

# CONTINUING EDUCATION

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## Learning Objectives

After completion of this exercise, the participant will be able to:

1. Discuss the use of vibratory technology to shorten Phase I treatment with clear aligners.
2. Apply zygomatic miniplate anchorage to correct severe anterior open bite in adult cases.
3. Contrast a new Haas-inspired miniscrew-assisted maxillary expander with other expansion methods in non-growing patients.
4. Fabricate a removable acrylic inclined plane to move a permanent incisor out of crossbite in the early mixed dentition.

## Article 1

Gorton, J.; Bekmezian, S.; and Mah, J.K.: *Mixed-Dentition Treatment with Clear Aligners and Vibratory Technology* (pp. 208-220)

1. The decision whether to supervise or treat a patient in the mixed dentition is generally based on all of the following factors except:
  - a) clinical experience
  - b) timing related to craniofacial growth and development
  - c) periodontal status
  - d) prevention and treatment goals
2. In Phase I treatment, clear aligners offer the advantage of:
  - a) simultaneous anterior alignment and arch expansion
  - b) upper and lower arch coordination
  - c) freedom from dietary restrictions
  - d) all of the above
3. The authors recommend asking Phase I patients

who use the AcceleDent device to change their aligners:

- a) daily
  - b) twice per week
  - c) once per week
  - d) every two weeks
4. The authors' current protocol for aligner attachments is to:
    - a) place them on all available permanent teeth at the first aligner delivery
    - b) place them on all permanent and deciduous posterior teeth at the first aligner delivery
    - c) delay placement until the patient has adjusted to aligner wear
    - d) use buccal and lingual "divots" instead

## Article 2

Shetty, P.S.; Deshpande, R.S.; Gajaduhada, J.G.; Khan, W.Z.; and Prajapat, P.P.: *A Zygomatic Miniplate as Skeletal Anchorage for Correction of Severe Skeletal Anterior Open Bite* (pp. 221-229)

5. The etiology of open-bite malocclusion may involve any of the following factors except:
  - a) an unfavorable growth pattern
  - b) a digit-sucking habit
  - c) increased lower anterior facial height
  - d) enlarged lymphatic tissue
6. In an adult patient with severe anterior open bite of skeletal origin, orthodontic alternatives to surgical repositioning include:
  - a) extraction treatment
  - b) a vertical-pull chin cup
  - c) multiloop edgewise archwire therapy
  - d) all of the above

7. Intrusion of overerupted upper posterior teeth is an effective treatment method because anterior open bite is characterized by:

- a) excessive upper posterior dentoalveolar height
- b) a short mandibular body and ramus
- c) increased lower anterior facial height
- d) weak orofacial musculature

8. Forces required for molar intrusion reportedly range from:

- a) 75g to 150g
- b) 100g to 200g
- c) 250g to 300g
- d) 150g to 400g

**Article 3**

Lupini, D.; Retrouvey, J.M.; Decesari, D.; and Cozzani, M.: *A Tissue- and Boneborne Rapid Palatal Expander* (pp. 230-240)

9. The safest and most reliable approach to maxillary expansion in adult patients is:

- a) a miniscrew-assisted rapid palatal expander (MARPE)
- b) surgically assisted rapid palatal expansion
- c) slow palatal expansion
- d) arch development with fixed appliances

10. A hybrid MARPE tends to promote labial molar tipping because:

- a) much of the force load is transferred to the anchor teeth
- b) the appliance is not anchored in the bone
- c) the appliance delivers a pure orthopedic force to achieve tooth movement
- d) all of the above

11. The Hyrax expander is:

- a) entirely boneborne
- b) entirely tissue-borne
- c) entirely toothborne
- d) a hybrid

12. The Haas-inspired miniscrew-assisted maxillary expander differs from the traditional Haas design in that it uses:

- a) acrylic palatal pads
- b) metal palatal pads
- c) a central jackscrew
- d) no skeletal anchorage

**Article 4**

Vatarugegrid, S.: *A Removable Acrylic Inclined Plane for Anterior Crossbite Correction* (pp. 247-248)

13. This removable acrylic appliance is presented as an alternative to a:

- a) tongue crib
- b) composite bite turbo
- c) metal bite turbo
- d) cross-elastic

14. When an upper permanent incisor is in crossbite, the acrylic is extended over:

- a) the lower permanent incisors
- b) the upper permanent incisors
- c) the lower permanent incisors and deciduous canines
- d) as many lower teeth as possible

15. If both upper and lower incisors need to be adjusted, the lower incisor can be moved with a:

- a) tongue crib
- b) composite bite turbo
- c) brass wire
- d) stainless steel finger spring

16. In case of noncompliance, the inclined plane can be:

- a) affixed to the anterior teeth with standard band cement
- b) replaced by a finger spring
- c) connected to bands on the first molars
- d) converted to a full-coverage retainer