

CBCT scan:

Dental CBCT scan (Medium FOV) was performed. Image processing in 3D was performed with On-Demand 3D™ s/w. 3D cross-sectional & Panoramic images are provided with On-demand view s/w on CD. Cross sectional numbers for prospective sites are w.r.t given panoramic section. Cross sectional interval = 1.5 mm.

Lesion in the right ramus involving the coronoid process and posterior body of the mandible:

- Well defined lucent lesion is noted in the right ramus involving the posterior body of the mandible and the coronoid process.
- The lesion extends from the distal root apex of 46 to involve the apical peri-radicular region of the tooth 47 sparing the furcation region. Posteriorly, the lesion extends to the posterior border of the ramus in the superior- and middle-third.
- The lesion extends from the entire width of the alveolus bucco-lingually; supero-inferiorly from the sigmoid notch and coronoid process to the inferior cortex of the mandible sparing the angle and the tip of the coronoid process.
- The lesion measures approx. 4.5cm x 1.3cm x 4.7cm in the greatest antero-posterior x transverse x supero-inferior dimensions respectively.
- The margins are largely well defined & corticated with internal scalloping.
- Internal contents are lucent with multiple residual loculations.
- The buccal and lingual cortices appear largely intact with thinning and mild expansion (lingual > buccal); there is marked thinning of the buccal and lingual cortices below the level of the condylar process.
- There is effacement of the lingual cortical plate in the ramus w.r.t. the postero-superior aspect of the lesion.
- The lesion causes effacement of the mandibular foramen and the cortical walls of the right inferior alveolar canal in the ramus region with partial effacement of the cortical walls in the posterior body of the mandible.
- There is inferior displacement of the inferior alveolar nerve canal in the posterior body of the mandible.
- Mid-apical root resorption of the tooth 47 is also noted.

Dental findings:

- Generalised mild to moderate attrition/ wear are noted.
- Grade- I furcation involvement of the tooth 26 is noted.
- Labial wear/ abrasion are noted with the 22 & 23
- Labial cervical wear is noted with the 24.
- Mild proximal angular crestal bone defects are noted with the 27.
- Mild angular crestal bone defect is noted mesial to the 25.

Incidental notes:

- S-shaped deviation of the nasal septum is noted with an osseous spur on the right side indenting the right inferior turbinate.
- Mild mucosal thickening of the walls of the maxillary sinuses is noted bilaterally.

IMPRESSION:

Well defined lucent lesion is noted in the right ramus involving the posterior body of the mandible and the coronoid process. The lesion involves the apical peri-radicular region of the tooth 47 to extend posteriorly to the posterior border of the ramus in the superior- and middle-third, involves the entire width of the alveolus

bucco-lingually and supero-inferiorly from the sigmoid notch and coronoid process to the inferior cortex of the mandible sparing the angle and the tip of the coronoid process. The margins are largely well defined & corticated with internal scalloping; there is homogenous internal lucency with multiple residual loculations. The buccal and lingual cortices appear largely intact with thinning and mild expansion; marked thinning and intermittent effacement of the lingual cortical plate in the ramus w.r.t. the postero-superior aspect of the lesion. There is effacement of the mandibular foramen and the cortical walls of the right inferior alveolar canal in the ramus region. There is inferior displacement of the inferior alveolar nerve canal in the posterior body of the mandible. Mid-apical root resorption of the tooth 47 is also noted.

The above findings could be due to an odontogenic cyst/ tumor; the most likely differentials include keratocystic odontogenic tumor or multilocular ameloblastoma. Correlation with histopathology is necessary for elucidation.