing lateral incisors, 29 patients with unilateral missing lateral incisors, 16 patients with bilateral peg-shaped lateral incisor, and 32 patients with normal maxillary lateral incisors as the control.

TRUE

FALSE

15. The authors reported that, according to quadrant analysis, the teeth in the quadrants with missing or peg-shaped lateral incisors were wider than the teeth in the quadrants with normal lateral incisors.

TRUE

FALSE

16. The authors concluded that, in patients with bilateral missing or peg-shaped lateral incisors, individual tooth widths and total tooth widths were essentially the same as those in the control group.

TRUE

FALSE