



An unusual sinonasal inverted papilloma originating from superior turbinate and extending to epiglottis

Üst konkadan köken alan ve epiglota uzanan sıra dışı bir sinonazal inverted papillom

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ABSTRACT

Sinonasal inverted papillomas are benign tumors of the nasal cavity and paranasal sinuses. The basic characteristics of these papillomas are their different localizations in the nasal cavity, local aggressive behavior and potential to transform into malignant tumors. The most common symptoms of those tumors are nasal obstruction, rhinorrhea, and epistaxis. Rare symptoms such as dysphagia and hoarseness may be seen in relation with the localization and the size of the tumor. In this article, we present an unusual case of a huge inverted papilloma originating from the superior turbinate, extending down to epiglottis, and causing dysphagia and dyspnea.

Keywords: Epiglottis; inverted papilloma; paranasal sinus.

Öz

Sinonazal inverted papillomlar, burun ve paranasal sinüslerin benign tümörleridir. Bu papillomların temel özellikleri; nazal kavite içinde farklı lokalizasyonlarda bulunabilmeleri, lokal agresif seyir göstermeleri ve malign tümörlere dönüşme potansiyelleridir. Burun tıkanıklığı, burun akıntısı ve burun kanaması bu tümörlerin en yaygın semptomlarıdır. Tümörün yerleşim yerine ve büyüklüğüne bağlı olarak, yutma güçlüğü ve ses kısıklığı gibi nadir semptomlara da rastlanabilir. Bu yazıda üst konkadan köken alan, epiglota kadar uzanan ve yutma güçlüğü ve nefes darlığına yol açan sıra dışı dev bir sinonazal inverted papillom olgusu sunuldu.

Anahtar Sözcükler: Epiglot; inverted papillom, paranasal sinüs.

Schneiderian papillomas are neoplastic proliferations seen rarely in the nose and paranasal sinuses.^[1] They have three histological subtypes-- inverted, fungiform (exophytic) and oncocytic (cylindric).^[1,2] Inverted and oncocytic forms usually originate from the lateral nasal wall, while the fungiform type is typically localized in the nasal septum.^[3]

Nasal obstruction is the most frequent presenting symptom in patients with sinonasal inverted papilloma (SIP). Epistaxis, rhinorrhea, and headache are less frequent.^[4] Patients with SIP may present with atypical symptoms such as dysphagia, sensation of a lump in the throat, and hoarseness. In this case report, we present a SIP that originated from the superior turbinate,



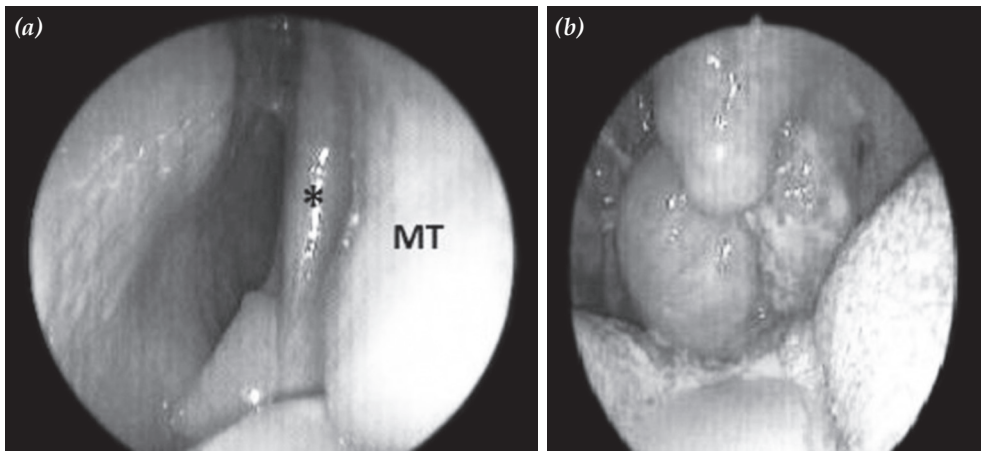


Figure 1. (a) On endoscopy, the mass originating from the superior turbinate, and extended to the nasal cavity and nasopharynx. (b) The mass is seen to extend into the oropharynx and hypopharynx. * Superior turbinate; MT: Middle turbinate.

extended down to the epiglottis, and caused dysphagia and sensation of a lump in the throat of the patient.

CASE REPORT

A 61-year-old male presented to our outpatient clinic with nasal obstruction, headache, dysphagia, and sensation of a lump in the throat that had been present for six months, and increased in severity in time. His nasal endoscopic examination revealed a gray-yellow polypoid mass originating from the left superior turbinate, filling the left side of

the nasal cavity, nasopharynx, and extending inferiorly to the epiglottis (Figures 1a, b). Paranasal computed tomography revealed a soft tissue mass at the levels of the superior and middle turbinates in the left nasal cavity, extending to the nasopharynx and almost totally obliterating the airway, reaching the superior border of the epiglottis inferiorly (Figure 2). Under general anesthesia, the left superior turbinate was excised partially including the site of origin of the mass, and the mass was removed in toto. The tumor did not infiltrate any other regions in the nose, nasopharynx, oropharynx or hypopharynx. On histopathological examination, stratified squamous epithelium was seen to invaginate into stroma, indicating an inverted papilloma (Figures 3, 4). The symptoms of the patient completely improved after surgery, and he did not have any residual tumor or recurrence on follow up. Written informed consent was obtained from the patient for this report.

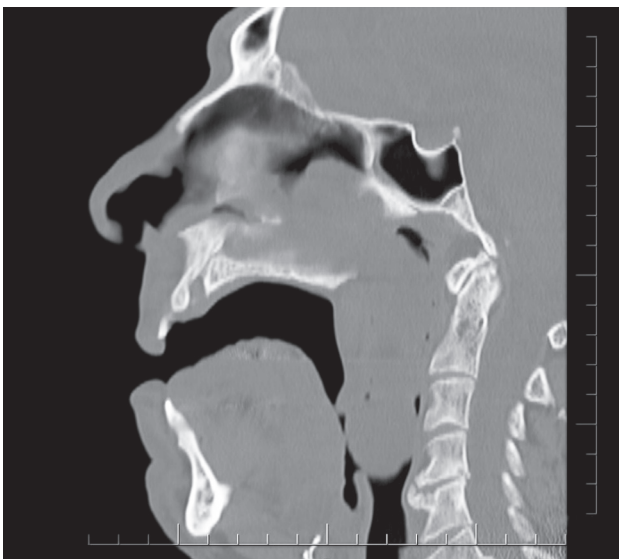


Figure 2. Computed tomography, sagittal section shows the mass extending to the epiglottis.

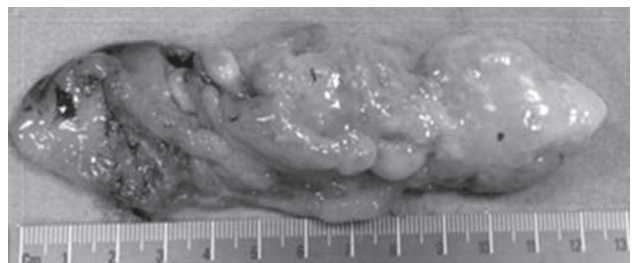


Figure 3. Macroscopic appearance of the mass, measuring 13 cm in length.

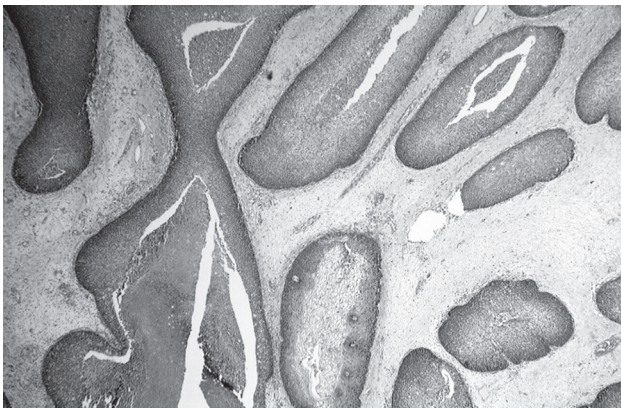


Figure 4. Invaginations of benign stratified squamous epithelium in edematous stroma (H-E x 40).

DISCUSSION

Sinonasal inverted papilloma is a benign tumor constituting 0.5-4% of all sinonasal tumors.^[1,2] It originates from the Schneiderian epithelium in the lateral nasal wall.^[3] The most frequent subtype is inverted papilloma seen in 47-73% of the cases, followed by fungiform and oncocytic types, seen in 19-50% and 3-8%, respectively.^[3]

The etiology of SIP is not clear, but environmental factors and viruses have been considered. They are most frequently seen in males in their fifth and sixth decades.^[3,4] Their basic characteristics are a potential for recurrence and malignancy, and local aggressive behavior. Transforming to a malignant tumor was reported in 5-15% of the cases in the literature.^[5] Our patient was a 61-year-old male, and did not have any residual or recurrent tumors in early postoperative period.

The symptoms may vary in relation with the anatomical localization of the tumor. Unilateral nasal obstruction is the most frequent symptom. Rhinorrhea, epistaxis, and headache are other frequent symptoms.^[4,5] A review of the English literature on PubMed, using the search terms "Sinonasal papilloma" "Schneiderian papilloma" "inverted papilloma" revealed only two cases wherein the tumor extended to the oropharynx and caused dysphagia and hoarseness.^[6,7] First complaint of our patient was unilateral nasal obstruction, then dysphagia and sensation of a lump in the throat appeared as the mass got bigger, and extended down to epiglottis. Our patient is the first in the literature for an inverted papilloma originating from the

superior turbinate alone, not invading any other neighboring structures, and extending down to epiglottis.

Classically, inverted and oncocytic papillomas originate from the lateral nasal wall, while fungiform papillomas usually appear on the nasal septum and in the nasal vestibule. Schneyer et al.^[8] retrospectively analyzed 83 patients, and did not report any tumors that originated from the superior turbinate alone, but reported the rate of superior turbinate involvement as 5.56%. In their retrospective study, Keskin et al.^[9] analyzed 35 patients, and reported superior turbinate involvement in only one patient. In our literature search, we did not encounter any inverted papillomas that originated from the superior turbinate alone, and extended down to the epiglottis. To the best of our knowledge, ours may be the first such case in the English literature.

The treatment of SIP is surgical, with the lateral rhinotomy approach first used by Moore in 1902. Lateral rhinotomy has a number of complications including atrophic rhinitis, purulent rhinorrhea, persistent crusting, and scar formation.^[9,10] Lately, endoscopic surgery has become popular since recurrences are similar to external open approaches, and there is no need for skin incisions.^[10] We used endoscopic surgery to treat our patient. The sinonasal inverted papilloma was completely removed together with a part of the superior turbinate from which it originated.

In conclusion, our case may be the first in the literature involving a SIP that originated from the superior turbinate alone and extended inferiorly to the epiglottis, and presented with atypical symptoms such as dysphagia, and a sensation of lump in throat. It must be kept in mind that dysphagia, and a sensation of lump in throat may be caused by nasal tumors, and that patients must be examined for nasal pathologies.

Declaration of conflicting interests

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