

Patient:	Anonymous	Report Date:	01/01/2020
Date of Birth:	01/01/1899	Study Date:	01/03/2020
Female:	Female	Ref. Doctor:	Dentist
Study Purpose:	TMJ	Scan Source:	Reveal Diagnostics, LLC
Dr. Notes:	CT scan was taken for both closed and open TMJ. Please read the scan. Thank you!		

RADIOGRAPHIC TECHNIQUE:

Radiographic technique is adequate. Evaluation is limited to the capability of CBCT imaging.

OBSERVATIONS

Dentoalveolar Findings: Teeth nos. 1, 9, 16 and 32 are missing. Tooth no. 9 is restored with a single unit implant. The buccal cortex is not well visualized in the area of implant no. 9. The palatal cortex is intact.

Tooth no. 17 is horizontally impacted. No clear areas of resorption are seen where the crown of tooth no. 17 abuts the distal root of tooth no. 18.

A periapical radiolucency is seen on endodontically treated tooth no. 10. The buccal and palatal cortices are intact. No frank fracture lines are seen.

Periapical radiolucencies are seen on the mesial, distal and lingual roots of endodontically treated tooth no. 19. The surrounding trabeculation is densely sclerotic. No frank fracture lines are seen. The buccal and lingual cortices are intact. The inferior alveolar canal is well visualized inferior to the apices of tooth no. 19.

The apical PDL space endodontically treated tooth no. 31 is minimally widened. The apex of tooth no. 31 directly abuts the superior aspect of the inferior alveolar canal in this area. No frank fracture lines are seen. The buccal and lingual cortices are intact.

An amorphous, homogeneously dense radiopacity is seen blending with the buccal and lingual cortices inferior to tooth no. 22. This radiographic appearance is consistent with an area of idiopathic osteosclerosis, an asymptomatic area of dense bone with no known cause.

Paranasal Sinuses: The paranasal sinuses are clear and well-aerated. The right and left ostiomeatal units are patent. A relatively round, homogeneously dense radiopacity is seen within the right anterior ethmoid air cells. The radiopacity has the greatest transverse dimension of approximately 6 mm. This radiographic appearance is consistent with an ethmoid osteoma. This finding is most often asymptomatic and requires no treatment unless they become large enough to block sinus drainage pathways.

Nasal Cavities: A right-side concha bullosa (pneumatized middle turbinate) is incidentally noted; this represents a variation in normal anatomy

Airway: The dimensions of the airway, posterior to the soft palate and tongue base, are within normal limits.

Cervical spine: Sclerotic changes are noted at the superior aspect of the dens and the anterior arch of C1, which is consistent with adaptive remodeling. A punctate calcification which is most consistent with partial calcification of the apical ligament is seen superior to the dens; this is a physiologic ossification with little clinical significance.

Temporomandibular Joints: Right TMJ: Flattening is seen along the superior surface of the right condyle. The superior cortical outline is thickened, sclerotic and is intact. Subcortical sclerotic changes are seen along the posterior slope of the articular eminence. The anatomy and architecture of the glenoid fossa are within normal limits. The right condyle is posterior to the center of the glenoid fossa and the dimensions of the posterior joint space are narrowed. When opening, the condyle translates to past the tip of the articular eminence.

Left TMJ: The posterior surface of the left condyle is flattened. The cortical outline of the condyle is thickened, sclerotic and appears intact. Subcortical sclerotic changes are seen along the superior surface of the condyle and along the posterior slope of the articular eminence. The glenoid fossa is sclerotic. The condyle is posterior to the center of the glenoid fossa and the dimensions of the posterior joint space are narrowed. When opening, the condyle translates to past the tip of the articular eminence.

Other findings: An intracranial calcification is noted along the sagittal midline, consistent with calcification of the pineal gland. This is a physiologic calcification with no clinical significance.

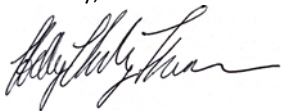
IMPRESSIONS AND RECOMMENDATIONS:

All viewed structures were determined to have no significant findings and are reported as **no abnormalities detected except:**

- TMJ: The osseous findings of the **right and left TMJs** are most consistent with osseous remodeling, most likely functional in origin. These changes are typically adaptive and not progressive.
 - The narrowed posterior joint spaces increase the probability of displaced disc and compression of the retrodiscal tissues on both sides.
 - Both condyles translate past the tips of their articular eminences, demonstrating hypermobility.
- #10: Resolving or persistent apical periodontitis associated with endodontically treated tooth no. 10. Correlation with the timeline since endodontic treatment is suggested to determine if this is new or healing inflammation.
- #19: Persistent or resolving apical periodontitis associated with endodontically treated tooth no. 19. Correlation with the timeline endodontic treatment is suggested to determine if this is new or healing inflammation.
- #31: Apical scarring, resolving or persistent apical periodontitis associated with endodontically treated tooth no. 31. Correlation with the timeline since it on treatment is suggested to determine if this is new or healing inflammation or apical scarring.

Thank you for the opportunity to serve your practice. Please feel free to contact me if you have any questions.

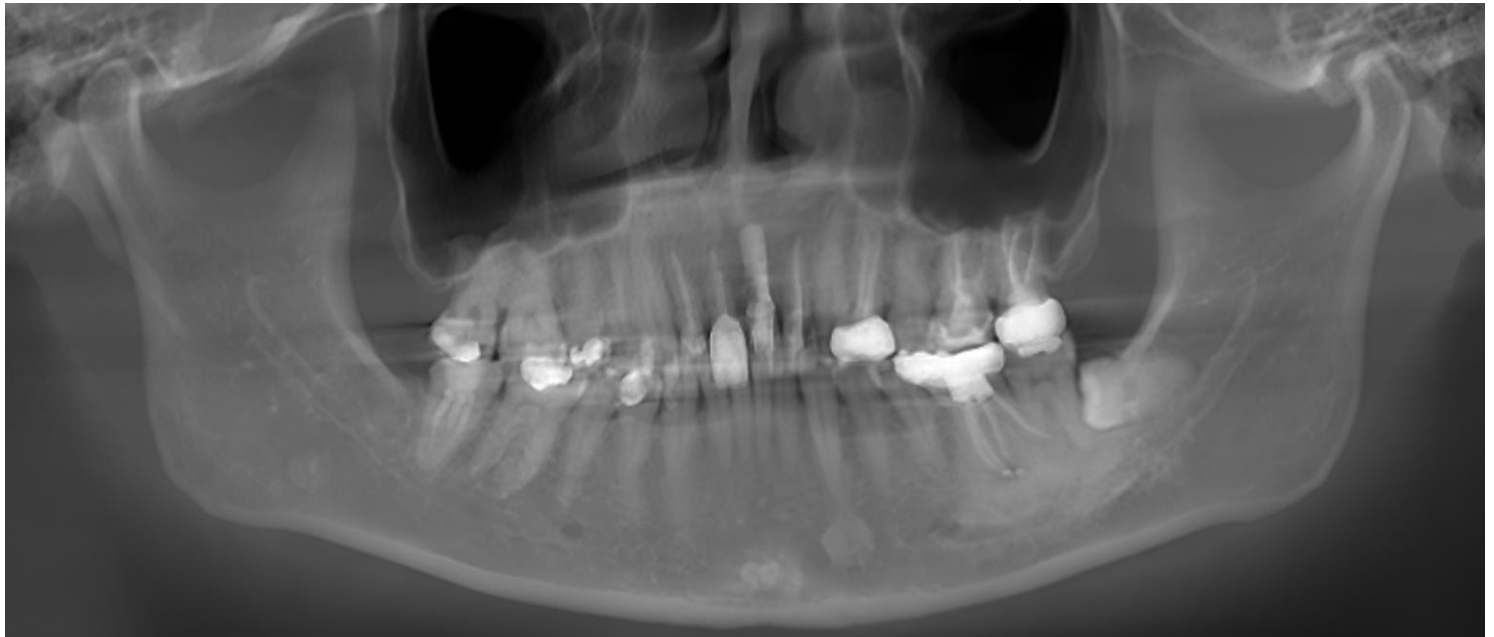
Sincerely,



Dr. Holly Vreeburg Thomson
Oral and Maxillofacial Radiologist
holly@beamreaders.com

This is a consultative report only and is not intended to be a definitive diagnosis or treatment plan

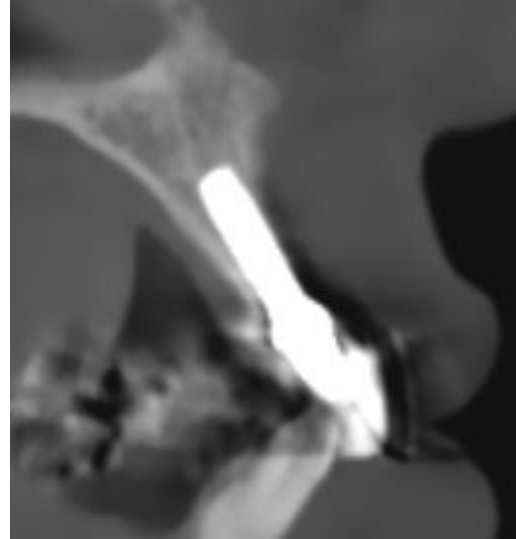
THE FOLLOWING ARE THUMBNAIL VIEWS OF IMAGES FROM THE ACQUIRED DATA:



Panoramic Reconstruction



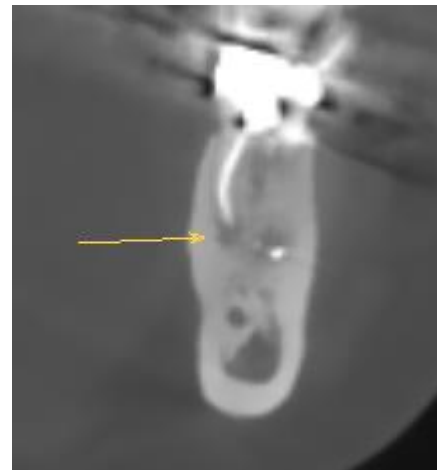
Sagittal view of #10



Sagittal view of implant #9



Sagittal view of #19 mesial and distal roots



Coronal view of #19 lingual root



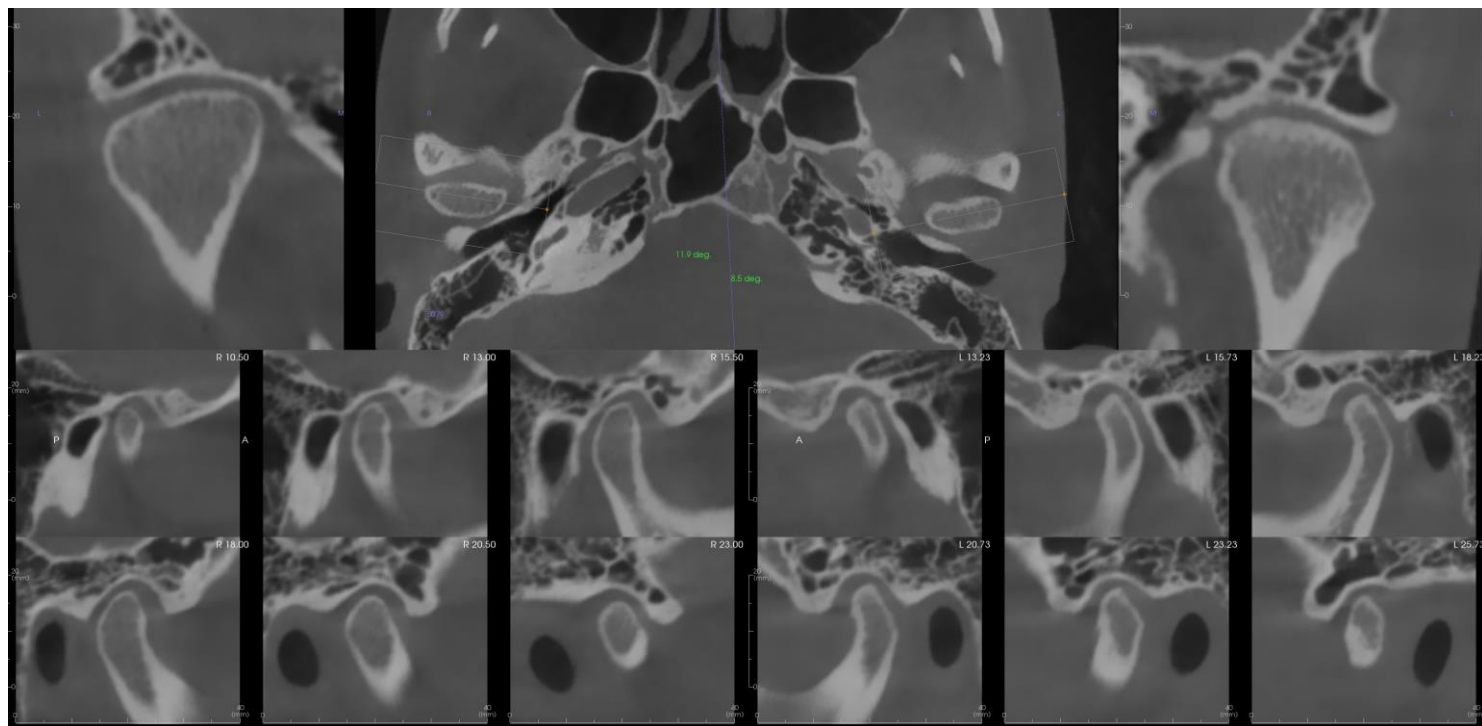
Sagittal view of osteosclerosis inferior to #22



Sagittal view of #31

RIGHT TMJ

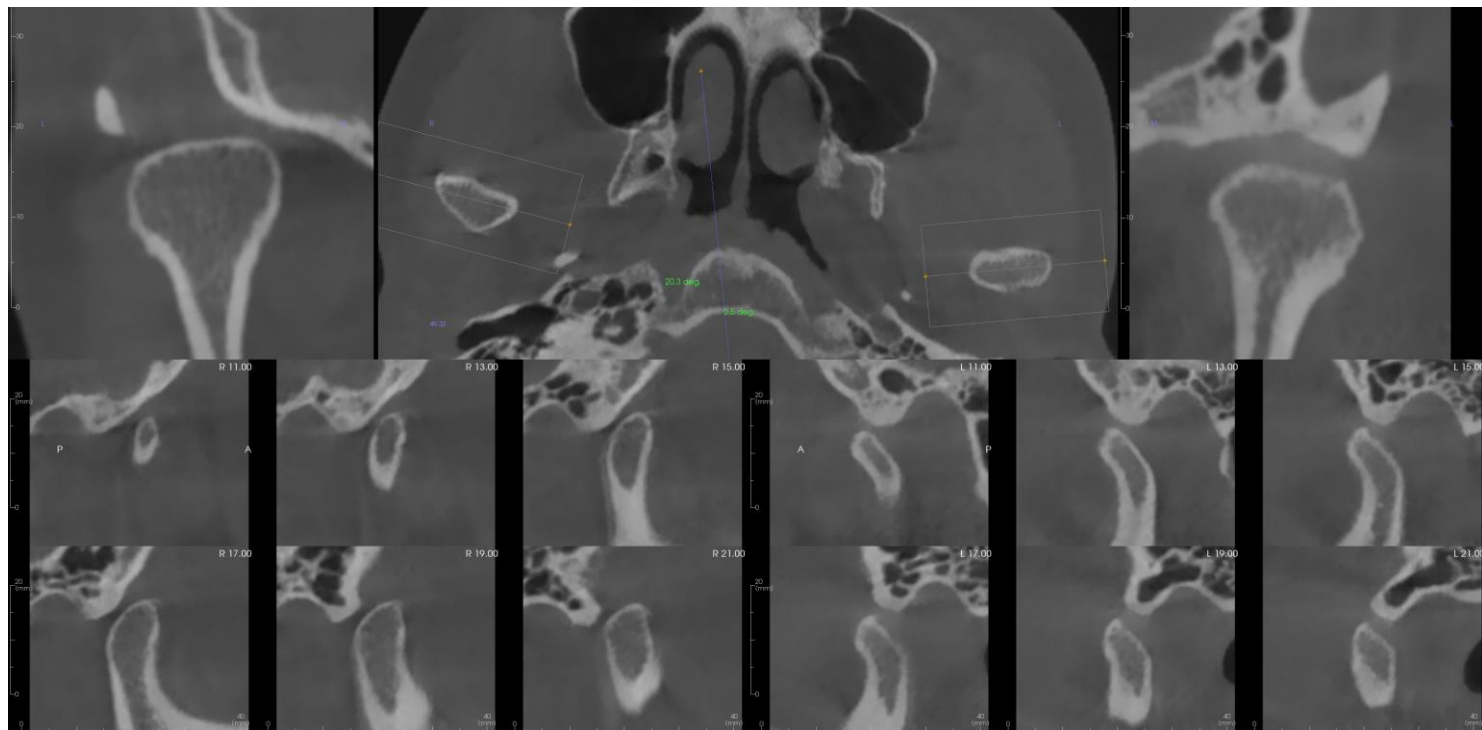
LEFT TMJ



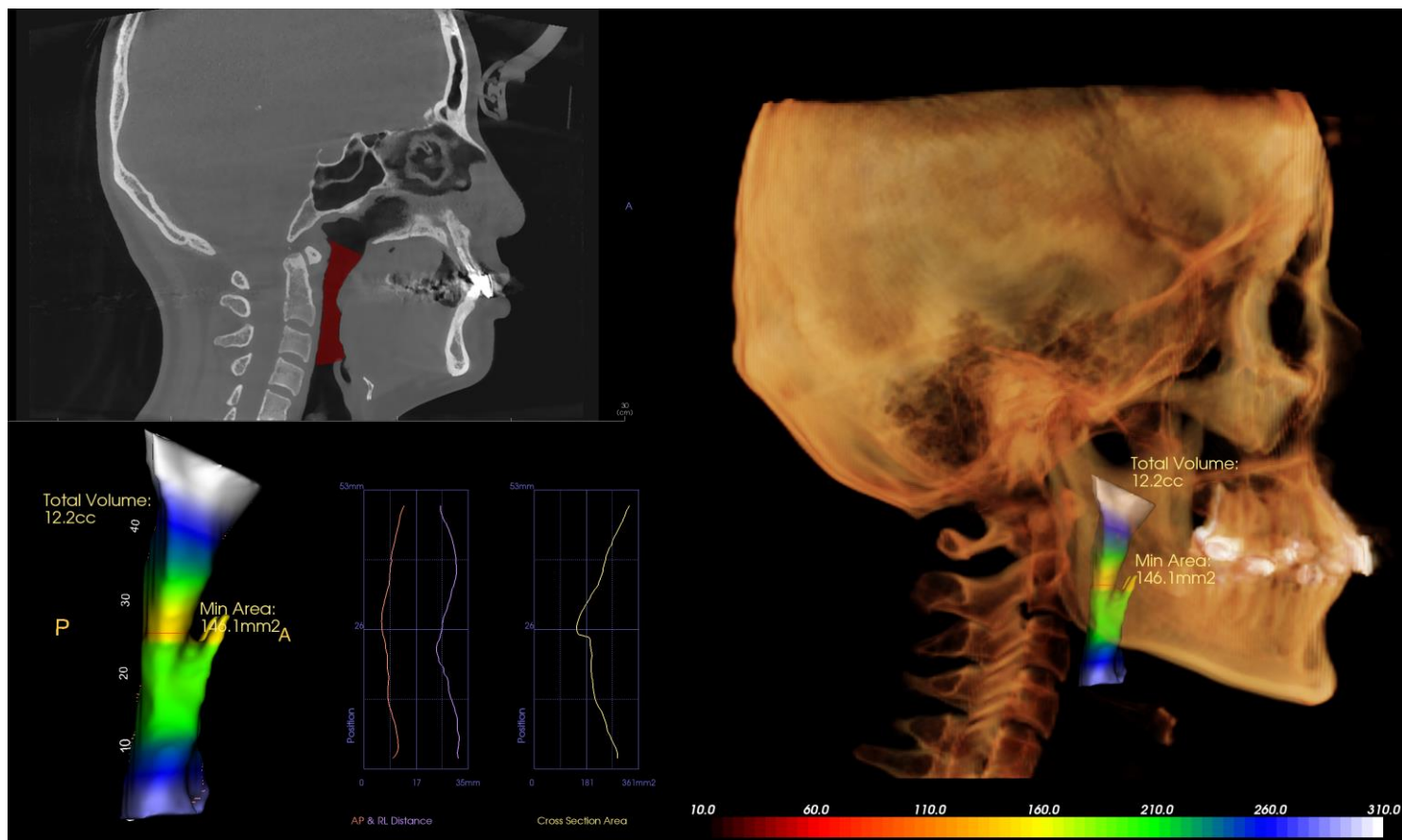
Closed TMJ: Sagittal sections with coronal and axial views

RIGHT TMJ

LEFT TMJ



Open TMJ: Sagittal sections with coronal and axial views



Airway



Coronal view of the right ethmoid osteoma