

Radiographic Features of Maxillary Sinusitis Induced by Residual Root in the Left Maxillary Sinus

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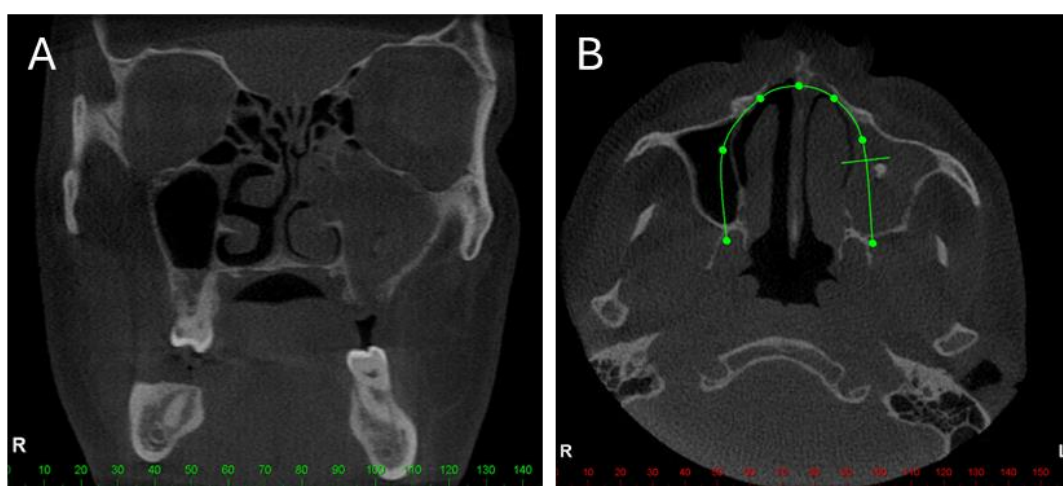


Figure 1: Cone-beam computed tomography showing the residual root fragment within the left maxillary sinus area (A and B).

Maxillary sinusitis is often associated with dental pathologies, and one potential cause is the presence of a residual root fragment within the maxillary sinus. In this case, the patient's persistent sinusitis prompted further investigation using cone-beam computed tomography (CBCT). The radiographic images provided valuable insights into the underlying pathology. The patient, a 45-year-old male, presented with a history of chronic left-sided facial pain, nasal congestion, and purulent nasal discharge. Despite multiple courses of antibiotics, his symptoms persisted. Physical examination revealed tenderness over the left maxillary sinus area. (Figure 1). The presence of a residual dental root fragment in the maxillary sinus can lead to chronic sinusitis [1].

The retained root acts as a foreign body, triggering an inflammatory response and obstructing the sinus drainage pathway. Clinicians should consider this possibility when evaluating patients with persistent sinusitis, especially after dental extractions [2]. In summary, this clinical case highlights the radiographic features of maxillary sinusitis induced by a residual root fragment. Early recognition and appropriate management, including

endoscopic or surgical removal of the foreign body, are essential for resolving symptoms and preventing complications.

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