Patient's Name:

Date of Birth:

Date of imaging study:

Date of Report: 01/21/2025

Requesting practice:

Purpose of the study: General Evaluation

Relevant Notes and History: N/A

Pertinent Medical, dental history and any relevant medications:

Radiographic Technique:

- The provided imaging study is a large FOV CBCT volume capturing maxillary and mandibular dental arches.
- The scan was reoriented and visualized using Invivo 3D software.

Dento-alveolar and Osseous Structures:

- Missing teeth: Third molars, 3 and #14.
- Sites #3 and #14 shows unrestored implants: crestal bone level at site #3 implant noted in the cervical
- third with possible mild peri-implant bone loss, site #14 implant shows likely well-integrated graft material
- elevating the sinus floor.
- Generalized bone levels are approaching the cervical third.
- #8: Small focal radiopaque entity noted palatal to the apical aspect embedded in the bone, likely idiopathic osteosclerosis.
- Generalized apical lamina dura is likely intact.
- Mild labial/buccal exostoses with mandibular arch and lingual mandibular tori bilaterally.

Nasal Cavity:

- The nasal cavity appears clear with intact borders, mild nasal septum deviated to the right side with spur formation.
- Linear radiopaque entity noted in the anterior nasal cavity mucosa, possible dystrophic calcification of nasal cartilage, or calcifications associated with previous history of rhinoplasty procedure, correlate with medical history, these entities are likely asymptomatic.

Paranasal Sinuses:

- There is minimal peripheral mucosal thickening with the maxillary sinuses, intact portrayed borders and patent ostio-meatal complex bilaterally.

Airways:

- The minimum upper airway cross-sectional area is 45.4 mm^2 and volume is 4.9 cc.
- The soft palate measures ~ 45.45 mm in length.
- There is mild-moderate bilateral and symmetrical soft tissue enlargement with the palatine tonsils.

Temporomandibular Joints (TMJs):

- Right TMJ: Condylar volume is within normal radiographic limits, there is mild-moderate condylar surface flattening with slight anterior osteophyte formation, intact cortical outlines, flattening and sclerosis with articular eminence and glenoid fossa.
- Left TMJ: Condylar volume is within normal radiographic limits, there is moderate condylar surface flattening with slight anterior osteophyte formation, irregular cortical outlines with possible superior cortical erosion sites, mild flattening and sclerosis with articular eminence and glenoid fossa.
- Condyle-fossa relationship: Both condyles are slightly posteriorly and superiorly positioned in the glenoid fossae.

Cervical Spine:

- Degenerative/osteoarthritic changes are noted with the visualized osseous aspects; correlate with clinical history.

Soft Tissue Findings:

- Carotid artery calcifications are noted bilaterally in the neck soft tissue spaces and parasellar region.
- Physiological pineal gland and choroid plexus calcifications are noted in the cranial cavity.

Radiographic Impression and Recommendations:

1. Site #3 implant: Radiographic findings suggestive of mild peri-implant bone loss, clinical evaluation suggested for peri-implant bone health.
2. TMJs: Osseous findings are consistent with mild degenerative joint disease bilaterally, radiographically stable in the right, and possible active cortical erosion sites in the left:
    a. condyle-fossa positional relationship bilaterally suggestive of increased risk of internal derangement, such as disc displacement; correlate with clinical findings for active TMDs.
    b. note if significant TMD is present, MRI study with closed and open mouth protocols can be advised for further soft tissue evaluation.
3. Airways: Reduced upper airway cross-sectional findings suggestive of increased risk of sleep disordered breathing: note mild nasal septum deviation, soft tissue enlargement with palatine tonsils likely contributory; if clinically indicative, appropriate specialist evaluation/referral advised.
4. Carotid artery calcifications in the neck soft tissue spaces and parasellar region, these findings are known to be associated with increased risk of cerebrovascular disease, correlate with medical history, if not available, these findings should be conveyed in patient-PCP communication.

Thank you for the opportunity to serve your practice,

Sincerely,

Mayank Pahadia (BDS, MDS, MS)

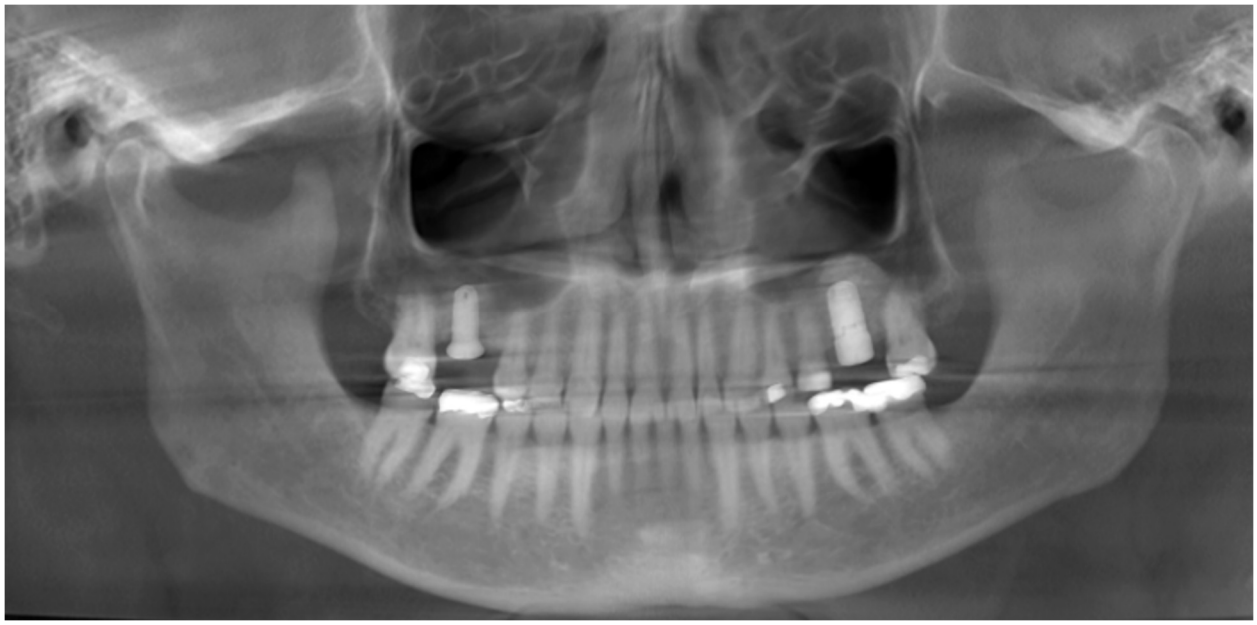
Diplomate, American Board of Oral and Maxillofacial Radiology

Consultant Oral and Maxillofacial Radiologist

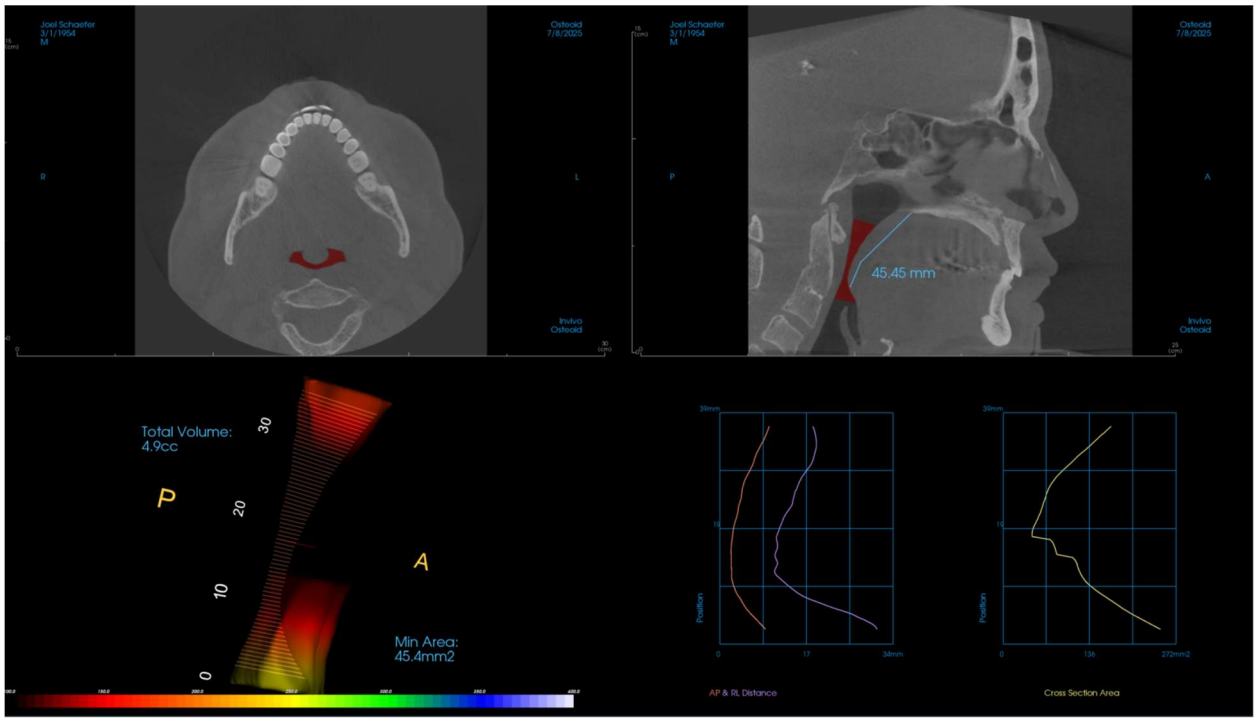
Contact: (904) 430 5010

Disclaimers:

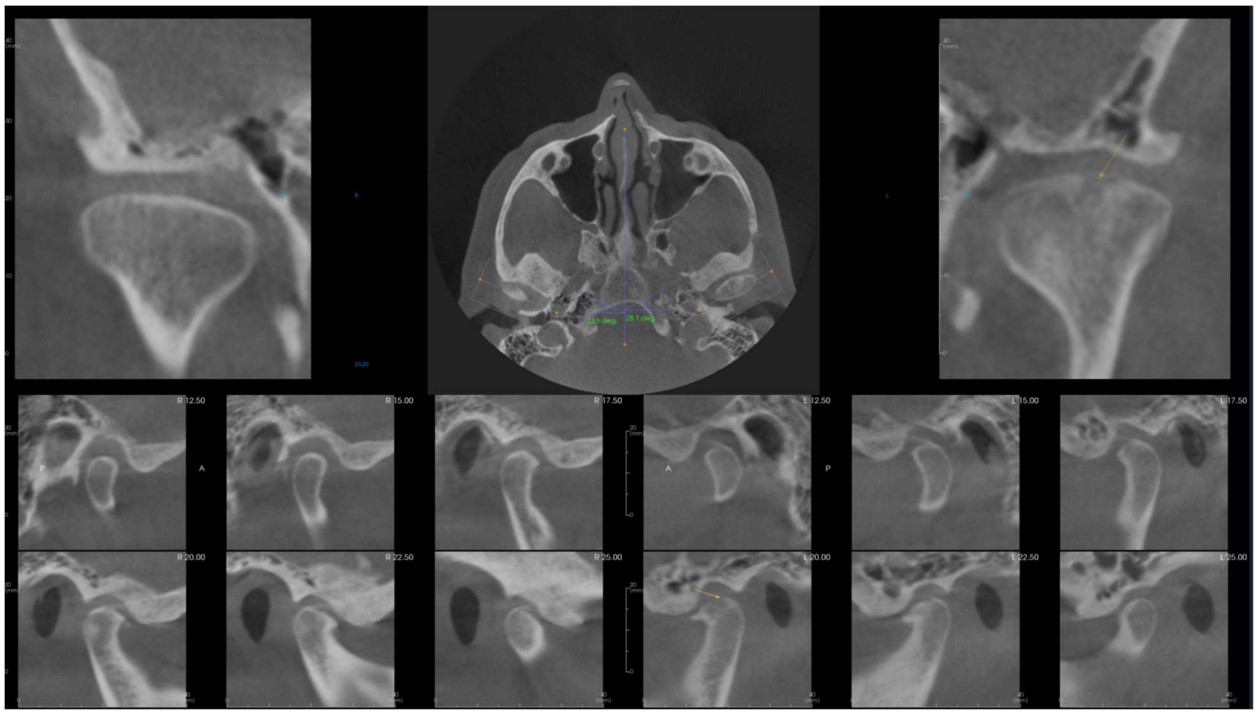
- *Please note that measurements should not be made from any attached images. These are representative slices for reference.*
- *This is a consultative report only and is not intended to be a definitive diagnosis or treatment plan.*



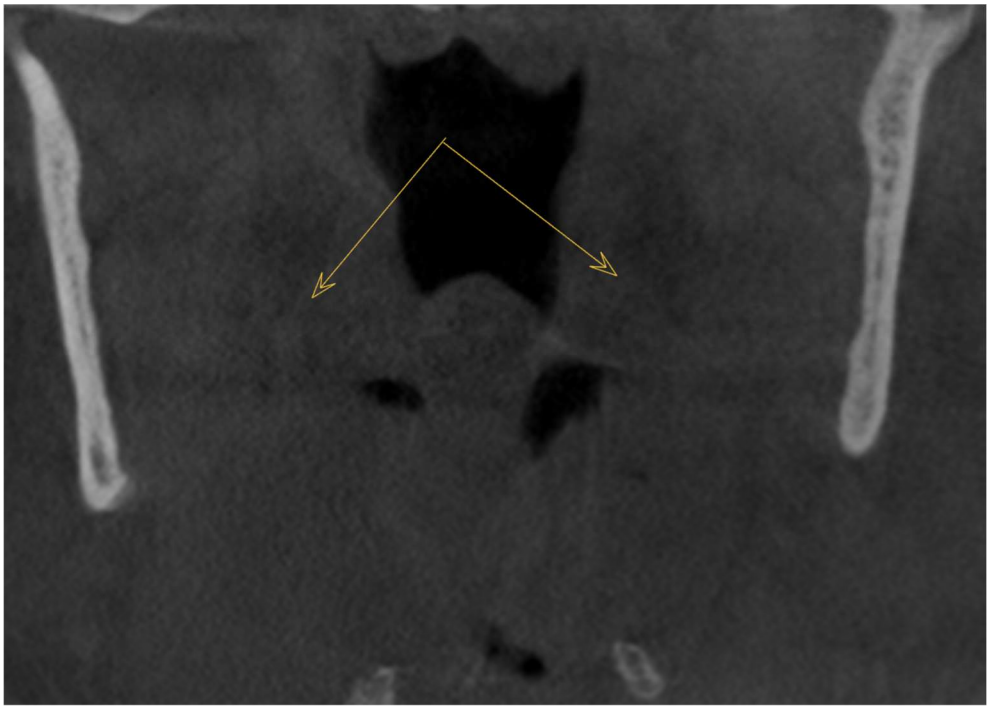
Panoramic reconstruction



Airway analysis

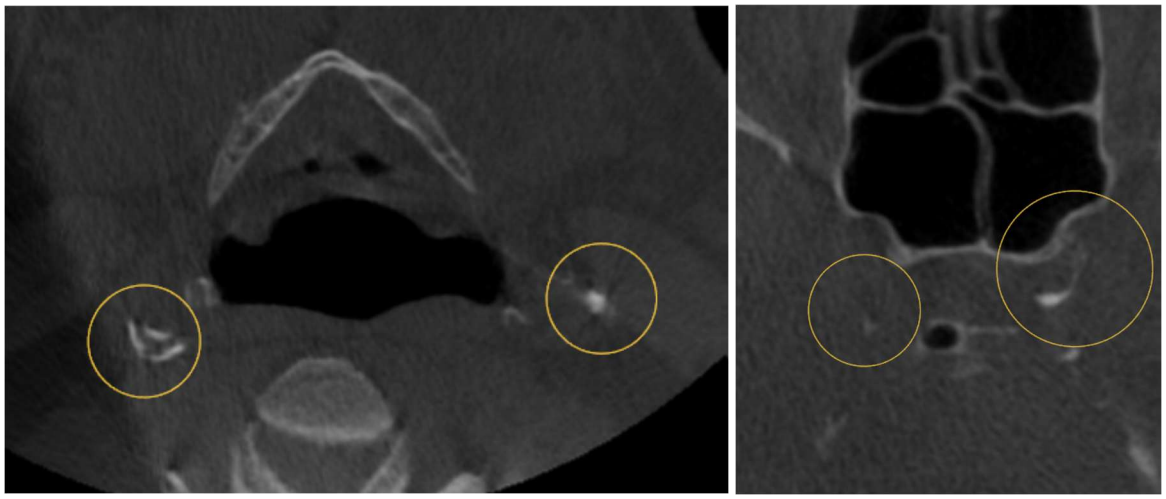


TMJ series



Pharyngeal airway spaces at the level of palatine tonsils (coronal view)

Nasal cavity and Maxillary sinuses (coronal view)



Carotid artery calcifications in the neck and parasellar region bilaterally (axial views)