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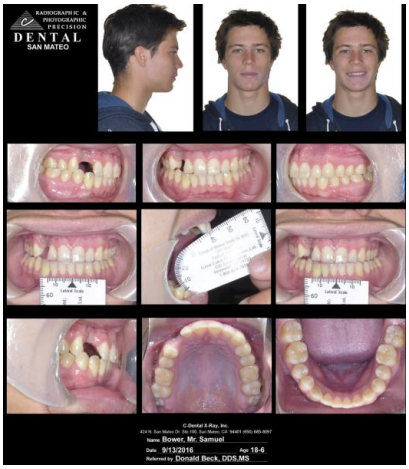

Patient:	Samuel Bower	**Report Date:**	09/15/2016
DOB:	02/15/1998	**Study Date:**	09/13/2016
Ref. Doctor:	Donald Beck, DDS., MS.	**Scan Source:**	C-Dental X-Ray, Inc - San Mateo
Study Purpose:	TMD Orofacial Pain		
Dr. Notes:	See notes		

OBSERVATIONS:

DENTITION:

Unerupted: -#6 was unerupted, in high position and in mesial inclination. No resorption or displacement of adjacent teeth was noted. Mild crown resorption was observed. Mild narrowing of pulp chamber and root canal was observed. PDL root spaces were strongly thin. Traction element was noted for the crown. Similar findings were described in the 2012-2013 studies

-#s 17 and 32 were unerupted, incompletely formed and in mesio-angular inclination/impaction. The mesio-coronal portions of their crowns were close to the disto-cervical areas of adjacent teeth #s 18 and 31 respectively. No signs of root resorption or displacement were noted. The inferior alveolar canal (*IAC*) was localized inferior/lingual as it relates to the incompletely formed # s 17 and 32 root apexes. A close relationship of #'s 17 and 32 roots with the superior and buccal cortical walls of the respective IAC was noted; evidence of mild right IAC impingement cannot be ruled out at one point.

Others: Mild root shortening/blunting was noted for teeth #s 7-10 and 23-26. This is consistent with idiopathic external apical root resorption (EARR)

ALVEOLAR BONE: - Normal alveolar bone levels were observed. No suggestive signs of pathology were noted for the alveolar bone.

- A defined, non-corticated opacity was noted in tooth area #19. This is most consistent with a dense bone island/enostosis (idiopathic sclerosis)

- Defined, non-corticated hypodensity were noted surrounding the apex of #27. This is consistent with rarefying osteitis, mostly endodontic in origin.

AIRWAY: -Slight nasal septum deviation was noted. The soft palate was approximately 42 mm long.

-Mild adenoid and tonsillar hyperplasia was noted

]-The most constricted area of the airways corresponded to the area posterior to the tongue and soft palate and it is within the normal limits (approximately 358 mm^2); however, soft palate and tongue posture can compromise the accuracy of this measurement.

SINUSES: - Signs of slight increase in the mucosal thickening were noted from the floor and walls of the maxillary sinuses and from selected ethmoidal air cells. This is consistent with allergies or another condition of inflammatory origin (sinusitis). The antromeatal complexes were patent/clear.

-Small antrolith was observed at anterior-middle third of right maxillary sinus.

TMJs:

Right and Left: The condyles were small. The reduction in size occurred along the posterior surface of the condyles (anterior-posterior dimension). Evidence of mild sclerosis, flattening for the superior/posterior surface of the condyles and mild sclerosis for the posterior left slope of the eminentia was noted.

Position: When the mandible was in "closed" position the condyles were positioned slightly posterior to the center in their respective fossa. The posterior articular spaces were reduced. Normal radiographic range of motion for the condyles was noted. The condyles translated to the apex of their adjacent eminence.

OCCLUSION: **-**Bilateral Molar Class I relationships were noted

OTHERS: -Bilateral slight elongation/calcification of the styloid-hyoid process/ligaments was observed. This is a normal anatomic variant; if pain is related to this finding then Eagle Syndrome should be considered in the differential diagnosis.

IMPRESSIONS:

- **Dentition**: # 6 has similar position and relationship with adjacent teeth as compared to the 2013 scan; however, mild pulp chamber and root canal narrowing, coronal resorption and apical remodeling was observed for this unerupted tooth
- **TMJs:** The findings described above are most consistent with **regressive osseous remodeling** for the TMJs, most likely functional in origin. These changes generally are most likely adaptation to compression along the posterior surface of the condyle and they are not necessarily progressive. The posterior positioned condyles within their fossa may predispose to anterior displaced discs and compression of the posterior surface of the condyles and the adjacent retrodiscal tissues.
- Most of the other findings and their correspondent diagnosis were noted above. Please correlate the sections with the axial and panoramic views for additional diagnosis and treatment planning purposes. Reviewing the remaining available volume, there was no evidence of any other anomaly/pathology in the maxillofacial and surrounding structures available in this study.

Sincerely,

Francisco Eraso, DDS, MS, MS, MSD.
Oral & Maxillofacial Radiologist

* The thumbnail images in the report are for reference only.

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Panoramic Views

2016

2013

Unerupted teeth – Normal alveolar bone levels - Unerupted/impacted # 6

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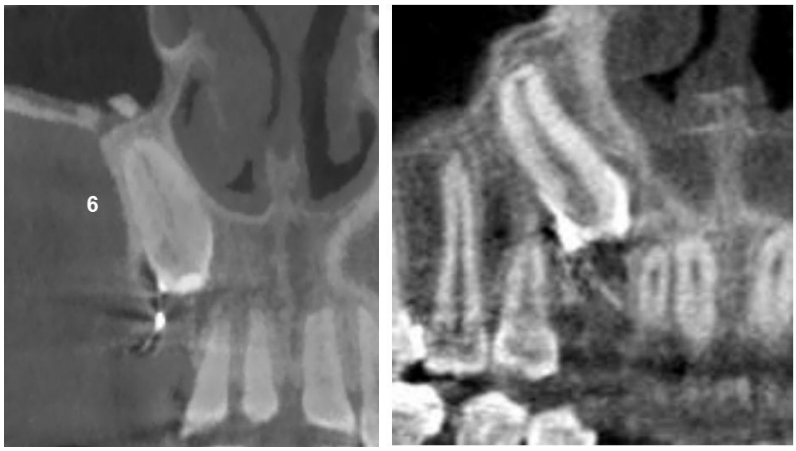
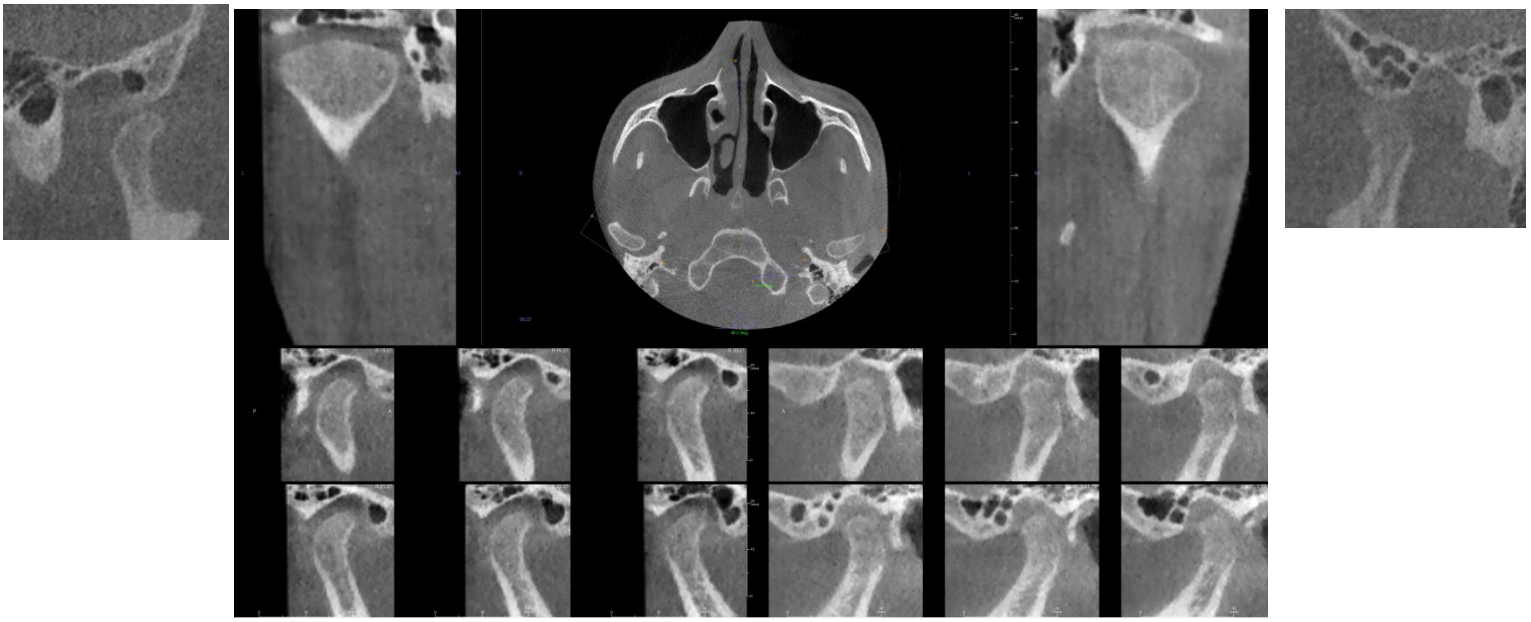
Coronal Views

2016 2013



Mild apical remodeling - Root canal and pulp chamber narrowing

TMJ s Views



Regressive Osseous remodeling for the TMJs – The posterior articular spaces were reduced - Normal condylar range of motion

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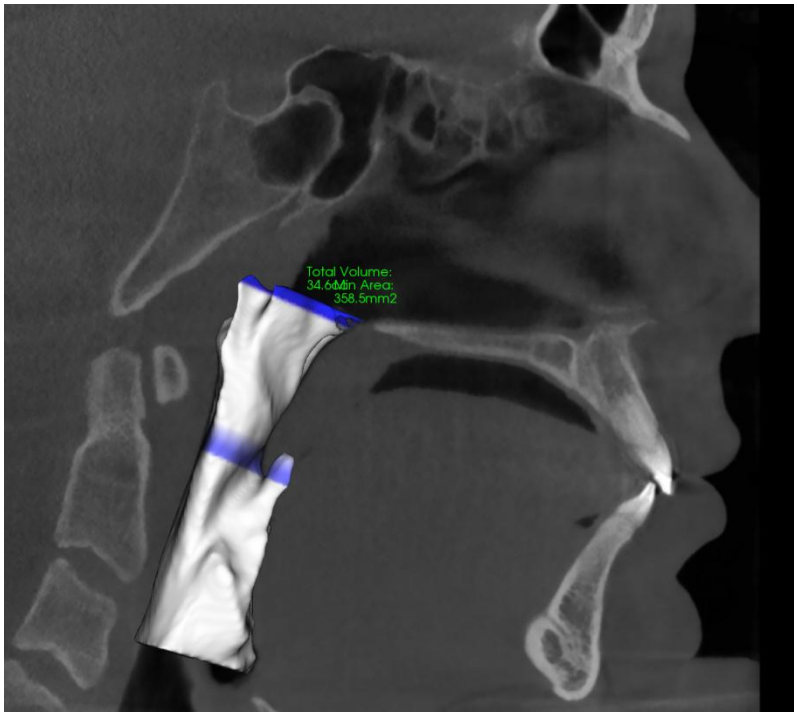
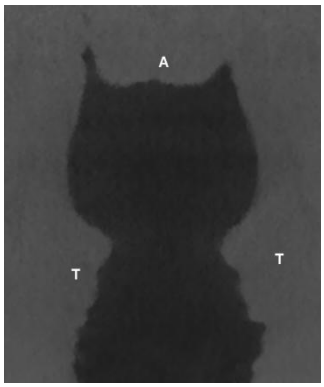
Airway Rendering and Coronal Views





Normal airway spaces – Mild Adenoid (A) and tonsillar (T) hyperplasia

Samuel Bower
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