

## Embarrassing Situations Related to The Maxillary Sinuses and How to Deal with Them

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With the increasing spread of cone-beam CT (CBCT) in dentistry, more diagnoses of maxillary sinus diseases are being made. As a result, understanding of the structure and pathological conditions of the paranasal sinuses, including the maxillary sinuses, is gradually increasing. In particular, interest in the maxillary sinus is increasing as the number of implant placement surgeries accompanied by bone grafting of the maxillary sinus, which is more difficult, increases as the know-how on implant surgery is accumulated. If you don't have much experience with the pathological condition of the maxillary sinus, you may be a bit embarrassed when you encounter an abnormal condition.

Maxillary sinusitis can be divided into odontogenic and non-odontogenic causes (bacterial or viral infection through the nasal cavity, spread of other paranasal sinusitis, allergic rhinitis, etc.). The rate of odontogenic maxillary sinusitis is gradually increasing. The odontogenic cause may be mainly root apical lesions or periodontitis that extended to the apical area. Although maxillary sinusitis is diagnosed through haziness in the maxillary sinus area on the panoramic radiograph, there were limitations in determining whether it is of an odontogenic origin. In particular, in many cases, the origin is maxillary posterior teeth in terms of location. In the case of the palatal root origin, it is not easy to accurately diagnose on the panoramic radiograph, but it can be easily diagnosed on CBCT.

In the case of maxillary sinusitis in relation to dental procedures, there may be root canal treatment, root fragments displacement into the maxillary sinus during tooth extraction, scattering into the sinus or infection of graft materials after maxillary sinus bone grafting, and displacement into the sinus of implant fixtures. Resolving these cases as soon as possible can speed up healing and prevent progression to chronic maxillary sinusitis.

I'd like to share how to manage embarrassing situations related to the maxillary sinuses through anatomical variations related to the maxillary sinuses, imaging findings of various sinus diseases, and presenting treatment cases of odontogenic maxillary sinusitis.

### Profile

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