

Patient:	John Doe	Report Date:	04/27/2016
DOB:	11/01/1973	Study Date:	04/20/2016
Ref. Doctor:	Dr. Happy Smiles	Scan Source:	Perfect Smiles Orthodontics
Study Purpose:	TMD Orofacial Pain Impaction/Localization Orthodontic Evaluation		
Dr. Notes:	Please compare to prior scan and evaluate for changes in occlusion		

IMAGES PROVIDED: CBCT scans, Closed

OBSERVATIONS

TMJ:

Right: Closed: Condyle: Reduction of condylar height. The 2015 scan shows a superior erosion that is not seen on the 2016 scan.

Joint space: Narrowing of the superior and posterior aspects.

Fossa: Flattening of the posterior slope of the eminence.

Left: Closed: Condyle: Reduction of condylar height. The 2015 scan shows a superior erosion that is not seen on the 2016 scan.

Joint space: Narrowing of the superior and posterior aspects.

Fossa: Flattening of the posterior slope of the eminence.

MAXILLA and MANDIBLE:

- There is an anterior open bite noted on both scans that has increased in size on the 2016 scan.
- The mandible is small with a steep mandibular plane.
- The anterior alveolar process is thin faciolingually, with scalloping of the facial cortex between the roots of the anterior teeth. Please keep this in mind if planning traction mechanics.
- Tooth #17 is mesioangularly impacted. The left IAN canal passes lingual to the apices of the tooth, then remains in contact with the inferior aspect of the root (the anatomic mesial of the tooth) up to the cemento-enamel junction.
- Tooth #32 is horizontally impacted. The right IAN canal is positioned inferior to the root (the anatomic mesial of the tooth) up to the cemento-enamel junction.

SINUSES and AIRWAY:

- A smaller mucus retention pseudocyst is seen in the right maxillary sinus. No intervention is needed.
- The minimum axial airway measurement is about 85mm² at the level of the uvula. This may indicate moderate risk of sleep disordered breathing, but this cannot be verified using CBCT imaging. The dimensions change slightly since the 2015 scan, and may be a result of the airway measurement algorithm, or may be an actual slight narrowing of the dimension. Correlation to clinical presentation is recommended.

OTHERS:

- Flattening of the cervical spine lordosis. The head position is forward.
- All other structures within the field of view appear to be within normal limits.

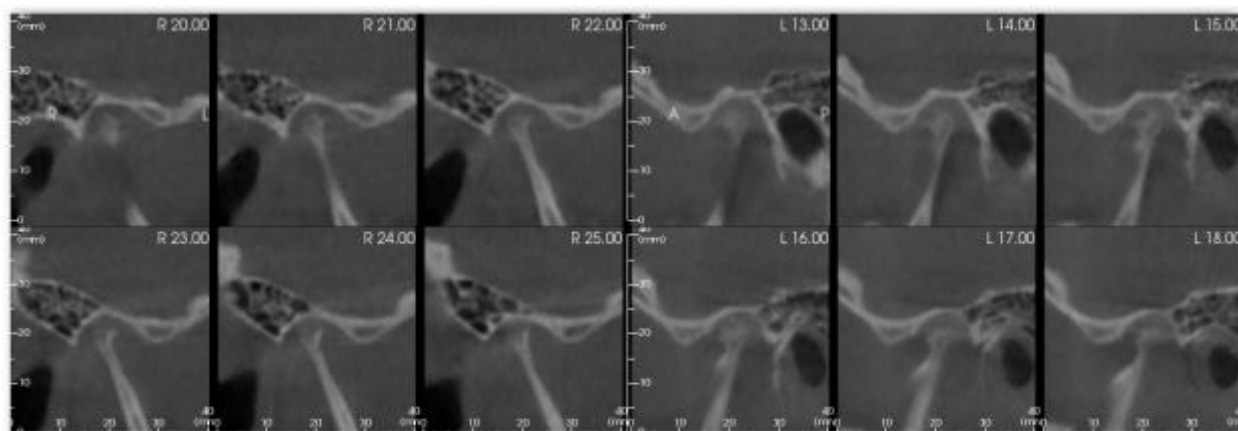
IMPRESSIONS

The findings in the right and left TMJs are suggestive of stable degenerative changes. The 2015 scan shows active degenerative changes. The change in condylar height may be the reason that the anterior open bite has increased in size.

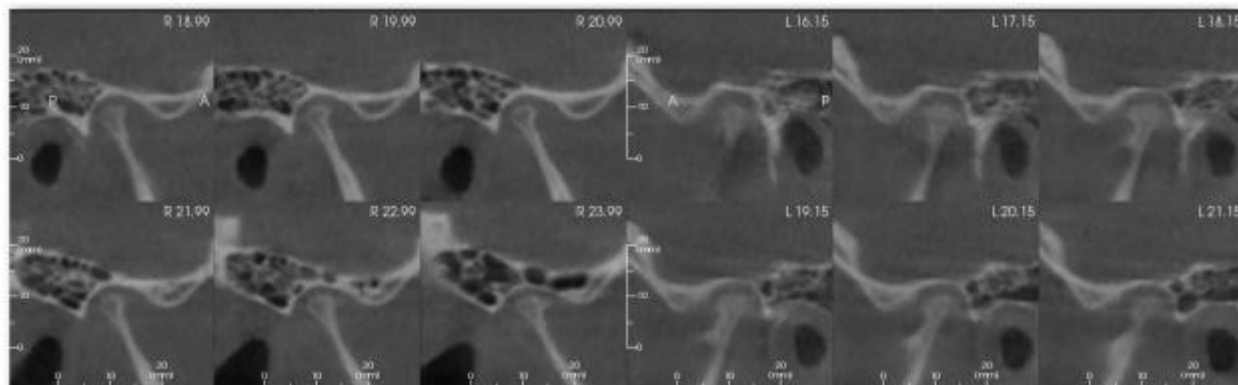
RECOMMENDATIONS

MRI if visualization of the disc and soft tissues is required.

Sincerely,
 Dania Tamimi, BDS, DMSc
 Diplomate, American Board of Oral and Maxillofacial Radiology



2015

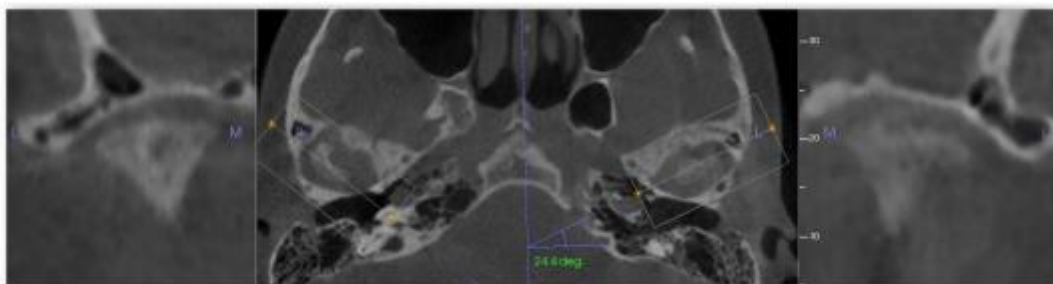


2016

Right

Left

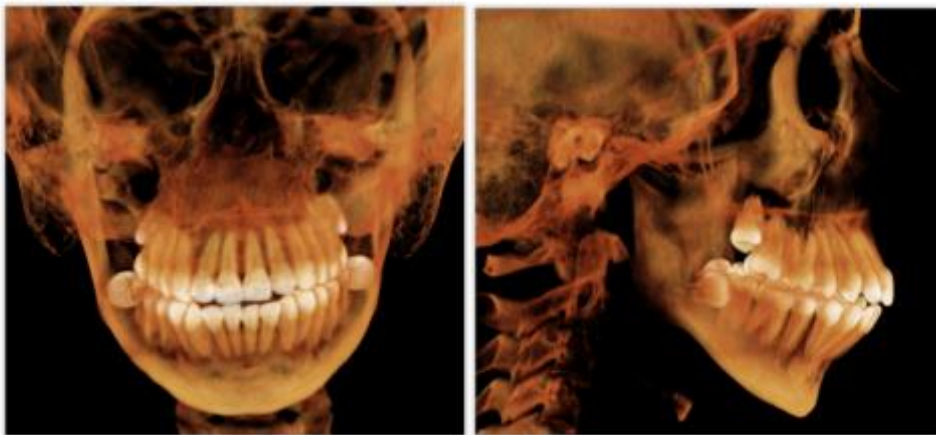
TMJ Cross sections



Axial and Coronals



Panoramic reformat



2015

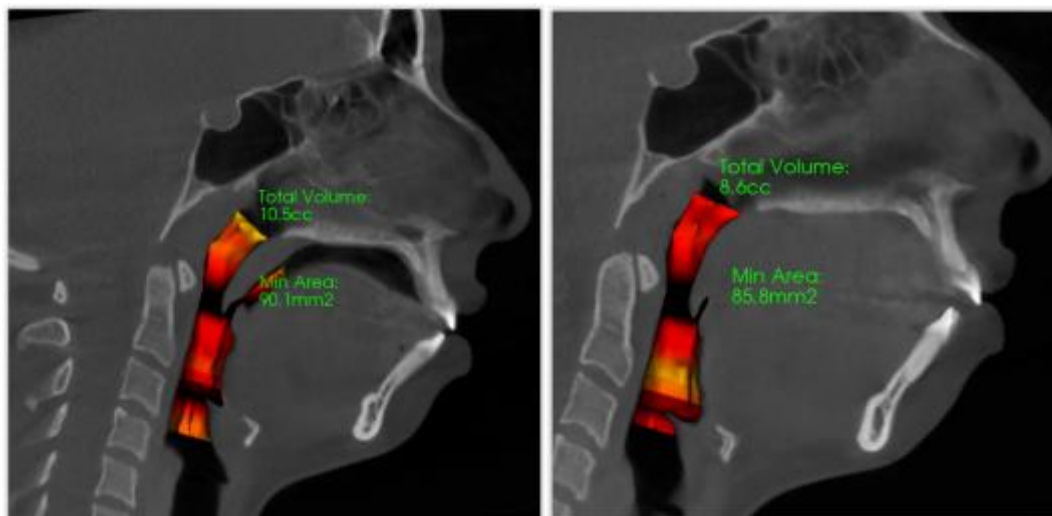


2016

Frontal

Lateral

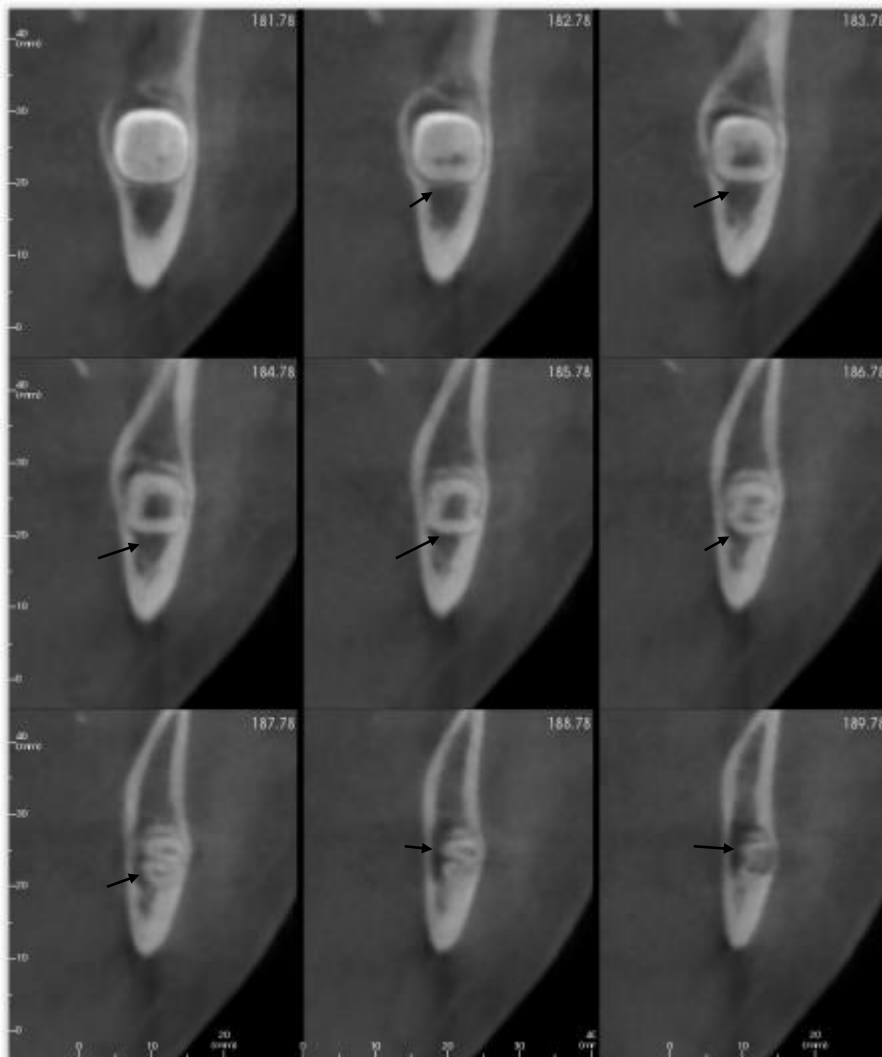
3D rendering



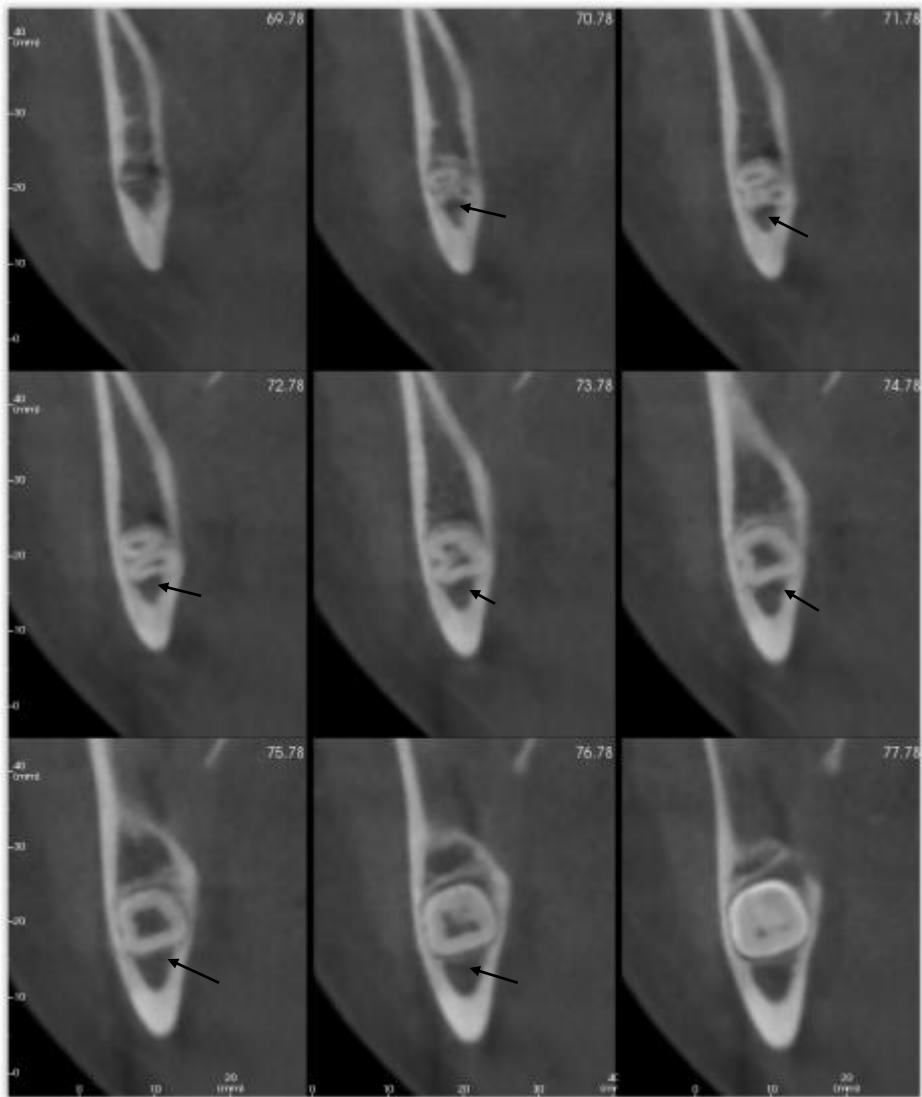
2015

2016

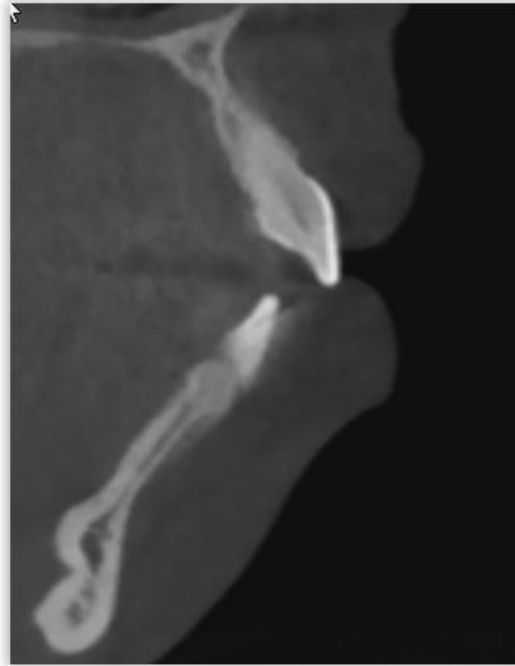
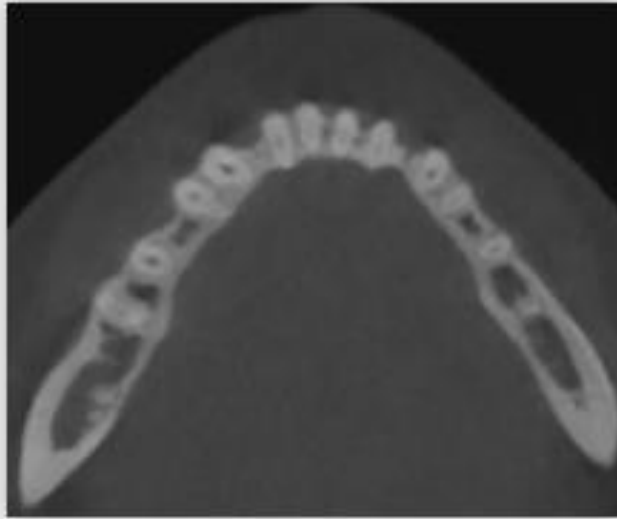
Airway Analysis



Tooth #17



Tooth #32



Thin anterior alveolar processes with scalloping of the facial cortical bone between the roots.
