

# CONTINUING EDUCATION

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## Learning Objectives

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

1. Consider orthodontic appliance options for a patient suffering from seizures.
2. Discuss a microabrasion protocol for patients with varying levels of demineralization.
3. Describe the mechanics involved in en masse anterior retraction using lingual appliances.
4. List the causes and symptoms of a subcutaneous emphysema resulting from dental procedures.

## Article 1

Pithon, M.M. and Santos, M.G.: *An Appliance for Treatment of Anterior Crossbite in an Epileptic Patient* (pp. 730-733)

1. Epilepsy has no identifiable cause in about:
  - a) 25% of cases
  - b) 40% of cases
  - c) 60% of cases
  - d) 75% of cases
2. Due to the patient's frequent seizures, a fixed appliance was designed to avoid the risk of dislodgment and:
  - a) aspiration of a removable appliance
  - b) swallowing of a removable appliance
  - c) breakage of a removable appliance, causing injury to the soft tissues
  - d) all of the above
3. Oral-health concerns associated with epileptic patients include:
  - a) an increased risk for dental caries
  - b) medication-induced gingival hyperplasia

- c) medication-induced bleeding gums
  - d) all of the above
4. If a removable appliance must be used in a patient suffering from seizures, it should:
    - a) be fabricated from high-impact acrylic
    - b) be easy to remove during a seizure
    - c) be inexpensive to fabricate
    - d) incorporate full molar coverage

## Article 2

Caglaroglu, M. and Gelgor, I.E.: *Microabrasion Technique for Treatment of Demineralization after Debonding* (pp. 734-738)

5. The abrasive gel recommended by the authors contains all of the following ingredients except:
  - a) 18% hydrochloric acid
  - b) 30% hydrogen peroxide
  - c) glycerin
  - d) powdered pumice
6. To prevent contact between the gingivae and the abrasive gel:
  - a) a rubber dam is used
  - b) petroleum jelly is applied to the soft tissues
  - c) a soft acrylic tray with fenestrations is worn
  - d) both a and b
7. The authors apply the abrasive gel using:
  - a) a slow-speed prophyl cup
  - b) a specially trimmed power toothbrush
  - c) a specially trimmed manual toothbrush
  - d) a small-diameter prophyl brush
8. Studies of microabrasion procedures suggest that the technique:
  - a) removes a microscopic layer of enamel

- b) produces a smooth enamel surface with a brilliant luster
- c) removes yellow-brown enamel discolorations and white spots
- d) all of the above

### **Article 3**

Tai, K.; Park, J.H.; Tanino, M.; and Ikeda, K.: *Bi-maxillary Dentoalveolar Protrusion Treated with Lingual Appliances and Temporary Anchorage Devices* (pp. 739-746)

9. The patient's lower extraction spaces were prevented from reopening with:

- a) an Essix retainer worn 24 hours per day
- b) a lower Hawley retainer worn at night
- c) ligature wires between the canines and second premolars
- d) fiber-reinforced composite segments between the canines and second premolars

10. Studies of the ratio of incisor retraction to lip retraction in bimaxillary-protrusion cases treated with extractions vary widely due to:

- a) lack of lip-position standardization
- b) variations in lip morphology
- c) inclusion of growing patients
- d) all of the above

11. According to Creekmore, when maximum-anchorage techniques are not used in first-premolar-extraction patients, the posterior teeth will move anteriorly:

- a) by about one-third of the space
- b) by about one-half of the space
- c) by about two-thirds of the space
- d) to fill the extraction space

12. According to Vanden Bulcke and colleagues, the center of resistance of the six maxillary anterior teeth during retraction is located:

- a) 7mm apical to the interproximal bone level between the central incisors

- b) 7mm apical to the cementoenamel junction of the central incisors

- c) 10mm apical to the interproximal bone level between the central incisors

- d) 10mm apical to the cementoenamel junction of the central incisors

### **Article 4**

Dabiri, D.; Nedley, M.; Baugh, R.; and Haerian, A.: *An Incident of Subcutaneous Emphysema Following Laser Tooth Exposure* (pp. 749-752)

13. Subcutaneous emphysema (SCE) resulting from a dental procedure is usually associated with the use of air-turbine handpieces or air-water dental syringes following:

- a) surgical extractions
- b) endodontic therapy
- c) tooth whitening
- d) both a and b

14. In the emergency room, the patient's symptoms included:

- a) crepitus of the affected areas on palpation
- b) pruritus on the affected side
- c) facial swelling and trismus
- d) abnormal phonation

15. Swelling in the lower eyelid was caused by air extending into the:

- a) infratemporal area
- b) preseptal orbital area
- c) submandibular area
- d) prevertebral fascia

16. A sudden onset of head and neck swelling following a dental procedure may be caused by SCE or by:

- a) allergic reaction
- b) hematoma
- c) cellulitis
- d) any of the above