

Unilateral Nasal Obstruction Caused by a Large Nasopharyngeal Cyst

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Dear Editor,

A 40-year-old man presented with left-side nasal obstruction for the past nine months. He had been treated for allergic rhinitis with nasal steroids for a long time. An anterior rhinoscopic examination was normal. Endoscopic examination revealed a nodulary mass in the nasopharynx, partially obstructing the left choana (Figure 1A). An endoscopic examination of the right nasopharynx revealed regular mucosal thickening of the right lateral and posterior walls of the nasopharynx. There were no otological symptoms. Magnetic resonance (MRI) of the nasopharynx revealed a left nasopharyngeal cyst measuring 18×15 mm (Figure 1B). The patient selected to undergo endoscopic marsupialization of the nasopharyngeal cyst. First, punch biopsies were performed from the mass and bilateral hypertrophic nasopharyngeal tissue for histopathological evaluation; the mass was found to be a lateral nasopharyngeal cyst containing seromucinous fluid. Then, the cystic mass was marsupialized using a microdebrider via a transnasal endoscopic approach (Figure 1C). Histopathological examination of the thickening nasopharyngeal mucosa revealed reactive lymphoid hyperplasia and identified the cystic specimen as a branchial cyst. The patient's postoperative period was uneventful. He was free of all symptoms nine months after the surgery, and an endoscopic examination did not detect any signs of recurrence.

Nasopharyngeal cysts are usually asymptomatic and incidentally discovered lesions. Large or superinfected cysts can present with symptoms such as nasal obstruction, post nasal drainage, halitosis, aural fullness, and diminished hearing secondary to eustachian tube obstruction [1, 2]. Nasopharyngeal cysts may be divided into two types: congenital and acquired cysts. Congenital cysts, such as Thornwaldt's cysts, are usually located in the midline; lateral nasopharyngeal cysts are usually acquired cysts [3]. The differential diagnosis of nasopharyngeal cysts includes Thornwaldt's cyst, intra-adenoid cyst, chordoma, cystic degeneration of a nasopharyngeal tumor, branchial cyst, dermoid cyst, seromucinous retention cyst, herniation of central nervous system, and sphenoid sinus mucocele [4]. Asymptomatic nasopharyngeal cysts are commonly and incidentally encountered during routine nasopharyngoscopy and radiologic imaging. Symptomatic cysts can be diagnosed by endoscopic nasopharynx examination and radiological examinations, such as computed tomography (CT) scans and MRI. MR imaging is superior to CT scans for detecting nasopharyngeal cysts, because it provides excellent details of soft tissues and distinguishes the contents of cysts [2]. Small, asymptomatic cysts do not require surgical intervention. For larger or symptomatic cysts, complete surgical excision or marsupialization via an endonasal endoscopic approach should be the main treatment. Surgical intervention via transoral, transpalatal, transmandibular, and transcervical approaches carries more significant morbidity [4, 5].

A large nasopharyngeal cyst is an uncommon entity. It can often present with unilateral nasal obstruction. An endoscopic nasopharyngeal examination should be performed for patients who present with unilateral nasal obstruction.



Figure 1. a-c. Endoscopic view of a large nasopharyngeal cyst (a), sagittal T2 MRI image showing a cystic mass narrowing the nasopharynx (arrow) (b), intraoperative view of the nasopharynx after the cyst was completely removed (c)

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