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Learning Objectives

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

1. Discuss trends in orthodontic economics and practice administration since 1981.
2. Describe the biomechanical and clinical principles involved in switching lower left and right canine brackets for Class III camouflage treatment.
3. Follow a digital workflow for fabricating mandibular advancement devices (MADs) for patients with obstructive sleep apnea (OSA).
4. Review the key rules of the “flip, don’t switch” principle of bracket positioning.

Article 1

Kravitz, N.D.; Vogels III, D.S.; and Vogels, P.B.: *2025 JCO Orthodontic Practice Study, Part 1: Trends* (pp. 625-643)

1. Between calendar years 2022 and 2024, median gross income:
 - a) declined by 8%
 - b) stayed the same
 - c) rose by 4%
 - d) rose by 8%
2. The percentages of practices charging additional fees were the lowest in any Practice Study for all of the following except:
 - a) diagnostic records
 - b) Phase I treatment
 - c) laser treatment
 - d) occlusal equilibration
3. Among expanded services, the highest-rated practice-building method was:

- a) cosmetic/laser treatment
 - b) lingual orthodontics
 - c) open a satellite office
 - d) change practice location
4. Out of all referrals in all practices, the Internet was the source for a median of:
 - a) 13%
 - b) 10%
 - c) 5%
 - d) 0%

Article 2

Moresca, R.: *Switching Lower Canine Brackets in Class III Cases* (pp. 644-648)

5. In nonextraction compensatory Class III treatment, the relative intrusion caused by excessive labial inclination of the anterior teeth can detrimentally affect smile esthetics by:
 - a) reducing the lower arch perimeter
 - b) diminishing incisor exposure
 - c) creating a reverse smile arc
 - d) both b and c
6. When the MBT prescription is used, the tendency of the lower incisors to procline during initial leveling and alignment can be attributed to the:
 - a) torque values of the upper incisor brackets
 - b) torque values of the lower incisor brackets
 - c) mesial crown tip of the lower canine brackets
 - d) distal crown tip of the upper canine brackets
7. Switching preadjusted brackets between the right and left sides of the same arch:
 - a) reverses the tip without changing the torque
 - b) reverses the torque without changing the tip

- c) reverses the tip and the torque
 - d) leaves the tip and the torque unchanged
8. To further limit proclination of the lower incisors in these cases, anchorage control may be enhanced with any of the following except:
- a) Class III elastics
 - b) up-and-down elastics
 - c) lacebacks
 - d) bendbacks

Article 3

Řezáčová, E. and Hálek, J.: *Direct-Printed, Titratable Mandibular Advancement Device for Obstructive Sleep Apnea* (pp. 649-656)

9. In 1995, MADs were recommended as a first-line treatment for patients with mild OSA by the:
- a) American Association of Orthodontists
 - b) American Academy of Sleep Medicine
 - c) American Medical Association
 - d) American Academy of Pediatrics
10. To produce digital models, the authors recommend scanning the patient with the mandible positioned:
- a) in habitual occlusion
 - b) in an edge-to-edge bite
 - c) at 60% of maximum advancement
 - d) at 100% of maximum advancement
11. The amount of mandibular advancement is adjusted during treatment by using:
- a) advancement blocks with plug-in joints
 - b) a virtual articulator
 - c) newly 3D-printed maxillary blocks
 - d) two 3mm spheres with corresponding 2mm cylinders
12. It is essential to position the MAD so as not to irritate the gingiva or oral mucosa, particularly in the:
- a) upper anterior region
 - b) lower anterior region

- c) palatal region
- d) third molar region

Article 4

Kravitz, N.D.; Miller, S.; Valverde Montalva, S.H.; Weissheimer, A.; and Akyalçin, S.: *Understanding "Flip, Don't Switch"* (pp. 674-677)

13. "Flipping" a bracket involves:
- a) moving it from one side to the other within the same arch
 - b) moving it from one arch to the other on the same side
 - c) moving it from one arch to the other on the contralateral side
 - d) rotating it 180°
14. Flipping a bracket:
- a) reverses the tip without changing the torque
 - b) reverses the torque without changing the tip
 - c) reverses the tip and the torque
 - d) leaves the tip and the torque unchanged
15. The "flip, don't switch" principle is most commonly used to:
- a) add labial root torque to palatally displaced upper lateral incisors
 - b) move lateral incisor roots away from mesially erupting canines
 - c) counteract the proclination effects of Class II elastics
 - d) add lingual root torque to prominent lower canines
16. Rather than flipping a lower canine bracket with 0° torque, the clinician can substitute a flipped:
- a) standard edgewise lower canine bracket
 - b) lower lateral incisor bracket with -6° torque and 0° tip
 - c) lower right second premolar bracket with -17° torque and 2° tip
 - d) upper right lateral incisor bracket with +10° torque and 8° tip