

Sinolith in the Maxillary Sinus: A Case Report

Maksiller Sinüste Sinolit: Olgu Sunumu
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Başvuru: 12.12.2014
Kabul: 14.02.2015
Yayın: 24.02.2015

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Özet

Bu yazıda kötü kokulu burun akıntısı, sol yanakta ağırlık hissi, geniz akıntısı, ağız kokusu ve aralıklı öksürük şikayetleri olan 38 yaşında kadın hasta vesilesiyle maksiller sinüste sinolit olgusu sunduk. Bilgisayarlı tomografi görüntülemesinde sol maksiller sinüs içinde düzgün kenarlı oval bir taş görüldü. Hastalığın etyolojisi, radyolojik özellikleri, ayırıcı tanısı ve tedavisi literatür verileri eşliğinde tartışıldı.

Anahtar kelimeler: *Sinolit, Antrolit Maksiller sinüs Rhinosinüzit*

Abstract

We present a case of sinolith in the maxillary sinus. She was a 38-year-old woman who complained of foul-smelling nasal discharge, heaviness on the left cheek, postnasal drip, halitosis and intermittent cough. Computed tomography (CT) showed a smooth-margined oval stone in the left maxillary sinus. The etiology, radiological features, differential diagnosis and treatment of the disease were discussed in the lights of literature.

Keywords: *Sinolith, Antrolith Maxillary sinüs Rhinosinusitis*

Introduction

Sinolith means a stone in the paranasal sinuses . The occurrence of sinolith is very rare. Maxillary sinus is the most commonly involved sinus and then ethmoid, frontal and sphenoid sinus ¹. Most antroliths are small and asymptomatic. Larger ones may present with nasal purulent secretion, foul-smelling discharge, postnasal dripping, chronic cough and recurrent and drug resistant rhinosinusitis. Long-standing infection, poor sinus aeration and drainage seem to be the most important predisposing factors of the stone formation ².

Case Report

We present a case of sinolith in the maxillary sinus. She was a 38 year-old-woman who complained of foul-smelling nasal discharge, heaviness on the left cheek, postnasal drip, halitosis and intermittent cough. Patient had a dental operation three years ago and there is an oro-antral fistula at the left second molar tooth region. Paranasal computed tomography (CT) revealed an opacification in the left maxillary sinus and inflammatory process around it (Figure 1 and 2).



Figure 1
Axial plane



Figure 2
Coronal plane

During surgery, we exposed and removed the stone with endoscopic and transoral Caldwell-Luc technique together, then repaired oro-antral fistula with lateral mucosal flap and bones of maxillary sinus anterior wall obtained from transoral Caldwell-Luc technique. (Figure 3 and 4).



Figure 3
Intraoperative view



Figure 4
Postoperative view

The histopathological exam results as sinolithiasis in maxillary sinus.

Discussion

Sinoliths are considered by many authors to be dystrophic calcification or ossification caused by chronic inflammation of the paranasal sinus, also other pathologic conditions, including neoplastic disease, trauma and after radiotherapy³.

Surgical removal of the stone is usually performed together with appropriate treatment of the coexisting sinus disease. In the literature, most of extractions from the outer approach have been reported⁴. However, an endoscopic approach is satisfactory for the treatment of ethmoid sinoliths and maxillary sinus antroliths⁵. Patients with antrolith may be asymptomatic and may be incidentally discovered on routine radiological examination⁶. The usual clinical features in symptomatic patients are facial pain, nasal obstruction, epistaxis, purulent or blood-stained discharge, foul-smelling postnasal drip.

However, dacryocystitis, otorrhoea, anosmia, palatal perforation, and septal perforation have been reported in the literature⁷. Radiographically, a dense, irregular yet well-defined mass can be identified in the antrum. Focal antral calcification also has been seen in sinuses filled with a fungal ball. Antroliths must be included in the differential diagnosis of radiopacities found in or near the maxillary sinus region. Other possible diagnoses can be supernumerary tooth, root fragments, osteoma, complex odontoma, mature cementoma, a periapical condensing osteitis, a buccal exostosis, a palatine torus, an impacted tooth, foreign bodies, and even neoplasms in cases of

large calcified masses of the antral area⁸.

Conclusion

In patients with unilateral purulent nasal secretion, nasal foul-smelling discharge and recurrent rhinosinusitis. We should take into account rhinolith, sinolith, foreign body and paranasal sinuses neoplasms in the differential diagnosis.

References

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Information Presentation

Çalışmamız, 17-19 Nisan, 2014'de Ankara'da yapılan 11. Uluslararası Kulak Burun Boğaz ve Baş Boyun Cerrahisi Kongresi'nde poster olarak sunulmuştur.