

After completing this course, the participant will have:

1. Knowledge concerning the effect of micro-osteoperforations on the rate of tooth movement.
2. A familiarity with the treatment outcome and patient satisfaction differences after using either a 2-dimensional or a 3-dimensional computer-assisted treatment planning technique for orthognathic surgery.
3. An appreciation for differences in periodontal health and compliance between Essix and Hawley retainers.
4. An awareness of how comprehensive clear aligner treatment can affect root resorption on maxillary incisors.

Article 1: Three-dimensional assessment of the effect of micro-osteoperforations on the rate of tooth movement during canine retraction in adults with Class II malocclusion: A randomized controlled clinical trial, by Amal Abdullah Alkebsi et al

1. The purpose of this split-mouth trial was to investigate the effect of micro-osteoperforations on the rate of tooth movement.

True

False

2. Retraction of the canine into the extraction space was accomplished with a nickel-titanium closed-coil spring connecting a power arm on the canine directly to a miniscrew between the maxillary second premolar and first molar.

True

False

3. The authors reported that the micro-osteoperforations had no adverse effect on the periodontal health of the involved teeth.

True

False

4. The authors concluded that the 3 micro-osteoperforations performed in this study were not effective for accelerating tooth movement.

True

False

Article 2: Treatment outcomes and patient-reported quality of life after orthognathic surgery with computer-assisted 2- or 3-dimensional planning: A randomized double-blind active-controlled clinical trial, by Martin Bengtsson et al

5. The aim of this randomized 2-arm parallel double-blind active-controlled clinical trial was to compare the outcomes of computer-based 2-dimensional and 3-dimensional planning techniques according to patient-reported health-related quality of life.

True

False

6. Eligibility criteria for subjects of the study were age between 18 and 30 years and diagnosed with Angle Class II malocclusion with a minimum of 5 mm. of overjet.

True

False

7. The authors reported no improvement in the health-related quality of life survey scores after surgical treatment for either the 2-dimensional or 3-dimensional planning technique groups.

True

False

8. The authors concluded that no statistically significant differences were found between the 2-dimensional and 3-dimensional planning techniques.

True

False

Article 3: Periodontal health and compliance: A comparison between Essix and Hawley retainers, by Licia Manzon et al

9. The aim of this study was to evaluate plaque accumulation, periodontal health, breakages, and patient compliance in 2 groups of young patients wearing Essix or Hawley retainers for a 6-month period.

True

False

10. The sample comprised 35 subjects who completed fixed orthodontic treatment and were enrolled in this prospective cohort study.

True

False

11. The authors reported that Essix retainers were more prone to breakage and deterioration than were the Hawley retainers.

True

False

12. The authors concluded that Essix retainers may cause greater accumulation of plaque on both teeth and retainers, but they are well accepted by patients for their esthetic and oral comfort characteristics.

True

False

Article 4: Apical root resorption during orthodontic treatment with clear aligners: A retrospective study using cone-beam computed tomography, by Courtney Aman et al

13. The purposes of this study were to investigate the incidence and severity of orthodontically induced inflammatory root resorption (OIIRR) on maxillary incisors with clear aligner therapy using cone-beam computed tomography and to identify possible risk factors.

True

False

14. The authors measured maxillary incisor root lengths on orthogonal images from pretreatment and posttreatment cone-beam computed tomography examinations of 160 patients who received comprehensive orthodontic treatment with clear aligners.

True

False

15. The authors reported that posttreatment approximation of root apices to the facial cortical plate showed the strongest association for increased OIIRR.

True

False

16. The authors concluded that comprehensive treatment with clear aligners resulted in minimal root resorption.

True

False