Dentogenic nasal septal abscess

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Figure. The bilateral masses (A) and nasal swelling (B) are evident at presentation.

Nasal septal abscess (NSA) is deﬁned as a collection of pus between the cartilaginous or bony septum and the mucoperichondrium or periosteum.1 As the infection progresses, a collection of ﬂuid (pus or blood) separates the mucoperichondrial blood supply from the underlying septal cartilage. The resultant ischemia and pressure, as well as microbial inﬂuences, can cause necrosis of the septal cartilage in 24 to 48 hours. The destruction of cartilage can cause septal deformity, perforation, or saddle-nose deformity, which can lead to severe functional and cosmetic sequelae.

NSA of dentogenic origin is extremely rare, as only 3 cases have been previously reported in the English-language literature.2,3 We report a new case.

A 41-year-old man presented to our ENT department with complaints of a foreign-body sensation in his nose, nasal airway obstruction, a swollen upper lip, and associated pain. He had no history of sinusitis or relevant trauma. Approximately 10 days prior to presentation, he had undergone a root canal in the upper left second incisor. His symptoms manifested a few days later.

Physical examination revealed the presence of a round, purplish, anterior mass in the nose that splayed bilaterally from the nasal septum (figure, A). The upper lip and perinasal area were swollen and tender to palpation (figure, B). X-ray detected a large periapical lesion associated with the upper left second incisor.

The patient was administered topical anesthesia, and aspiration of the mass was

performed. The aspiration yielded a scant amount of pus, although it was sufficient for microbiologic evaluation. In the meantime, the patient was started on amoxicillin/clavulanic acid at 625 mg twice daily and metronidazole at 500 mg three times daily. Apical resection was planned pending resolution of the acute symptoms, which occurred 3 days after the commencement of the antibiotic regimen.

Intraoperatively, the apical lesion we encountered was larger than it appeared to be on radiography. The lesion extended to the floor of the nasal cavity, where we encountered a grayish nasal mucosa. Granulation tissue was curetted, and the root tip was excised. About 3 ml of pus was drained from the area.

Postoperatively, the patient was continued on his medication regimen for 1 week. At the time of suture removal, his nasal airway obstruction and upper lip swelling had completely resolved. At the 1-month follow-up, no evidence of infection was noticed.

The potentially life-threatening complications of the contiguous spread of infection from an NSA include orbital or intracranial abscesses, meningitis, and cavernous sinus thrombosis.3 Piotrowski et al reported a case of nasal septum abscess that was complicated by cavernous sinus thrombophlebitis in a 4-year-old boy.4 The danger of complications from NSA is heightened in patients with compromised host defenses. In the immunocompromised population, NSA can develop without antecedent injury, and it may involve atypical pathogens.

Most often, the choice of antibiotic is penicillin. Evaluation of aspiration samples usually reveals staphylococci.5 The treatment protocol generally depends on the source of the infection. In our case, antibiotic treatment and the removal of the source of infection were sufficient.

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