After completing this course, the participant will have:
1. Knowledge about changes that result in the mandibular first molar area edentulous ridges due to either spacing opening or space closure of the adjacent teeth.
2. An appreciation for the evaluation of the midpalatal sutural maturation status as seen on cone-beam computed tomographic images to determine the prognosis for rapid maxillary expansion in patients over 15 years of age.
3. An awareness of how 4 rater groups assessed the profile improvements in Class II patients with convex profiles treated with functional appliances.
4. A familiarity with what the literature shows about patient compliance with removable orthodontic appliances and adjuncts.

**Article 1: Mesiodistal dental movement toward remodeled edentulous alveolar ridge: Digital model assessment, by Francyle Simões Herrera Sanches et al**

1. The aims of this study were to compare the changes in posterior dental inclination and angulation, and the posterior tooth crown sizes and alveolar ridge thicknesses consequent to the orthodontic procedures of closing and opening the mandibular first molar edentulous spaces.
   - True
   - False
2. The space closure group comprised 12 hemiarches with first molar edentulous spaces of 2 to 7 mm, and the space opening group comprised 14 hemiarches with first molar edentulous spaces of 7.1 to 12 mm.
   - True
   - False
3. In the space opening group, the authors observed second molar uprighting and buccal inclination of the first premolars.
   - True
   - False
4. The authors concluded that the only significant intergroup differences were that the second molar cervico-occlusal crown height and the alveolar ridge thickness decreased in the space closure group and increased in the space opening group.
   - True
   - False

**Article 2: Midpalatal suture maturation in 11- to 15-year-olds: A cone-beam computed tomography study, by Diego Luiz Tonello et al**

5. The authors used cone-beam computed tomography to evaluate maturation stages of the midpalatal sutures in children and young adults.
   - True
   - False
6. The primary radiographic examiner checked the reliability of the midpalatal suture classification method by remeasuring the images for all 84 subjects 15 days after the first evaluation.
True
False
7. The authors reported that 76.2% of the sample exhibited a midpalatal suture stage of either A, B, or C.
True
False
8. The authors suggested that their findings imply that patients older than 15 years with a sutural status of stage C would most likely have a satisfactory prognosis for rapid maxillary expansion.
True
False

Article 3: Perceived facial changes of Class II Division 1 patients with convex profiles after functional orthopedic treatment followed by fixed orthodontic appliances, by Kleopatra Tsiouli et al

9. The aim of this study was to investigate the perceived facial changes in Class II Division 1 patients with convex profiles after functional orthopedic treatment followed by fixed orthodontic appliances.
True
False
10. The initial and final profile photographs of all 36 patients in the sample were assessed by 4 rater groups: orthodontists, patients, parents, and laypersons.
True
False
11. The authors reported that the profiles of the Twin-block group of patients were significantly improved compared with the activator group of patients.
True
False
12. The authors concluded that according to the raters’ assessments, treatment with functional appliances followed by fixed appliances led to slight improvements of Class II patients’ convex profiles compared with the controls.
True
False

Article 4: Compliance with removable orthodontic appliances and adjuncts: A systematic review and meta-analysis, by Dalya Al-Moghrabi et al

13. The primary aims of this systematic study were to assess objective levels of wear of removable orthodontic appliances and components vs both stipulated and self-reported levels.
True
False
14. Only 11 studies met the selection criteria for this systematic review.
True
False
15. The authors reported the problem of overreporting appliance wear with a consistent exaggeration of wear time of about 5 to 6 hours daily.
True
False
16. The authors concluded that compliance with removable orthodontic appliances seems to be suboptimal.
True
False