

CASE REPORT / OLGU BİLDİRİSİ

Middle turbinate osteoma extending into the maxillary sinus

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Maksiller sinüs içerisine uzanan orta konka osteomu

Konka osteomu çok nadir olup literatürde sadece altı konka vakasında izlenmiştir. Maksiller sinüs içerisine uzanım gösteren orta konka osteomu vakası daha önce hiç bildirilmemiştir. Bu vaka sunumu devamlı başağrısı, ilerleyici sağ nazal tıkanıklık ve postnazal akıntı ile başvuran orta konka osteomu olan 38 yaşında bir erkek hastadır. Osteom endoskopik sinüs cerrahisi ile rezeke edilmiştir.

Anahtar Sözcükler: Osteom, nazal konka, endoskopik yaklaşım

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Abstract

Turbinate osteoma is very rare and only six turbinate cases have been previously reported in the literature. A case of middle turbinate osteoma extending into the maxillary sinus has never been reported before. This is a report of a 38-year-old male presenting middle turbinate osteoma with persistent headache, progressive right nasal obstruction, and post nasal discharge. The osteoma was resected by endoscopic sinus surgery.

Key Words: Osteoma, nasal turbinate, endoscopic approach.

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Introduction

Osteoma is the most common benign tumor of the paranasal sinus. Its incidence is between 0.014% and 0.43%.¹ They occur most commonly within the frontal sinus (52%), followed by the ethmoid (22.0%), the maxillary sinus (5.1%), and the sphenoid (1.7%).² It is very rare for an osteoma to arise in the nasal cavity or turbinates. Only five middle turbinate, one superior turbinate and one inferior turbinate osteoma cases have been reported in the literature to date.³ We present an unusual and rare case of a patient with an osteoma of the middle turbinate that is extending into the maxillary sinus.

Case Report

A 38-year-old man was referred to our clinic with a six-month history of persistent headache, progressive right nasal obstruction, and post nasal discharge. He had no history of facial trauma or nasal surgery. His past medical history was unremarkable. He had no family history of osteoma or malignancies.

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Endoscopic examination revealed a slight deviation and a mass blocking the right nasal cavity of bony hard consistency of the nose (Figure 1). Routine laboratory tests and physical examination were normal. Computed tomography (CT) study demonstrated a bony dense enlargement of the right middle turbinate which involved the maxillary sinus (Figure 2A, B).

The osteoma was totally extirpated subsequently without damaging the surrounding structures by endoscopic surgery under general anesthesia. The mass was released gently from its attachment to the middle turbinate using a sickle knife and an endoscopic drill. The mass was measured as 8.8x2.7 cm in diameter (Figure 3).

Examination of the histologic sections revealed a dense, mature, predominantly lamellar bone, consistent with osteoma (Figure 4). The postoperative course was

uneventful. He remained completely symptom-free 6 months following surgery.

Discussion

Osteoma is a benign, slow-growing tumor. Osteoma is the most common benign tumor of the paranasal sinuses.⁴ Most nasal osteomas are asymptomatic at an



Figure 1. Endoscopic examination.

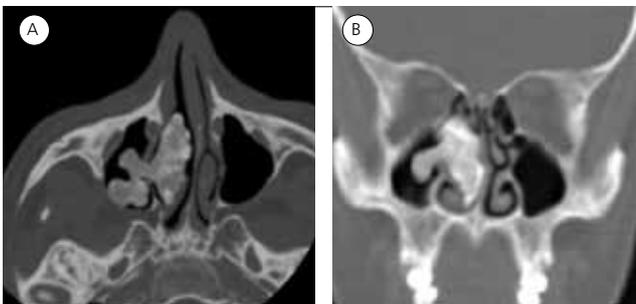


Figure 2. CT-scan. Axial image (A) and coronal images (B). Arrows indicate osteoma.



Figure 3. Osteoma removed completely by endoscopic surgery.

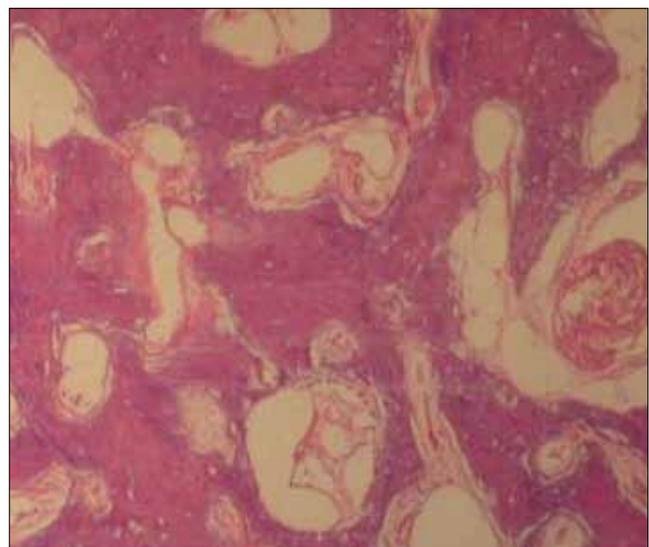


Figure 4. Histology showing a section of the osteoma tissue (H&E, x100).

early stage, and they are usually found incidentally during routine radiographic examination.

Paranasal sinus osteomas may occur at any age, but usually present between the second and fourth decade, with a slight male predominance.⁴

Surgical approaches are classified into external, endoscopic drill-out, and combined endoscopic and external procedures.⁵ The vast majority of sinonasal osteomas are found in the fronto ethmoidal region.¹ Osteomas are rarely seen in the nasal cavity or turbinates.⁴ Osteoma of the middle turbinate that extend into the maxillary sinus has not been previously published. Small osteomas could be removed by transnasal approach. External approaches could be used for osteomas with involvement of frontal or both frontal and ethmoid sinuses. Endonasal technique provides controlled excision in small pieces of the tumor by drilling.⁶ By drilling, tumors

margin and its attachment point was easily detected by endoscope. The osteoma was removed totally by endoscope. There was no recurrence during 6 months of follow-up.

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Conflict of interest statement:

No conflicts declared.

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