Case Report

Inverted papilloma presenting as antrochoanal polyp in a young adult

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ABSTRACT

Inverted papilloma is a benign tumor that generates a lot of attention due to it being notoriously known to be locally aggressive, high recurrence rate and risk of malignant transformation. It is common in fifth to sixth decade and uncommon in children and young adulthood. We present a case of inverted papilloma, which presented as antrochoanal polyp in a young adult. It was resected via endoscopic surgery approach with good result. (Rawal Med J 2014;39:233-234).

Key Words: Papilloma, antrochoanal polyp, nasal obstruction.

INTRODUCTION

Inverted papilloma is a benign epithelial neoplasm that arises within the nasal vault and less commonly, in the paranasal sinuses. It is relatively uncommon, accounting for less than 4% of mucosal tumors in this region. The tumor is characterized by a high recurrence rate (emphasizing the importance of accurate tumor mapping and total tumor resection), associated epithelial malignant transformation (5-8%) and bony destruction.

CASE PRESENTATION

An 18 years old Indian man presented to our Hospital Tuanku Jaafar Seremban, with the chief complaint of worsening unilateral nasal obstruction associated with rhinorrhea for the past 3-4 years. The nasal obstruction was consistent and specific to the right nostril. There was no anosmia/hyposmiaor bleeding from the nostril. Cranial nerves were grossly intact. There was no headache, facial pain, epiphora or impaired vision. Examination revealed a rounded pink fleshy mass in the right nasal cavity, and it was in right choana on posterior rhinoscopy.

CT scan of the paranasal sinus showed soft tissue density occupying the right maxillary sinus extending posteriorly into the right posterior nasopharynx. He underwent endoscopic sinus surgery and polypectomy, uncinectomy and medial meatus antrostomy were done. Postoperative course was uneventful. Histopathology showed inverted papilloma of sinonasal origin. He is symptom free for the past 18months after surgery with no evidence of disease recurrence.

DISCUSSION

Inverted papilloma incidence ranges from 0.5 % to 4% of all primary nasal tumors and it affects mainly men in the fifth and sixth decade.[1] It is an uncommon tumor of childhood and early adulthood.[2] It is thought that the tumor mainly arises from the ectodermally derived ciliated respiratory mucosa that lines the sinonasal tract, called Schneiderian membrane. In view of the age group, clinical as well as radiological findings, the diagnosis is not made on the first instance.

The tumor is staged as T1 to T4 as confined to nasal cavity, involving osteomeatal complex region, ethmoid and medial wall of maxillary sinus, involving all the walls of maxillary sinus, sphenoid and/or frontal sinus and involving or extending extrasinus region or there is evidence of malignancy.[3]

The main objective of treatment is to adequately excise the tumor to prevent recurrence. In general, medial maxillectomy is done either through open or endoscopic approach. However, open approach comes with it undesirable facial scars, associated with longer hospital stay and higher morbidity. With the recent advancement of endoscopic sinus surgery, it is a well established that endoscopic removal of sinonasal inverted papilloma offers same efficacy with equal or lower recurrence rate

comparable to the open method.[4] Endoscopic surgery also leads to fewer complication (such as epistaxis, dacrocystitis, facial pain), maintains nasal physiology and does not require external incision.[5]

It is recommended that endoscopic approach should be used for T1-2Krouse staging.[6,7] Several studies proposed that better visualization can be obtained when combining endoscopic approach with limited external procedures,[8,9] like involvement of the floor, superior, posterior, anterior an lateral recess of the antrum required additional procedures, such as Caldwell-Luc approach and canine fossa puncture.[10] The site of attachment of the tumor can be predicted accurately, using radiological signs of hyperostosis/osteitis,as predicted site found preoperatively was confirmed to be accurate intraoperatively to about 95% when radiological sign of hyperostosis/osteitis is present.[11] Systematic reviews have shown that these papillomas characteristically arise from the lateral nasal wall of middle turbinate or ethmoid recesses (93%) and only often extends secondarily into the sinuses, especially the maxillary (48%) and ethmoid (46%) and to a lesser extent, the sphenoid (12%) and frontal (8%).[12,13] It is widely accepted that a single focus and site of attachment is typical in inverted papilloma and that multicentricity is, fortunately, rare.[14]

As for our patient, due to unusual age presentation, the diagnosis was missed. An endoscopic biopsy of the lesion should be done to confirm the histopathological diagnosis in a lesion which has tell tale sign of inverted papilloma so that a concise treatment plan can be drawn down before embarking on surgical procedure. A tumor that reoccurs within 2 years of excision, usually indicates inadequate tumor removal.[15] In conclusion, complete removal without mutilation, irrespective of the approach used should be the aim.

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