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Inverted Papilloma of Nasal Septum

Dear Editor,

Papillomas are primary benign epithelial neoplasms producing finger-like projections that typically cover fibrous stalks.¹ The term Inverted Papilloma (IP) describes the endophytic projection of epithelium into the stroma. Also known as Schneiderian papillomas, IPs predominantly affect males in the sixth decade.² They usually arise from the lateral nasal wall and seldom involve the frontal or sphenoid sinuses.² The frequency of IP on the nasal septum is even less.³ We report a case of IP of the nasal septum and the role of endoscopic resection of the IP without any sign of recurrence.

CASE REPORT

A 52-year-old man who was a chronic smoker and worked as a cook presented with a 1 year history of progressively worsening unilateral nasal blockage and hyposmia. Rigid nasoendoscopy revealed a reddish grape-like mass filling the right nasal cavity. The mass extended posteriorly to the posterior nasal space and crossed to the left side and had a broad-based attachment to the posterosuperior part of the nasal septum. Computed tomography (CT) scan showed a heterogeneously-enhanced soft tissue density mass in the right nasal cavity and a soft tissue density in the right ethmoid and sphenoid sinus most likely representing retained secretions. The patient underwent endoscopic excision of the mass using Integrated Power Console (IPC[®]) system coupled to Straightshot[®] M4 microdebrider (Medtronic, Minneapolis MN, USA) under general anaesthesia. After induction, each nostril was packed with five rayon neuro-patties (Raycot[®], American Surgical Company, Lynn MA, USA) soaked with 2ml cocaine 10%, 2ml adrenaline 1:1000 and 6ml of water, carefully placed along the septum, floor and turbinate region. This method reduces the bleeding significantly and prevents blood from impairing the endoscopic view. During the operation, a septal perforation was found at the origin of the mass. No further removal of nasal septum was performed. Histopathological examination (HPE) confirmed the diagnosis of Inverted Papilloma. He has been under our follow-up for the past five years and remains well and symptom-free with no evidence of recurrence detected on endoscopic examination.

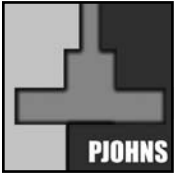
DISCUSSION

Inverted Papilloma (IP) poses many clinical, pathological and even management challenges. There are various surgical techniques advocated for treating IP. Radical transfacial approaches like lateral rhinotomy, minimally invasive endoscopic techniques and even midfacial degloving procedures are among some of the surgical techniques advocated.⁴ Most authors agree that complete surgical removal is the hallmark in treating IP.^{1,2,4,5} Traditionally, *en bloc* excision of the

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lateral nasal wall via lateral rhinotomy approach is the standard surgical option for IP arising from the lateral nasal wall. This approach provides good access to the tumor. Despite achieving complete surgical removal, IP tends to recur.¹ Recurrence rates of IP when treated surgically are as high as 71%.² Persistent disease is unacceptable especially with the possibility of malignant transformation.^{1,2} It is reported that malignancy in IP is particularly high at 10 to 15%.¹

As for IP of the nasal septum, Lawson *et al.* in 1995 reported five of 112 IP patients (4%) with isolated septal lesions that were treated by septectomy.⁶ Our patient underwent transnasal endoscopic resection of the tumor without further need of posterior septectomy. The tumor was removed using a microdebrider. Using the microdebrider for septal surgery usually involves a lateral (PNS and nasal cavity) to medial (septum) process, and posterior inferior to anterior superior shaving technique, also minimizes blood from impairing the endoscopic view. Any visible tumor at the margins was also removed. Unlike conventional polypectomy, complete removal of the tumor and sterilization of the margins is the hallmark in treating IP. Removal of IP without sterilization of the margins should be avoided. Sterilization of the margin is not necessarily by microdebrider only; other authors have reported debulking tumor completely and sterilizing the margins and underlying bone using a diamond burr.⁵

Transnasal endoscopic surgery avoided aggressive surgery and facial scarring in this patient. We observed no evidence of recurrence on follow up to date using this method. Although this tumor has the ability to destroy bone, tends to recur, and is associated with malignancy, we demonstrated that transnasal endoscopic resection of IP limited to nasal septum may be safely performed without the need for further septectomy. However, we do not advocate this technique in cases of large tumor or when malignancy is suspected. Endoscopic surgery would not adequately visualize the whole tumor and risk recurrence of tumor.² Larger series and better study design are required to support our observation and establish an acceptable and safe technique indicated for IP on the nasal septum.

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