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AAO Continuing Education

After completing this course, the participant will have:
1. An appreciation for how the complexity of maxillary impacted canine traction may influence potential root resorption on adjacent incisor teeth.
2. An understanding of the different treatment effects from incremental versus maximum activation of the Herbst appliance in class II malocclusions.
3. A familiarity with the influence on enamel demineralization of placing benzalkonium chloride in orthodontic adhesives.
4. An awareness of the differences in demineralization lesions and bond failures between resin-modified glass ionomer and light-cured composite used for orthodontic bonding.

Article 1: Influence of impacted maxillary canine orthodontic traction complexity on root resorption of incisors: A retrospective longitudinal study, by Luis Ernesto Arriola-Guillén et al

1. The objective of this study was to determine the influence of the complexity of orthodontic traction of impacted canines on the root resorption of adjacent incisor teeth.
TRUE
FALSE

2. The sample was divided into 2 groups according to the level of orthodontic traction treatment complexity: low-complexity group (n = 20) and high-complexity group (n = 25).
TRUE
FALSE

3. The authors reported that in the high-complexity treatment group, 60% of the patients had initial root resorption, compared with 15% of the patients with this condition in the low complexity group.
TRUE
FALSE

4. The authors concluded that orthodontic traction complexity of impacted maxillary canines is a risk factor for greater root resorption of the maxillary incisor teeth.
TRUE
FALSE

Article 2: Effectiveness of incremental versus maximum bite advancement during Herbst appliance therapy in late adolescent and young adult patients, by Nisa Gul Amuk et al

5. The aim of this study was to compare the effects of Herbst appliance therapy with maximum activation versus incremental activation in early and late adolescent patients with skeletal class II malocclusion and mandibular retrognathy.
TRUE
FALSE

6. The maximum activation group included 21 subjects (12 girls, 9 boys, overall mean age 15.7 ± 1.3 y) and the incremental activation group included 21 subjects (15 girls, 6 boys, overall mean age 15.6 ± 1.1 y).
TRUE
FALSE

7. The authors reported that overjet reduction and class I occlusion were accomplished through the combination of both skeletal and dental changes.
TRUE
FALSE

8. The authors concluded that less protrusion and proclination of the mandibular incisors were observed in the maximum activation group.
TRUE
FALSE

Article 3: Benzalkonium chloride in an orthodontic adhesive: its effect on rat enamel demineralization using color-based image analysis, by Maria Lourdes Torres-Garcia et al

9. The aim of this study was to determine the effect of an orthodontic bonding adhesive containing benzalkonium chloride (BAC) on enamel demineralization.
TRUE
FALSE

10. In the non-BAC group and the BAC group, all the miniature brackets that were placed remained intact throughout the entire 7 weeks of the experiment.
TRUE
FALSE

11. The authors reported that animals that received orthodontic resin with BAC showed no difference in enamel demineralization compared with the non-BAC group.
TRUE
FALSE

12. The authors concluded that the addition of BAC to an orthodontic composite had no effect on the amount and percentage of enamel demineralization in rats.
TRUE
FALSE

Article 4: Resin-modified glass ionomer cement versus composite for orthodontic bonding: a multicenter, single-blind, randomized controlled trial, by Philip E. Benson et al

13. The purpose of this study was to compare the incidence of new demineralized lesions and bond failures between 2 groups of participants wearing fixed orthodontic appliances bonded with either light-cured resin modified glass ionomer cement or light-cured composite.
TRUE
FALSE

14. The final sample comprised 173 participants with baseline and day-of-debonding images.
TRUE
FALSE

15. The authors reported that no difference was observed in the failure rates between the 2 bonding adhesives and that in fact, the operator had a greater influence on the failure rate than the choice of bonding adhesive.
TRUE
FALSE

16. The authors concluded that there is no evidence that the use of resin-modified glass ionomer cement over light-cured composite for bonding brackets reduces the incidence of new demineralized lesions or bond failures.
TRUE
FALSE