

Maxillary Sinusitis of Endodontic Origin - Needs more attention!

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Root apices of maxillary posterior teeth reside in very close proximity to floor of the maxillary sinus. Periapical infection of endodontically involved such teeth may cause perforation of the sinus floor leading to maxillary sinusitis. Such condition is often referred as maxillary sinusitis of endodontic origin (MSEO).

Patients with MSEO may have wide variation of dental or sinus related symptoms. Many a time, sinonasal symptoms such as facial pain over sinus area, nasal congestion, persistent watery discharge through nose, foul odor are more dominant which causes patient to seek urgent appointment of ear nose throat (ENT) specialist. In contrast to this, usual endodontic symptoms such as pain on mastication, pain to heat and cold stimuli, swelling, associated draining sinus tract are often missing in cases with MSEO [1]. This occurs due to non-vitality of tooth/teeth and drainage of periapical infection into the sinus(es).

Due to lack of dental symptoms, patient with MSEO may visit ENT specialist who in turn, may misdiagnose and treat it as primary sinus infection. This may lead to recurrent sinus infection.

Routine two dimensional dental radiographs often present challenge in diagnosing the case with MSEO due to superimposition of anatomical structures such as zygomatic arch, buccal cortical plate, etc. Recent limited field CBCT imaging technique which shows bony and mucosal changes of maxillary sinus as well as gives details of root canal anatomy of the teeth; can be a vital tool in diagnosing such cases [2].

Cases with MSEO can be successfully treated with more conservative approach i.e. endodontic therapy of involved tooth/teeth provided it is done by competent and skilled person. Once the focus of infection is properly removed and disinfected; there will be regression in sinus inflammation and its symptoms. This prevents major sinus surgery.

This article emphasizes that MSEO should be considered as a primary endodontic infection. ENT specialist and endodontist should collectively work for the best outcome and ultimate satisfaction of the patient.

Bibliography

1. Maxillary sinusitis of endodontic origin: AAE position statement (2018).
2. Shanbhag S., *et al.* "Association between periapical lesions and maxillary sinus mucosal thickening: a retrospective cone-beam computed tomographic study". *Journal of Endodontics* 39.7 (2013): 853-857.

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