

# Panoramic Radiographic Appearance of Giant Bilateral Tonsilloliths

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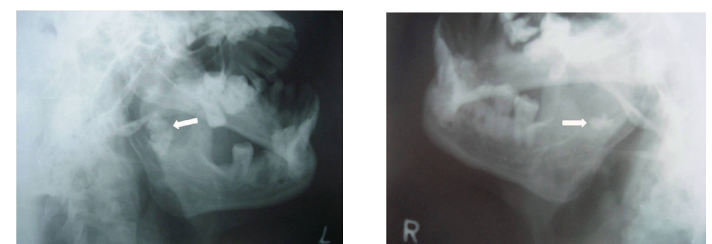
A 52-year-old male patient reported with a chief complaint of pus discharge from left mandibular posterior region, with an associated history of extraction of tooth 36 one year ago. Past medical history of patient was not significant in relation to patient's current complaint. Draining sinus was observed near the left body region of the mandible extraorally [Table/Fig-1]. Intraorally associated region disclosed a mobile root remnant [Table/Fig-2]. A provisional diagnosis of chronic suppurative osteomyelitis was made because of mobile root remnant of mandibular left first molar. A periapical radiograph showed extensive radiolucent bony changes surrounding the root remnant and hence a panoramic radiograph was advised. Interestingly, the panoramic radiograph showed the presence of two ovoid shaped radiopaque areas superimposed one on either side of the ramus of mandible measuring of size approximately 2.5cm x 2.8cm and 1.3cm x 1.6cm respectively on right and left side [Table/Fig-3] and large radiolucent lesion associated with periapical to root piece of lower left first molar. A lateral oblique view of left ramus showed the large ovoid shaped radiopacity above the sigmoid notch excluding intraosseous radiopaque lesion [Table/Fig-4], right lateral oblique view of ramus showed small calcified radiopaque area superimposed on sigmoid notch [Table/Fig-5]. On comparison with panoramic image radiopacity on right side ramus area appears larger in size giving an impression of "Ghost Image" formation. To rule out the size and determine the exact anatomical location patient was advised Computed Tomography (CT) Scan. Radiographic diagnosis of osteomyelitis of left body mandible and soft tissue calcification was given with a differential diagnosis of calcification of phleboliths, calcified lymph node, foreign bodies, an elongated styloid apparatus, large maxillary tuberosity, displaced mandibular third molar and calcified tuberculous lymphadenitis was made. His blood and serological investigations was normal.

to ramus of mandible bilaterally. Left side density is larger in size and single in number and right side densities are smaller in size and multiple in number [Table/Fig-6-8]. Further discussion at the clinicopathological session led to a radiographic diagnosis of osteomyelitis of left body of mandible and bilateral pharyngeal tonsilloliths were made. In this reported case, the patient had no symptoms and hence, patient was alerted to the development of tonsillitis and kept under observation.

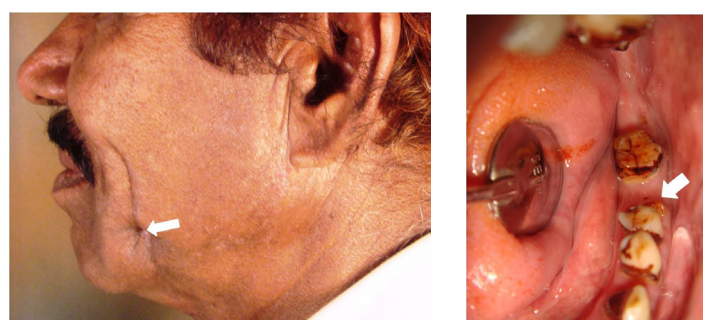
## DISCUSSION

Tonsilloliths are rare consolidations in tonsillar region which are mostly unilateral but rarely multiple and bilateral. As literature reveals, these lesions are reported as incidental findings on routine radiographic examination. The earliest known description of concretions in the oropharynx is supposedly recorded by Lang in 1560 [1]. The exact etiology and pathogenesis is unestablished. Many views have been expressed yet no conclusions are derived [2].

If symptoms are present, majority of patients, i.e., about 27.3% report pain in the throat followed by swelling in the tonsillar fossa in 15.1% of patients, swelling in the sub-maxillary triangle area in 6%, dysphagia in 12.1 %, odynophagia in 9%, otalgia in 9%, peritonsillar abscess in 9%, halitosis with bad taste in 3%; on the



**[Table/Fig-4]:** Lateral oblique view of ramus of left mandible showing oval shaped radiopacity of size 2.5cm X 2.8cm above sigmoid notch. **[Table/Fig-5]:** Lateral oblique view of right ramus of mandible showing small radiopacity superimposed on sigmoid notch.



**[Table/Fig-1]:** Extraoral sinus in left body of mandible. **[Table/Fig-2]:** Intraoral examination showed root remnant in left quadrant of mandible. **[Table/Fig-3]:** Panoramic radiograph showing irregular round shaped large radiopaque mass of 2.5cm X 2.8cm in size seen in right ramus region. Oval shaped radiopaque mass observed in left ramus region of size 1.3cm X 1.6cm. Large radiolucent lesion associated with periapical to root piece of lower left first molar.



**[Table/Fig-6]:** CT scan image of axial section in soft tissue window showing irregular hyperdense area of size 2.08cm (anterioposteriorly) X 1.58cm (mediolaterally) in left and 1.02cm (anterioposteriorly) X 0.97cm (mediolaterally) in right pharyngeal tonsillar region. **[Table/Fig-7]:** CT scan image of coronal section in soft tissue window showing irregular hyperdense area of size 2.66cm (superoinferiorly) X 1.58cm (mediolaterally) in left and 1.09cm (superoinferiorly) X 0.97cm (mediolaterally) in right pharyngeal tonsillar region. **[Table/Fig-8]:** 3D CT image showing large irregular mass seen in left pharyngeal region and small irregular mass seen in right pharyngeal region.

other hand, in 9% of patients the tonsillolith was asymptomatic as in our case. When the concretion was located in the palatine or pharyngeal fossa heaviness was experienced by patients [3].

Tonsilloliths are reported to occur between age of 22-77years and are rare. The chemical composition includes calcium salts like calcium hydroxyapatite, calcium oxalate and even magnesium salts [4].

Complications in association with tonsillolith are seldom. Occasionally, a tonsillolith may penetrate through the tonsillar capsule causing a peritonsillar abscess and subsequently trismus [5]. In elderly patients large tonsillolith can be aspirated leading to significant secondary pulmonary complications.

Treatment is usually removal of the tonsillolith by curettage; larger lesions may require local excision under topical or local infiltration anesthesia with or without tonsillectomy [6].

As tonsillolith may be detected on routine radiographic examination, an exhaustive differential diagnosis is important in such situations and requires advance imaging for proper management.

## CONCLUSION

Oropharyngeal pathologies pose a diagnostic challenge several times and hence, it becomes imperative to develop lateral thinking, with a multidisciplinary approach. Oropharyngeal region naturally shares a domain with more than one speciality and opportunities to treat such pathologies become learning experience for the health care fraternity.

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