

Demanding Maxillary Anterior Esthetic Cases

Treatment Planning Case Workups for AAED-EAED Webinar Series May 5, 2020)

Treating Clinicians:

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NOTE: US tooth numbering system used (in parenthesis is the International numbering system).

The participating graduate students should develop treatment plan recommendations FOR THE MAXILLARY ANTERIOR REGION FOR THE FOLLOWING CASE with supportive rationale based on the data provided.

CASE #1: EA

Month/Year of Initial Presentation: 04/2015

Patient's Age at Initial Presentation: 44

Introduction and Background

This patient (EA) reports a traumatic injury to her anterior dentition approximately 25 years ago. Teeth #s 8-10 (12-22) were subsequently endodontically treated and restored with crowns. The crowns have been replaced 2 times since the original restorations were done. In late December 2014, EA noted a 'lump' in her tissues over tooth #9(21).

EA was referred to a periodontist who prescribed and completed a flap procedure and GTR (guided tissue regeneration procedure) in January 2015. She is upset with her gingival tissue 'retraction' (recession) that occurred soon after surgery (February 2015). She was then referred by her general dentist to our practice to assess and plan management of the problem; he contacted and asked us to assess and manage the case, including the esthetic challenges and high patient expectations. EA stated that 'she shows a lot of gum'. She has pronounced lip dynamics and as a result readily displays the lost facial/interproximal tissues and exposed crown margins around her maxillary central incisors. EA is an attractive and esthetically focused female of Brazilian origin. She stated that she is in sales and is in a social/public career and must address the negative sequelae that developed post-surgically. She does not report any pain or sensitivity in this area.

Medical History:

- Good health.
- No medications

Dental History:

- Long-term care with her dentist in Vancouver, British Columbia.
- Supportive periodontal therapy on a 4-month interval.
- No orthodontic treatment history.
- No surgical history other than the recent periodontal regeneration procedure.
- Parafunction: does not use an appliance.

Extraoral and Facial Findings:

- Within normal limits. (WNL)

- High lip line and broad smile, displaying teeth to the 1st molar regions.

TMJ/Mandibular Range of Motion/Muscle:

- Within normal limits.

Intraoral Findings:

Dental:

- Missing teeth #s 1(18), 16(28), 17(38), 32(48).
- Restoration/ceramic wear #s 2(17), 30(46).
- Restoration margin exposures and marginal deficiencies #s 8(11), 7(12).
- NCCLs generalized in the posterior dentition.

Soft Tissue/Periodontal:

- Probing depth range in the maxillary dentition: 2-6mm. Deepest on the mesial of #9(21). Otherwise WNL.
- Moderately thick gingival phenotype.
- Thin phenotype in the regions #s 21(34), 24/25(31/41), 29(45).
- Mobility: 0 to 2+. Most advanced #9(21).
- Moderate calculus in the region #s 22-27(33-43).
- Blunted papilla/open gingival embrasure #s 8/9(11/21). Exposure of dark roots in this region.

Occlusal Notes:

- Parafunction activities suspected: yes.
- Angle skeletal classification: Class II. Anterior open bite. Overjet 5mm. Left posterior crossbite/constricted arch form.

Radiographic Review:

- PAs (maxillary anterior dentition), vertical BWs and CBCT available for the preliminary assessment.
- Apical radiolucencies: #s 7(12) and 10(22).
- Deficient restoration margins #s 7(12) to 10(22).
- #8(11) mild mesial bone loss.
- #9(21) mesial broad and deep intra bony defect. Based on the clinical assessment/probing pattern, this defect extends onto the facial of this root.
- Highly restored dentition.
- Prior endodontic procedures #s 3, 7, 8, 9, 10 (16, 12, 11, 21, 22) (dates unknown). Incomplete or short obturations on all.
- Large cast posts #s 7, 8 (12, 11). Large canal spaces and short carbon fiber posts #s 9, 10 (21, 22).
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Diagnosis:

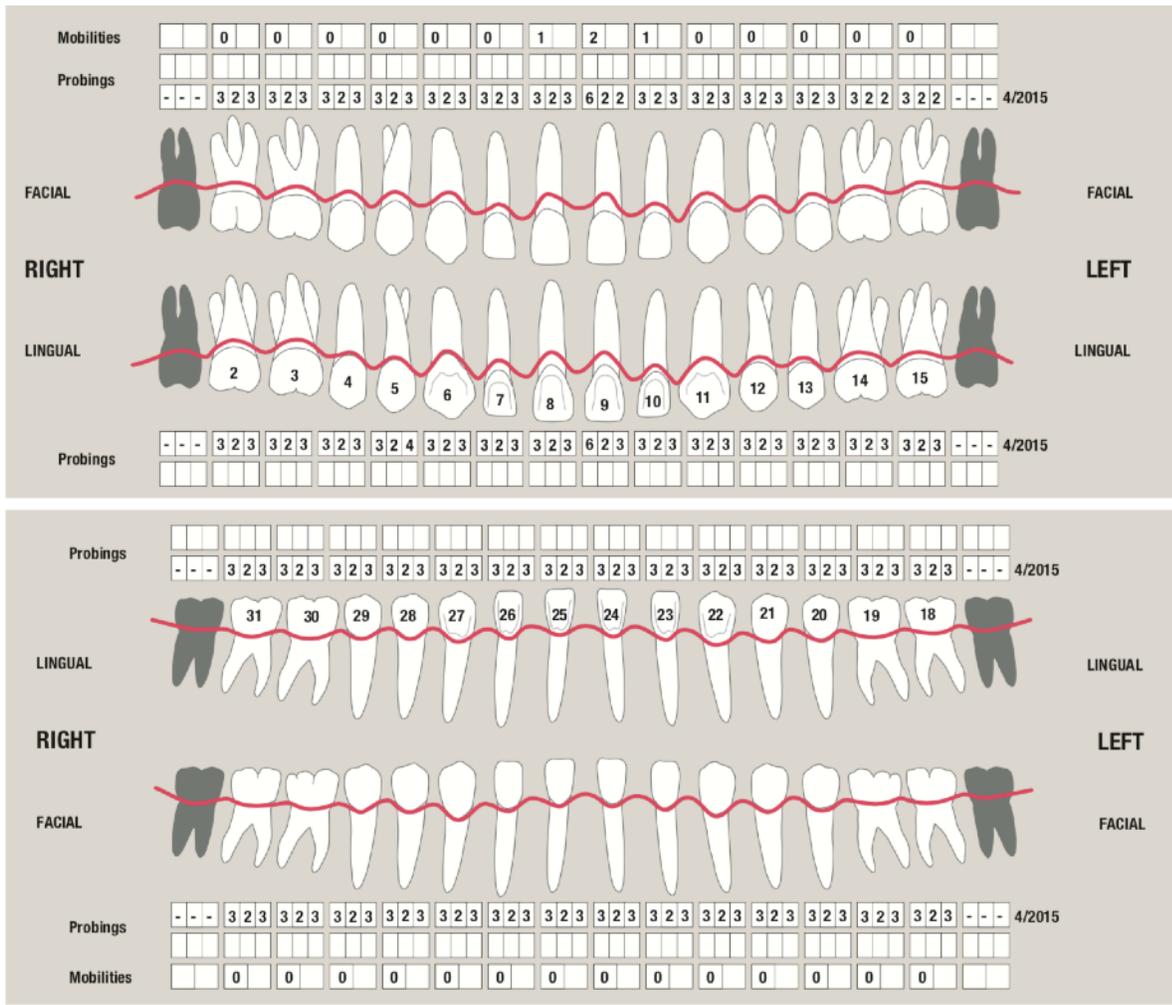
- Apical periodontitis #s 7, 9, 10 (12, 21, 22).
- Localized advanced chronic periodontitis # 9(21), affecting #8(11). Otherwise periodontally healthy.
- Caries/defective restorations #s 7, 10 (12, 22).
- Class II div I malocclusion. Facial Class II dysplasia with a retrognathic mandible.
- Parafunctional tendencies.

Prognosis:

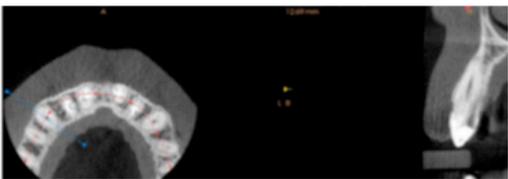
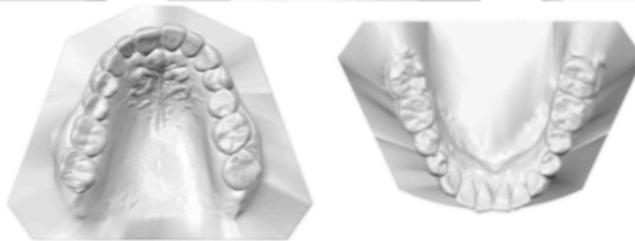
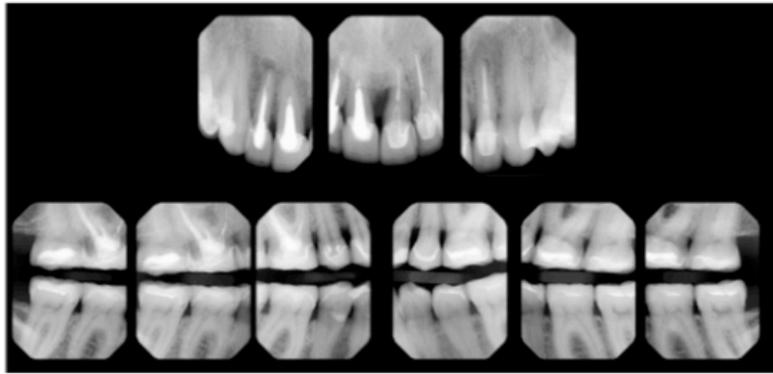
- Poor periodontal prognosis for #9(21), poor endodontic prognosis #7(12).
- Guarded/uncertain for #s 3(16), 8(11) and 10(22).
- Good for all other teeth.

Summary of Concerns:

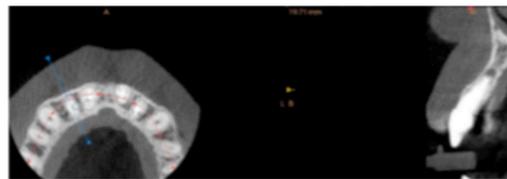
- Gingival tissue loss #s 8/9 (11/21) subsequent to flap curettage/failed GTR procedure.
- Highly restored #s 7-10 (12-22) with inadequate endodontic treatment and presumably biomechanically weakened residual tooth structure.
- Other/future: uncertain endodontic outlook for #3(16). Mid-treatment failure due to root fracture.
- Class II dental/skeletal malocclusion (patient is not prepared to address this with comprehensive orthodontic/orthognathic treatment, but open to limited treatment).



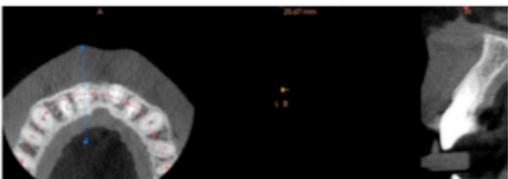




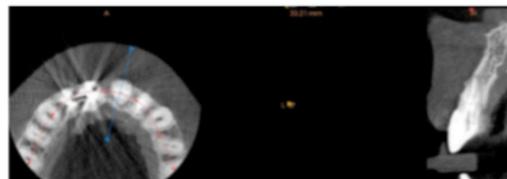
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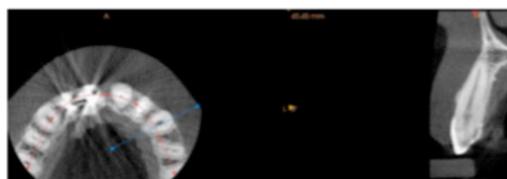
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