A Case of Nasal Inverted Papilloma Accompanied with Odontogenic Maxillary Sinusitis Caused by an Oral Implant

Kosuke Akiyama¹, Masafumi Yonezaki¹, Rieko Goto¹, Masayuki Karaki², Hiroshi Hoshikawa² and Nozomu Mori²

A 67-year-old man presented with left nasal obstruction and mucopurulent discharge. CT showed shadows at his left sinuses, and implant extension into the left maxillary sinus cavity with an osteolytic lesion around that equivalent to the left side maxillary second molar. Our diagnosis in this case was left maxillary sinusitis related to a dental implant, and we performed endoscopic sinus surgery with implant extraction. Postoperatively, a concomitant sinonasal inverted papilloma (IP) was diagnosed with a histopathological examination. Residual lesion or recurrence has not occurred so far and all patient symptoms disappeared during the follow-up period. Dental implants are widely used and their use is increasing rapidly. On the other hand, cases of maxillary sinusitis caused by inadequate dental implant treatment have been reported. IP is one of the most frequent sinonasal benign tumors, and there are various differential diagnoses, including antrochoanal polyp, and odontogenic maxillary sinusitis. We should keep in mind that IP may occur in unilateral nasal polyoid cases, including cases suspected as being odontogenic maxillary sinusitis. Such masked lesions might not be detected if the treatment is performed by a dentist alone; therefore, we think it is important that dentists and otolaryngologists should make the diagnosis and perform the treatment together.

Keywords: inverted papilloma, odontogenic maxillary sinusitis, dental implant, endoscopic sinus surgery

References

¹ Department of Otolaryngology, Head and Neck Surgery, Mitoyo General Hospital
² Department of Otolaryngology, Head and Neck Surgery, Faculty of Medicine, Kagawa University

Corresponding Author Address: Kosuke Akiyama
kakaka@med.kagawa-u.ac.jp
Rigid endoscopic view
Discharge is observed in the left middle meatus and polypoid mass (→) exists in the common meatus.

CT imaging
A: CT axial section showing the left unilateral maxillary sinus opacity and an antrochoanal polyp-like mass.
B: Coronal section showing left unilateral sinusitis and displacement of a dental implant into the left maxillary sinus floor with osteolysis.
C: Panoramic radiography findings

Intraoperative findings
A: Granulomatous polyp at the left middle meatus.
B: Common meatal polypoid mass diagnosed as an inverted papilloma post-operation.
C: Opened left maxillary sinus. The arrow indicates the fistula caused by the dental implant.