Turkish Archives of Otolaryngology
Türk Otolarengoloji Arşivi

Turk Arch Otolaryngol 2013; 51: 91-3

An Angiomatous Antrochoanal Polyp with Epistaxis and Bony Destruction

Epistaksis ve Kemik Destrüksiyonu ile Seyreden Anjiomatöz Antrokoanal Polip: Olgu Sunumu

Case Report
Olgu Sunumu

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Abstract

Angiomatous polyps are rare sinonasal masses and may present with intense epistaxis. Angiomatous antrochoanal polyps are rare variants of antrochoanal polyps, and their diagnosis and management requires more detailed evaluation in respect to classical antrochoanal polyps. In both antrochoanal polyps and angiomatous polyps, bone destruction is an exceptional finding. The signs of bone destruction and epistaxis suggest additional pathologies including inverted papilloma, lobular capillary haemangioma and carcinoma as differential diagnoses. In this case, total excision of a left-sided angiomatous antrochoanal polyp with bone destruction was managed with nasal endoscopic approach. Troublesome intraoperative bleeding was avoided with effective additional measures.

Key Words: Sinonasal, angiomatous polyp, antrochoanal polyp, epistaxis, bony destruction

Özet

Anjiomatöz polipler yoğun epistaksis ile karşımıza çıkabilen nadir görülen sinonazal kitlelerdir. Anjiomatöz antrokoanal polip, antrokoanal poliplerin nadir görülen bir çeşididir. Tanı ve tedavide klasik antrokoanal poliplere kıyasla daha detaylı değerlendirme gerektirir. Antrokoanal ve anjiomatöz poliplerin her ikisinde de kemik destrüksiyonu beklenmedik bir bulgudur. Kemik destrüksiyonu ve epistaksis bulguları, ayırıcı tanıda inverted papillom, kapiller hemanjiom ve karsinom gibi patolojileri akla getirir. Bu vakada kemik destrüksiyonu bulunan sol taraf anjiomatöz antrokoanal polip nazal endoskopik yaklaşımla total eksize edilerek tedavi edildi. Etkin ek önlemler alınarak, cerrahi esnasında can sıkıcı kanamadan kaçınıldı.

Anahtar Kelimeler: Sinonazal, anjiomatöz polip, antrokoanal polip, epistaksis, kemik destrüksiyonu

Introduction

Sinochoanal polyps arise from the sinus cavity and expand towards the choana (1). The most common subgroup of sinochoanal polyps are antrochoanal polyps. Angiomatous polyps, on the other hand, are a rare variant of sinochoanal polyps (2). We report a case of angiomatous antrochoanal polyp which presented with serious epistaxis besides the medial maxillary wall and caudal septum destruction. Nasal obstruction is the major presenting symptom of antrochoanal polyps, whereas epistaxis and bone destruction is rarely encountered. Institutional review board approval and informed consent were obtained.

Case Report

A 54 year-old male patient with the complaint of unilateral persistent nasal bleeding was seen in the outpatient clinic. Nasal endoscopy revealed a polypoid lesion that was slightly red in colour, occupying the left nasal cavity completely and associated with active unilateral epistaxis (Figure 1). Radiological work-up with computed tomography (CT) revealed destruction in the left medial maxillary wall and a soft tissue density mass filling the left nasal cavity and maxillary sinus completely (Figure 2). CT angiography did not detect a vascular lesion. Magnetic resonance imaging (MRI) sequences (with 0.6 mm thickness) of T1 and T2A fat in coronal planes revealed a lesion with bone destruction (heterogeneous contrast take-up). The bone destruction and heterogeneity was reminiscent of inverted papilloma and squamous carcinoma primarily. Following the provision of informed consent, the patient was scheduled for intranasal biopsy that was reported as an antrochoanal polyp with fibrin masses. Caldwell Luc or combined approach to the maxillary sinus was planned unless the endoscopic removal of the lesion was successful. The patient was scheduled for sinus surgery to accomplish endoscopic removal of the lesion. Total endoscopic removal of the lesion was accomplished with a microdebrider (Xomed) and simultaneous suction. Excised tissue included intense fibrin clots, infarcted polypoid and vascular components. Destruction in the caudal part of the bony septum and medial maxillary wall was noticed, as well as the septum apparently being

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Received Date/Geliş Tarihi: 27.08.2010
Accepted Date/Kabul Tarihi: 11.10.2011

doi:10.5152/tao.2013.23

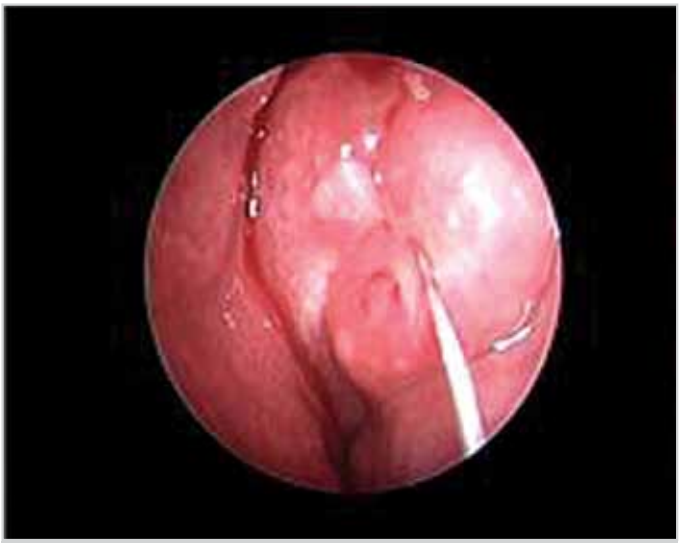

Figure 1. Preoperative endoscopic view of the angiomatous antrochoanal polyp

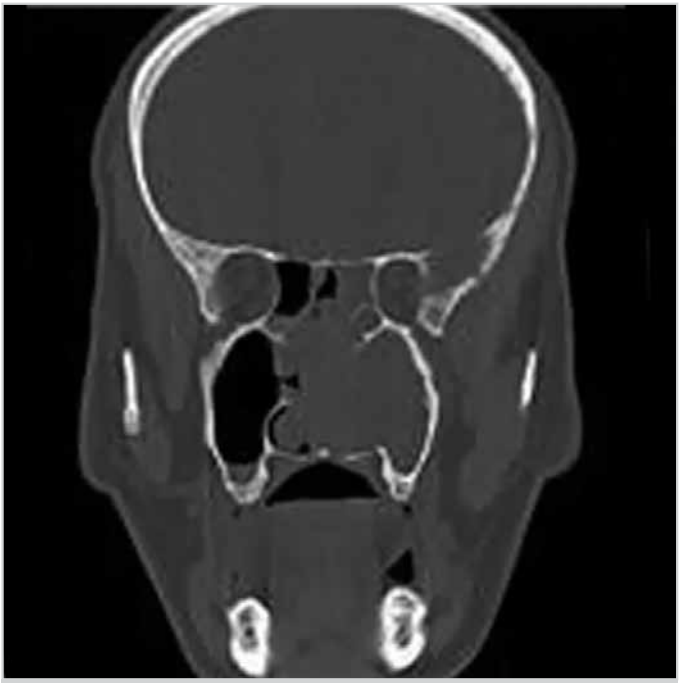

Figure 2. Coronal CT revealing the left-sided mass with medial maxillary wall and caudal septal destruction

pushed to the opposite side. Intense intraoperative bleeding due to the highly vascular nature of the lesion was controlled with hypotensive anaesthesia and local adrenaline infiltration. Blood loss was replaced via the transfusion of two units of fresh whole blood intraoperatively. Fibrin sealant (Tisseel Lyo 4mL, Baxter AG, Vienna, Austria) and surgicel was applied to the left nasal cavity and maxillary sinus at the end of the operation, as well as the intranasal tampon. The patient was discharged on the following day. Epistaxis did not occur following removal of the nasal tampon on the 5th postoperative day and nasal obstruction was relieved gradually. Histopathology was reported as an angiomatous antrochoanal polyp. Microscopically, fibrin clots, osteoid tissue degeneration and lymphoplasmacytes embedded

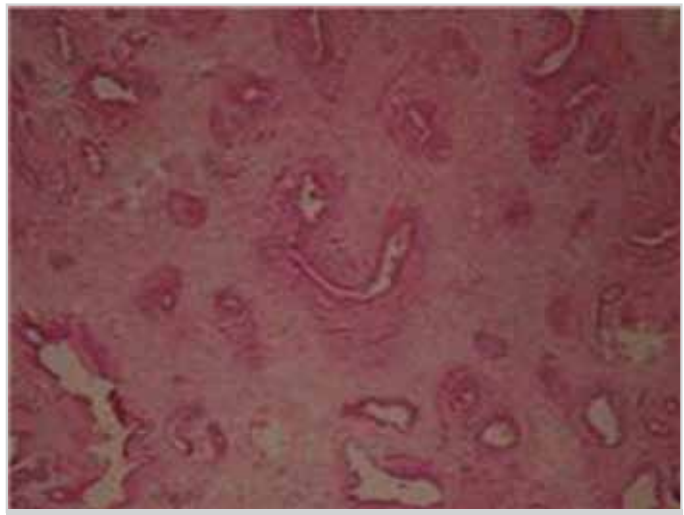

Figure 3. Fibrin clots, dense fibrovascular oedematous stroma with lymphoplasmacytic cellular infiltration and dilated thick walled vascular structure

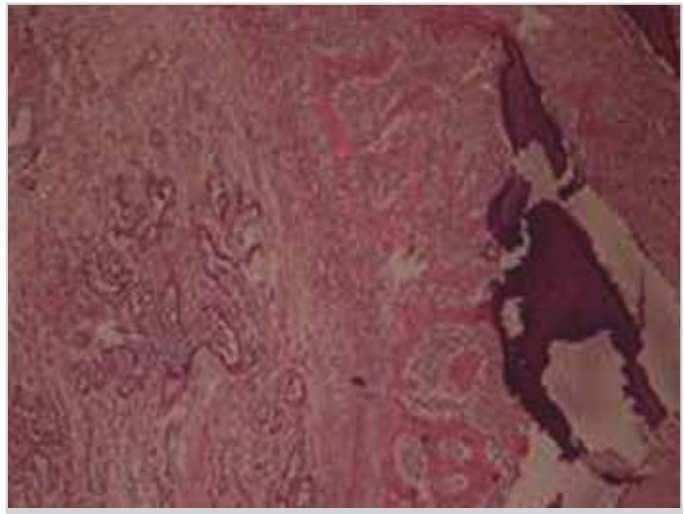

Figure 4. Bone destruction

in fibrovascular stroma covered with pseudostratified columnar epithelium were observed (Figure 3, 4).

On the 3rd postoperative month, nasal endoscopy revealed patent nasal airway and maxillary sinus cavity with normal mucosal layer and no recurrence.

Discussion

In surgical excision of antrochoanal polyps, the endoscopic approach proved to be more feasible and effective with lower recurrence rates (3). In this case, although the gross and endoscopic appearance of the lesion was suggestive of an antrochoanal polyp, pronounced epistaxis and presence of caudal septum and maxillary sinus wall destructions were not consistent with this diagnosis. A clinical suspicion of a highly vascular lesion such as haemangioma associated with prominent epistaxis was not supported by radiological findings. The magnetic resonance imaging (MRI) and computed tomography (CT) reports were much more supportive for inverted papilloma and squamous carcinoma due to the heterogeneous nature and bony destruc-

tion. Intensive enhancement in gadolinium-enhanced MR images was consequent with a vascular lesion, but no vascular lesion was revealed in CT angiography. The endoscopic approach was planned primarily for the excision, and the combined approach was preserved unless total excision was achieved. Blood transfusion, local vasoconstrictor agents and fibrin sealant were used to minimise intraoperative intense bleeding and consequences. Histopathological examination revealed highly vascular stroma and predominant plasma cells supporting the angiomatous structure. The fibrin clots and osteoid tissue degeneration embedded in fibrovascular stroma with the covering pseudostratified columnar epithelium was observed. These findings were concordant with a previous study that histologically compared the angiomatous and classical antrochoanal polyps (4).

Conclusion

Angiomatous antrochoanal polyps are rare variants that require special attention both at diagnosis and during surgery. The presence of epistaxis and bone destruction is suggestive of angiomatous polyps, as well as sinonasal neoplastic pathologies (5). Clinical, radiological and pathological data are usually complementary to each other and provide a definite diagnosis together. Detailed surgical planning, including preventive measures, is important to control intense perioperative bleeding. Surgical strategy must be directed for total excision and the control of bleeding and recurrence.

Conflict of Interest
No conflict of interest was declared by the authors.

Peer-review: Externally peer-reviewed.

Informed Consent: Written informed consent was obtained from patients who participated in this case.

Author Contributions
Concept - M.E.A.; Design - M.E.A., N.S.Ö.; Supervision - M.E.A., Ö.Y.; Funding - N.S.Ö., A.A.; Materials - M.E.A., A.A.; Data Collection and/or Processing - M.E.A., N.S.Ö., A.A.; Analysis and/or Interpretation - M.E.A., N.S.Ö., A.A.; Literature Review - M.E.A., N.S.Ö., A.A.; Writer - M.E.A., N.S.Ö.; Critical Review - M.E.A., Ö.Y.; Other - M.E.A., N.S.Ö., Ö.Y.

Çıkar Çatışması
Yazarlar herhangi bir çıkar çatışması bildirmemişlerdir.

Hakem değerlendirmesi: Dış bağımsız.

Hasta Onamı: Yazılı hasta onamı bu olguya katılan hastalardan alınmıştır.

Yazar Katkıları
Fikir - M.E.A.; Tasarım - M.E.A., N.S.Ö.; Denetleme - M.E.A., Ö.Y.; Kaynaklar - N.S.Ö., A.A.; Malzemeler - M.E.A., A.A.; Veri toplanması ve/veya işlemesi - M.E.A., N.S.Ö., A.A.; Analiz ve/veya yorum - M.E.A., N.S.Ö., A.A.; Literatür taraması - M.E.A., N.S.Ö., A.A.; Yazıyı yazan - M.E.A., N.S.Ö.; Eleştirel İnceleme - M.E.A., Ö.Y.; Diğer - M.E.A., N.S.Ö., Ö.Y.

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