After completing this course, the participant will have:
1. A familiarity with the effect of shielded brackets on patients' mucosa and perception of discomfort.
2. An awareness of the effects of silver added to resin-modified glass ionomer cement on shear bond strength and biofilm formation.
3. An appreciation for factors that may influence the success rate of autotransplanted teeth with complete root formation.
4. An appreciation of how the cervical vertebral maturation method of growth assessment can be used to predict the skeletal maturity of the midpalatal suture.

Article 1: Can shielded brackets reduce mucosa alteration and increase comfort perception in orthodontic patients in the first 3 days of treatment? A single-blind randomized controlled trial, by Livia Pereira Brocos Pires et al

1. The aim of this study was to investigate whether self-ligating brackets would induce fewer mucosal alterations and less discomfort than regular brackets with self-snapping customized plastic shields.
   True
   False

2. The sample for this single-blind randomized controlled trial comprised 35 subjects.
   True
   False

3. The authors observed a tendency for the mucosa to adapt to the unshielded brackets after only 4 days or less.
   True
   False

4. The authors concluded that patients experienced less discomfort on the sides where the brackets were not shielded.
   True
   False

Article 2: Antibacterial orthodontic cement to combat biofilm and white spot lesions, by Xiaoying Wang et al

5. The objective of this study was to develop an antibacterial resin-modified glass ionomer cement containing nanoparticles of silver for the prevention of white spot lesions.
   True
   False

6. The shear bond strength was tested on 80 maxillary first premolars in 40 volunteers.
   True
   False

7. The authors reported that the shear bond strength of adhesive was adversely affected when silver was added to the resin-modified glass ionomer cement.
   True
   False

8. The authors concluded that the addition of silver to resin-modified glass ionomer cement adhesives could reduce biofilm formation and plaque buildup around brackets and might inhibit white spot lesion formation in orthodontic patients.
   True
   False
**Article 3: Retrospective study of 100 autotransplanted teeth with complete root formation and subsequent orthodontic treatment**, by Satoshi Kokai et al

9. The purpose of this retrospective study of autotransplanted teeth with complete root formation was to evaluate the effects of donor tooth type, donor tooth condition, and early orthodontic treatment on the overall success rate.
   True
   False

10. The mean age of the patients in the study was 29 years, and the mean follow-up period was 5.8 years.
    True
    False

11. The authors reported that the presurgical occlusal condition of the donor teeth had no effect on the autotransplantation success rate.
    True
    False

12. The authors concluded that the early application of orthodontic force adversely influences the success rate of the autotransplanted teeth.
    True
    False

**Article 4: Diagnostic performance of skeletal maturity for the assessment of midpalatal suture maturation**, by Fernanda Angelieri et al

13. The aim of this study was to analyze the diagnostic performance of the cervical vertebral maturation method in estimating accurately the stages of maturation of the midpalatal suture.
    True
    False

14. The cone-beam computed tomography images of 142 subjects were examined in this study.
    True
    False

15. The authors concluded that cervical vertebrae maturation stages 4 and 5 can be used as reliable indicators for midpalatal maturational stages A and B.
    True
    False

16. The authors recommended that if the cervical vertebral maturation stage cannot be assessed, chronologic age may be a viable alternative to predict some midpalatal suture stages, particularly the early stages.
    True
    False