Patient's Name:

Date of Birth:

Date of imaging study:

Date of Report: 07/27/2025

Requesting practice:

Purpose of the study: Orthodontics

Relevant Notes and History: Orthodontic evaluation

Pertinent Medical, dental history and any relevant medications:

Radiographic Technique:

- The provided imaging study is a large FOV CBCT volume of the maxillofacial complex
- The scan was reoriented and visualized using Invivo 3D software.

Dento-alveolar and Osseous Structures:

- Missing teeth: Third molars and set of four maxillary mandibular premolars.
- Generalized bone levels are approaching the cervical third.
- Generalized lamina dura appear intact.

Nasal Cavity:

- The nasal cavity appears clear with intact borders, minimal nasal septum deviation with spur formation.

Paranasal Sinuses:

- Visualized sinuses are clear with intact borders and patent ostio-meatal complex bilaterally.

TMJs:

Osseous findings:

- Right and left TMJs: Condylar volume is within normal radiographic limits, there is mild-moderate condylar surface flattening with intact cortical outlines, mild flattening and sclerosis with temporal bone components.

Condyle-fossa relationship:

- Right and Left TMJs: Teeth appear in maximum intercuspation, both condyles are posteriorly positioned in the glenoid fossa, right condyle is slightly medially and superiorly positioned, left condyle is laterally and superiorly positioned.

Airways:

- The minimum upper airway cross-sectional area is 68.1 mm^2 and volume is 5.8 cc, soft palate measures ~ 5.8 cc.
- There is mild soft tissue enlargement with palatine tonsils bilaterally and symmetrically.

Cervical spine:

Early osteoarthritic/degenerative changes are noted with the visualized osseous aspects.

Soft tissues:

Physiological triticeous cartilage calcifications noted in the neck soft tissue spaces postero-medial to the inferior hyoid.

Radiographic Impression and Recommendations:

1. Within limitations of imaging study, negative for radiographic signs of appreciable dento-alveolar apical and osseous pathology.
2. TMJs: Osseous findings are indicative of functional remodeling changes:
    a. condyle-fossa relationship bilaterally suggestive of increased risk of internal derangement; correlate with clinical findings for active TMDs.
3. Airways: Reduced upper airway cross-sectional findings suggestive of increased risk of sleep disordered breathing:
    a. note mild palatine tonsillar hypertrophy likely contributory, if clinically indicative, appropriate specialist evaluation/referral advised.

Note: Specific orthodontic analyses are reserved for the managing orthodontist.

Thank you for the opportunity to serve your practice,

Sincerely,

Mayank Pahadia (BDS, MDS, MS)

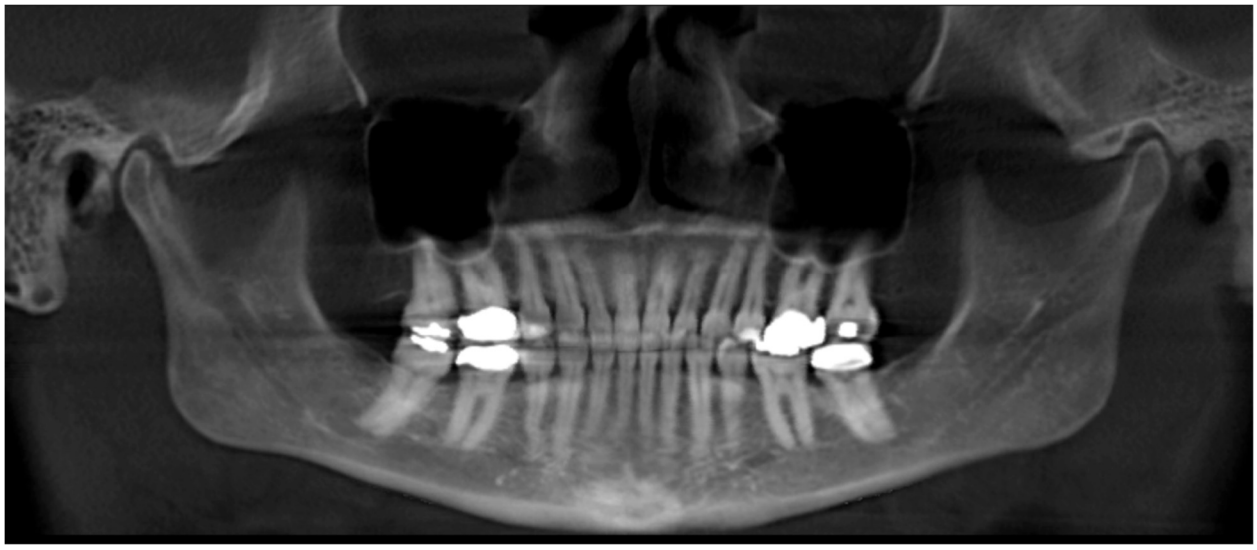
Diplomate, American Board of Oral and Maxillofacial Radiology

Consultant Oral and Maxillofacial Radiologist

Contact: (904) 430 5010

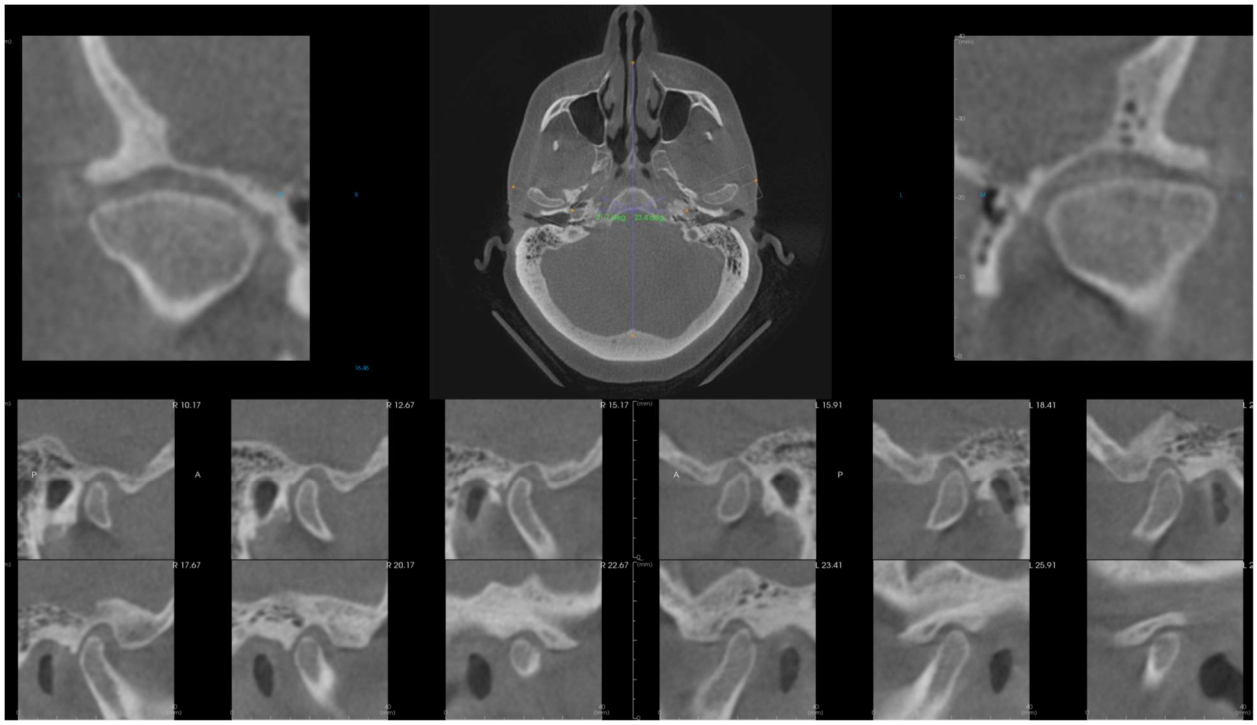
Disclaimers:

- *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.*

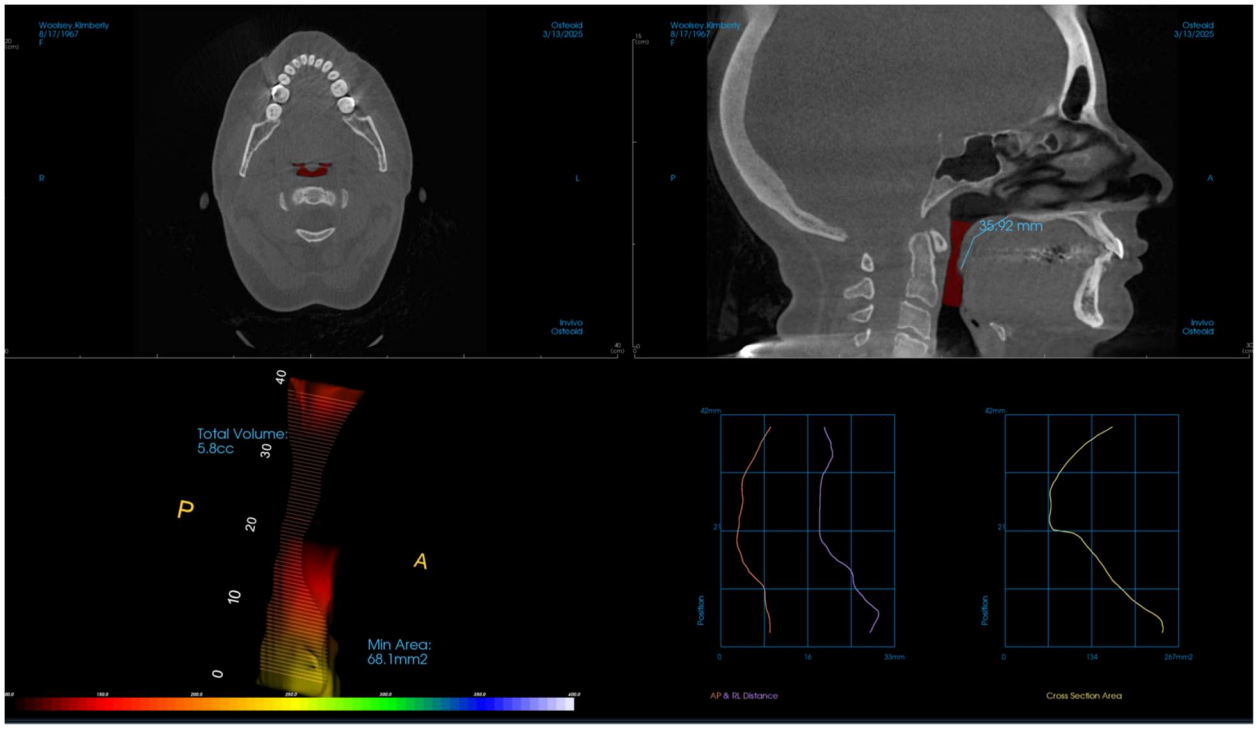


Panoramic reconstruction

3D Cephalometric reconstructions



TMJ series



Airway analysis