

After completing this course, the participant will have:

1. Understanding how extractions of 4 first premolars can influence the posterior Bolton ratio in finished orthodontic patients with Class I occlusion.
2. Awareness of the differences in the dentoskeletal relationships that are observed after the use of either a hybrid hyrax or a conventional hyrax expander in conjunction with a miniscrew-anchored maxillary protraction protocol for the treatment of Class III malocclusion.
3. Appreciation for how microosteoperforations may accelerate the alignment of maxillary anterior crowding in adults.
4. Familiarity with the long-term effect on maxillary molar positions after distalization using a modified C-palatal plate in patients with and without second molar eruption.

Article 1: The effect of 4 first premolar extractions on the posterior Bolton ratio, by Anthony D. Mongillo et al

1. This study aimed to investigate how the Bolton ratio is affected by the extraction of maxillary first premolars.
True
False
2. The preliminary inclusion criteria of the sample for each set of physical models were (1) a full set of permanent dentition from the second molar to the contralateral second molar; (2) a posttreatment result with a good Class I occlusion; and (3) a patient which had minimal interproximal alterations.
True
False
3. The authors reported that the study indicated complete space closure without interproximal reduction and/or restoration may result in a functionally compromised anterior and/or posterior occlusion.
True
False
4. The authors concluded that ideal anterior, posterior, and overall Bolton ratios with the extraction of 4 first premolars and ideal occlusion would likely finish with some spacing in the mandible.
True
False

Article 2: Dentoskeletal comparison of miniscrew-anchored maxillary protraction with hybrid and conventional hyrax expanders: A randomized clinical trial, by Felicia Miranda et al

5. This study's purpose was to compare the dentoskeletal effects of miniscrew-anchored maxillary protraction using hybrid hyrax (HH) and conventional hyrax (CH) expanders.
True
False
6. The primary outcomes to be considered were the overjet correction and the maxillary length (CoA) changes. The secondary outcomes included changes in the mandibular plane, incisor inclination, and molar relationship.
True
False
7. The authors reported that the HH and the CH expanders had a similar mesial displacement of the maxillary first molar during maxillary protraction.
True
False

8. The authors concluded that the study supported the null hypothesis that maxillary protraction with the HH and CH expanders present similar orthopedic and orthodontic changes.
- True
False

Article 3: Effectiveness of microosteoperforations in accelerating alignment of maxillary anterior crowding in adults: A randomized controlled clinical trial, Azaitun Akma Shahrin et al

9. This study's objectives were to compare the effectiveness of microosteoperforations (MOPs) in the overall time taken for alignment of maxillary anterior crowding and to evaluate the alignment improvement percentage within 16 months between MOPs and control groups.
- True
False
10. Little's irregularity index was used to assess the overall changes and measure the change of tooth alignment in the 6 maxillary anterior teeth.
- True
False
11. The authors reported no significant difference found in the first 6 months of alignment improvement percentage among the 2 groups (MOPs and controls) on the basis of time.
- True
False
12. The authors concluded that the use of the MOPs procedure is not more effective than the conventional method in accelerating initial orthodontic alignment of maxillary anterior crowding in adults.
- True
False

Article 4: Long-term evaluation of maxillary molar position after distalization using modified C-palatal plates in patients with and without second molar eruption, by Jou Hee Park et al

13. The primary purpose of this study was to analyze the treatment effects after molar distalization using modified C-palatal plates with and without second molar eruption.
- True
False
14. The experimental sample comprised 42 adolescent patients, divided into group 1 with second molar eruption and group 2 without second molar eruption.
- True
False
15. The authors reported that distalization of the molars was achieved within an average of 18.1 months for group 1 with erupted second molars and 13.1 months for group 2 with unerupted second molars.
- True
False
16. The authors concluded that in the long-term, group 2 showed full eruption of the second molars after distalization, and both groups showed a favorable position of the third molars.
- True
False