

CONTINUING EDUCATION

The East Carolina School of Dental Medicine will award 3 hours of Continuing Education credit for reading this issue of JCO and answering at least 12 of the following 16 questions correctly. Take this test online at www.jco-online.com (click on Continuing Education); payment of \$25 is required by VISA or MasterCard. The test may be retaken once if not passed on the first attempt. Correct answers will be supplied immediately, along with a printable certificate. Tests will be accessible on the JCO website for 12 months after publication. A subscription to JCO is not required to earn C.E. credits. For information, contact Dr. Neal Kravitz; e-mail: editor@jco-online.com. CER Code: JCO January 2023.

Learning Objectives

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

1. Cooperate with other specialists in complex interdisciplinary treatment using a hybrid aligner approach.
2. Discuss a two-phase protocol with a boneborne maxillary expander followed by clear aligners.
3. Describe a palatally anchored molar-distalization system that can be used in conjunction with clear aligner therapy in adult Class II patients.
4. Compare hybrid aligner treatment using mini-screw anchorage to other methods of resolving Class III malocclusions.

Article 1

Lin, J.C.Y.; Chen, S.; Tsai, S.J.; Chang, S.; and Bowman, S.J.: *Treatment of Complex Interdisciplinary Cases Using a Hybrid Aligner Approach* (pp. 16-31)

1. Increasing lower anterior facial height requires the correction of contributing factors including:
 - a) insufficient upper-incisor display
 - b) unfavorable clinical crown sizes
 - c) severely worn dentition
 - d) all of the above
2. Both cases shown here involved clear aligner therapy in conjunction with:
 - a) periodontal therapy
 - b) prosthetic treatment
 - c) orthognathic surgery
 - d) all of the above
3. In both cases, lower anterior facial height was increased using:

- a) temporary crowns
 - b) dental implants
 - c) intermaxillary elastics
 - d) aligner auxiliaries
4. During distalization of the mandibular teeth in Class III treatment, the approach shown here can prevent:
 - a) perforation of the lingual plate of the symphysis by the lower-incisor roots
 - b) penetration of the maxillary sinus by the upper-molar roots
 - c) penetration of the lingual cortical plate by the distolingual roots of the lower second molars
 - d) both a and c

Article 2

Arreghini, A.; Palone, M.; Maino, B.G.; Paoletto, E.; and Lombardo, L.: *A Digitally Planned Tandem Skeletal Expander and Hybrid Aligner Approach* (pp. 32-44)

5. Clear aligners have demonstrated substantial limitations in controlling all of the following except:
 - a) root movement
 - b) lingual tipping
 - c) extrusion
 - d) major rotations
6. The Tandem Skeletal Expander utilizes anchorage from:
 - a) four palatal miniscrews
 - b) a palatal miniplate
 - c) two palatal miniscrews and upper-molar bands
 - d) a transpalatal arch and upper-molar bands
7. The authors' digital insertion guide is designed using the:

- a) SARPE System
- b) TSE System
- c) MAPA System
- d) DICOM System

8. During clear aligner therapy, the authors controlled mesiodistal root tip with:

- a) a Tandem Skeletal Expander
- b) bonded lingual buttons
- c) intermaxillary elastics
- d) lingual sectional appliances

Article 3

Riatti, R.; Pozzan, L.; Ceschi, M.; and Contardo, L.: *The iMolar System and Clear Aligners in Adult Class II Patients* (pp. 45-53)

9. Rossini and colleagues reported 88% predictability using clear aligners for:

- a) 1.5mm distal movement of the upper first molars
- b) full-cusp distal movement of the upper first molars
- c) 1.5mm expansion of the upper first molars
- d) extrusion of the upper first molars

10. The fixed base of the iMolar distalization system is anchored by:

- a) four palatal miniscrews
- b) two palatal miniscrews
- c) a palatal miniplate
- d) a transpalatal arch

11. The amount of distalization with the iMolar system is determined by the:

- a) length of the fixed bar
- b) length of the nickel titanium wire
- c) distance between two crimpable stops on the nickel titanium wire
- d) position of the soldered prefabricated tubes

12. When clear aligners are initiated:

- a) the iMolar base must be removed
- b) the iMolar base should be replaced
- c) the iMolar base can be left in place to enhance molar anchorage
- d) a lingual sectional appliance should be placed to enhance molar anchorage

Article 4

Arveda, N.; Colonna, A.; Siciliani, G.; and Lombardo, L.: *Class III Correction Using Clear Aligners, Sectional Wires, and Miniscrew Anchorage* (pp. 54-62)

13. Hybrid aligner treatment involves the combination of clear aligners with any of the following except:

- a) different aligner materials
- b) sectional wires
- c) elastics
- d) molar distalizers

14. The case shown here involved extraction of:

- a) the four first premolars
- b) the lower second premolars
- c) a single lower incisor
- d) no teeth other than third molars

15. The buccal sections of the aligners were trimmed on one side to allow:

- a) insertion of a retromolar miniscrew
- b) attachment of Class III elastics
- c) bonding of lingual attachments
- d) bonding of labial brackets

16. A retromolar miniscrew was inserted on one side to:

- a) avoid distal rotation from the buccal elastic traction
- b) facilitate distalization on that side
- c) promote mesial rotation of the canine
- d) all of the above