After completing this course, the participant will have:
1. An appreciation for whether there is a need to remove 2 different types of fixed retainer wires before a magnetic resonance image scan of the skull.
2. Knowledge of the influence of long-term wear of the SIlensor appliance on the facial skeleton and the dentition.
3. A familiarity with the evidence from the orthodontic literature about the association between orthodontic force systems and root resorption.
4. An understanding of the impact of premolar extractions on the facial profile over time.

Article 1: Influence of common fixed retainers on the diagnostic quality of cranial magnetic resonance images, By Miriam Shalish et al

1. The purposes of this study were to assess the in-vitro effects of the 2 most common types of fixed retainers on magnetic resonance image (MRI) distortion and to answer the dilemma of whether they should be removed before MRI.
   True
   False

2. Two types of commonly used fixed retainer wires were tested; Twistflex 018 in. from Dentaurum and Ortho Flex Tech from Reliance.
   True
   False

3. The authors reported that the Twistflex fixed retainer should be considered for removal when the area being evaluated by MRI scan is located in the jaws or tongue.
   True
   False

4. The authors concluded that the removal of the Ortho Flex Tech fixed retainer is unnecessary prior to MRI scan.
   True
   False

Article 2: Follow-up study of dental and skeletal changes in patients with obstructive sleep apnea and hypopnea syndrome with long-term treatment with the SIlensor appliance, By Xiaoyu Wang et al.

5. The aim of this study was to investigate the possible dental and skeletal changes associated with long-term use (4 years on average) of the SIlensor appliance in patients with mild to severe obstructive sleep apnea and hypopnea syndrome.
   True
   False

6. Cone-beam computerized tomography scans were obtained at the beginning and at the end of the study to evaluate dental and skeletal changes.
   True
   False

7. The authors reported that the orthodontic side effects of SIlensor wear were maxillary incisor retraction and mandibular incisor proclination.
   True
   False

8. The authors concluded that SIlensor wear between 1 to 3 years resulted in predominantly skeletal changes, but wear for longer than 4 years resulted in both skeletal and dental changes.
   True
   False
Article 3: Association of orthodontic force system and root resorption: A systematic review, by Martin G. Roscoe et al

9. The aims of this systematic review were to assess the scientific literature that has examined root resorption as an outcome of orthodontic treatment or genetic predilection and to determine which level of evidence is available to support an association with either factor.
   True
   False

10. The studies that were appropriate to be included in the systematic review consisted of randomized and nonrandomized controlled trials, and cohort studies fulfilling the criteria concerning populations, intervention characteristics, comparison groups, and outcomes.
   True
   False

11. The authors reported that from the available literature, positive correlations seem to exist between increased force levels and root resorption, yet there does not seem to be a correlation between treatment time and root resorption.
   True
   False

12. The authors concluded that a high level of evidence is available to support the association of root resorption with orthodontic treatment.
   True
   False

Article 4: Extraction vs no treatment: Long-term facial profile changes, By Anita Bhavnani Rathod et al

13. The purposes of this study were to investigate long-term soft tissue profile changes in an extraction sample and to compare them with profile changes in an untreated sample.
   True
   False

14. The 47 orthodontic patients had premolar extractions and were approximately at 25 years post-treatment.
   True
   False

15. The authors reported no differences in the directional changes for the soft tissue profiles between untreated subjects and those treated with extractions.
   True
   False

16. The authors concluded that extractions do not adversely impact the esthetics of a soft tissue facial profile over time.
   True
   False