

Patient: Jane Doe
05/11/1956: 05/11/1956
Ref. Doctor: Dr. Dentist
Scan Source: Your Town Imaging Center

Study: CBCT
Study Date: 05/09/2019
Report Date: 05/18/2019
Study Purpose: General, TMD

Dr. Notes: Complete evaluation

DENTITION: **Missing Teeth:** #s 14 or 15,18,28,35,38 and 48.
Root Canals: #s 11,12,22,46 and 47.
Peri-radicular: The bone along the mesial surface of the distal root of # 46 has a low attenuation value. I could not identify any root structure covering the mesial side of the post in the distal root. In addition, there is a broad zone of dense bone surrounded the roots of # 46.

PERIODONTAL: Minor crestal alveolar bone loss, consistent with periodontitis, is noted adjacent to selected teeth.

OCCLUSION: The incisor teeth are retroclined. There is a deep anterior over bite. There is a tendency for a right side posterior cross bite.

AIRWAY: The dimensions of the airway, posterior to the soft palate and tongue base, are small with the small cross sectional area measuring 62 mm². The soft palate is long measuring 43 mm. The anteroposterior dimensions of the oral pharynx posterior to the soft palate is very small.

SINUSES: The paranasal sinuses are fully aerated and without mucosal thickening or soft tissue densities. The sinus walls are intact. The ostiomeatal units are patent.

NOSE: No significant abnormalities are noted.

TMJs: **Osseous Components:** The right condyle is small. The reduction in size occurred from the superior surface of the right condyle. The superior surface of the condyles shows signs of flattening, erosions and sclerosis. Subchondral bone cysts are noted near the proximal surface of the left condyle.
Spatial Relationships: In the closed position the condyles are located superior to the center of their fossa and the resultant superior joint spaces are thin, more so in the right TMJ.

MAXILLA: The transverse dimensions of the maxilla are small.

MANDIBLE: The vertical dimensions of the right condylar process and ascending ramus are smaller than the left side. The lateral development of the right half of the mandible is less than the left side. The mandible is recessive.

C-SPINE: Joint space narrowing, sclerosis, flattening and osteophyte formation is noted in the median atlantoaxial joint. The anterior arch of C1 is anteriorly deflecting posterior pharyngeal wall.

IMPRESSIONS

TMJS:

- **Degenerative joint disease (DJD)** is noted in the TMJs.
 - DJD occurs when the adaptive capacity of the articular tissues is exceeded by the functional demands.
 - DJD results in the loss of the articular tissues.
 - The presence of DJD increases the probability of disc displacement.

- There is no radiographic evidence of active DJD.
- The mandibular asymmetry suggests that the degenerative process started in the right TMJ during the late stage of somatic growth.
- The narrowed superior joint spaces increase the probability of displaced discs and/or thinning of the soft tissues separating the superior and inferior joint compartments.

PERIAPICAL:

- The observations adjacent roots of # 46 suggest chronic bone response to a low grade inflammatory process (sclerosing osteitis) with a focal zone of rarefying osteitis along the mesial surface of the distal root of # 47.
 - I recommend monitoring this area for signs of progression.

AIRWAY:

- The small airway dimensions may be a risk factor for **sleep disordered breathing (SDB)**.
 - The small jaws and long soft palate may be contributing to the small airway dimensions.
 - I recommend a clinical assessment for the potential of SDB.

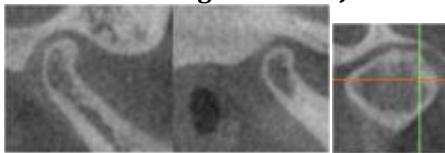
Sincerely,



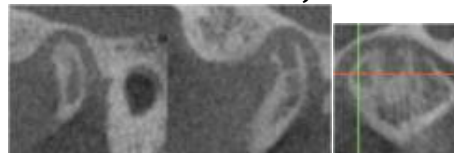
David C. Hatcher, D.D.S., M.Sc., M.R.C.D.(c)
Oral & Maxillofacial Radiologist

Patient: Marilyn Short

Right Lat. TMJ



Left Lat. TMJ



DJD
Thin superior joint space

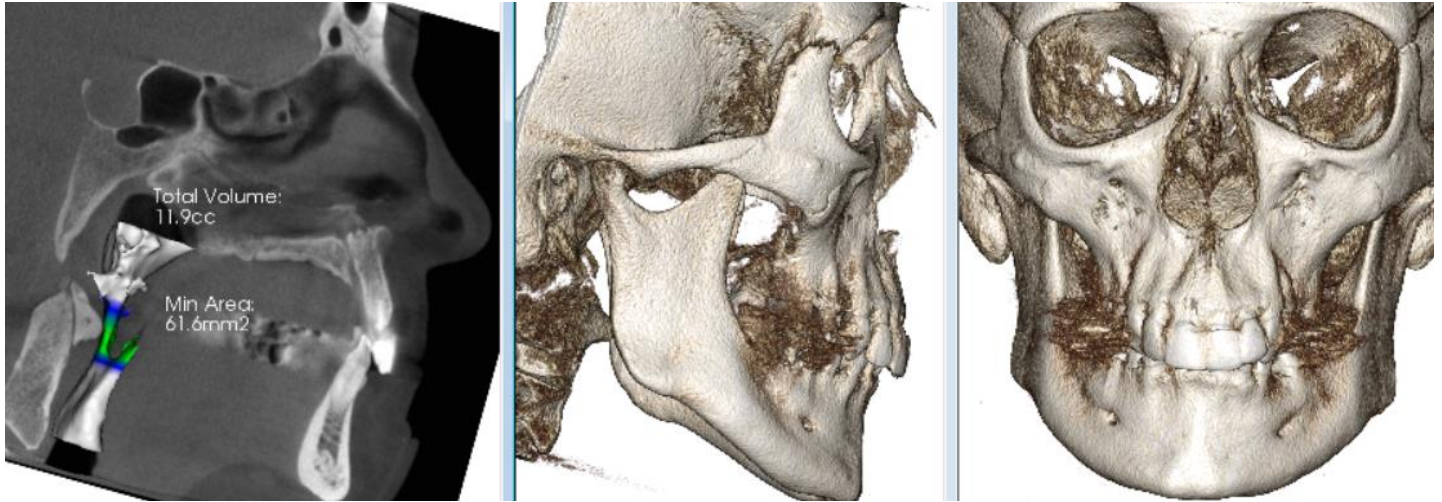
Panoramic



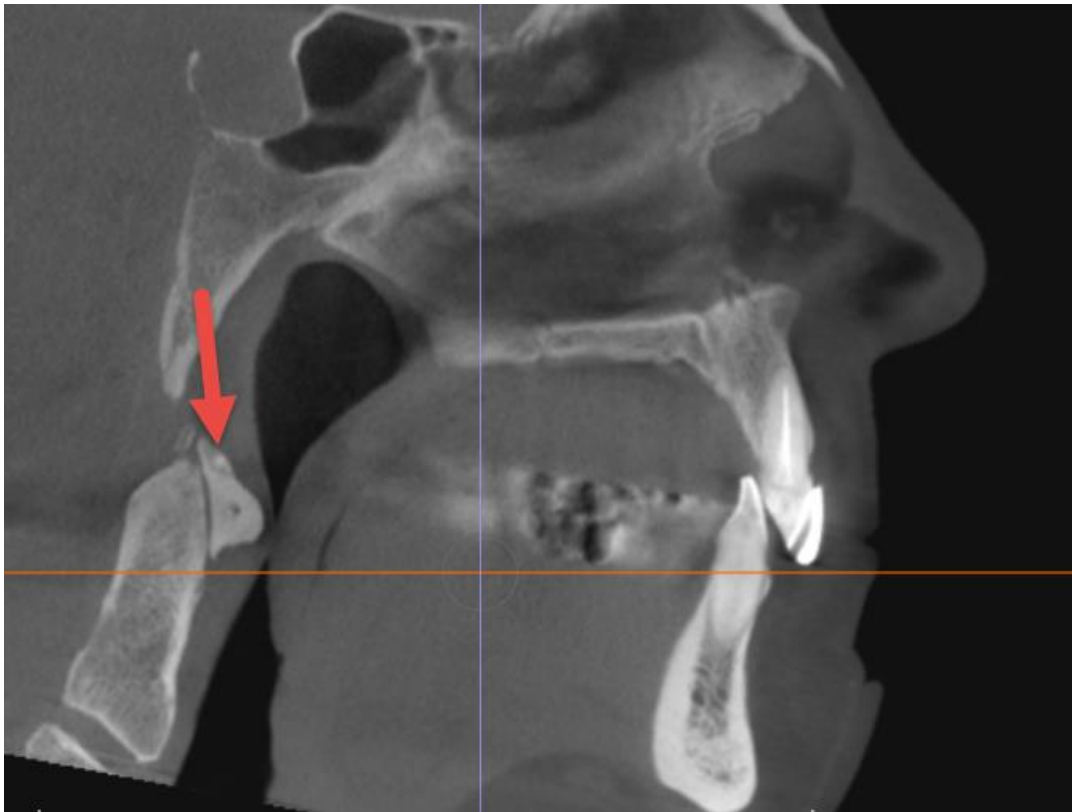
Note the broad zone of sclerosing osteitis are around the roots of # 46



Low density area along mesial surface of distal root (orange arrow).



Small airway regions shaded in blue and green



Note long soft palate

Anterior reflection of posterior pharyngeal wall by the position of the anterior arch of C1- red arrow

Note small AP dimensions of airway posterior to soft palate