

CONTINUING EDUCATION

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Learning Objectives

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

1. Discuss the management of Invisalign treatment for Class II patients with deep bites.
2. Compare distraction osteogenesis to other methods of treating patients with mandibular asymmetry.
3. Follow the procedure described for using a three-dimensionally printed donor tooth model to test for fit in an autotransplantation site.
4. Describe the use of the glass ionomer open exposure (GOPEX) technique in erupting retained permanent molars.

Article 1

Glaser, B.: *Practical Invisalign Mechanics: Deep Bite and Class II Correction* (pp. 241-248)

1. Invisalign treatment of deep overbite aims to “undo” the:
 - a) Class II skeletal relationship
 - b) supraeruption of the lower anterior teeth
 - c) intrusion of the upper anterior teeth
 - d) hyperdivergent growth pattern
2. The ClinCheck treatment plan should be over-engineered to:
 - a) create a deep curve of Spee
 - b) overcorrect the upper molar distalization
 - c) produce a flat lower archform
 - d) increase the posterior facial height
3. In a growing patient with a half-cusp Class II molar relationship, a bite jump should:
 - a) be planned without any molar distalization
 - b) be combined with 3mm of sequential molar distalization

- c) be delayed until the finishing stage
 - d) not be used
4. Class II elastics should:
 - a) be worn only when molar distalization is being performed
 - b) be worn regardless of whether bite jumping or distalization is performed
 - c) not be worn until the finishing stage
 - d) not be used

Article 2

Kornmehl, D.L.; Sohn, C.; Bastidas, J.A.; and Ahmed, M.K.: *Treatment of Mandibular Asymmetry with Distraction Osteogenesis in a Growing Patient* (pp. 254-263)

5. Potential pathological etiologies of asymmetrical mandibular development include all of the following except:
 - a) tumors
 - b) childhood injury
 - c) infections
 - d) condylar resorption
6. Dental compensations created by mandibular asymmetry include:
 - a) buccoversion of the maxillary molars on the deviated side
 - b) intrusion of the maxillary molars on the non-deviated side
 - c) a reverse curve of Spee
 - d) all of the above
7. To address this patient’s occlusal cant, the authors used:
 - a) a posterior bite block
 - b) an asymmetrical functional appliance

- c) differential bonding of the maxillary arch
 - d) bonded bite turbos
8. In a long-term study of patients treated with distraction during the mixed or early permanent dentition, the most common abnormality observed by Chen and colleagues was:
- a) root malformation
 - b) destruction of tooth follicles
 - c) impacted teeth
 - d) absent molars

Article 3

Di Leonardo, B.; Mura, R.; Pozzan, L.; and Migliorati, M.: *Lower Canine Autotransplantation Using a 3D-Printed Donor Tooth Model* (pp. 264-271)

9. Autotransplantation of an impacted canine has the advantage of:
- a) providing functional adaptation
 - b) preserving the alveolar bone ridge
 - c) restoring a normal alveolar process
 - d) all of the above
10. The authors print the donor tooth model using Formlabs:
- a) Draft Resin
 - b) Clear Resin
 - c) Grey Resin
 - d) Precision Model Resin
11. The reported overall success rate after five years for autotransplantation of teeth with completely formed roots is:
- a) 78.8%
 - b) 87%
 - c) 90.2%
 - d) 98%
12. Potential side effects of autotransplantation include all of the following except:

- a) discoloration
- b) root resorption
- c) ankylosis
- d) cardiac anomalies

Article 4

Alali, O.: *Spontaneous Eruption of a Retained Permanent Second Molar Using Glass Ionomer Open Exposure* (pp. 272-278)

13. Arrested eruption of a lower permanent second molar has a prevalence in adolescents of:
- a) .03-.65%
 - b) .6-1%
 - c) 3-6.5%
 - d) 6-10%
14. The GOPEX technique uses glass ionomer cement instead of:
- a) composite resin
 - b) a conventional surgical dressing
 - c) a bone graft
 - d) dental sutures
15. Potential contributors to successful treatment of retained lower second molars include all of the following except:
- a) incomplete root development
 - b) a vertical initial tooth position
 - c) a slightly mesially inclined initial position of the retained tooth
 - d) signs of primary retention
16. The optimal stage for use of the GOPEX technique as described in this article is:
- a) the primary dentition
 - b) the early mixed dentition
 - c) early adolescence
 - d) adulthood