Lateral nasopharyngeal cysts

Mohamed Adel Khalifa and Mohsen Makshat

Department of Otolaryngology, Faculty of Medicine, Tanta University, Tanta, Egypt

Correspondence to Mohamed Adel Khalifa, MD, Department of Otolaryngology, Tanta University Hospital, PO Box 378, Tanta, Egypt
Tel/fax: +20 4033 28004;
e-mail: makhalifa@hotmail.com

Received 19 February 2012
Accepted 19 February 2012

The Egyptian Journal of Otolaryngology
2012, 28:156–157

Objective
We report an extremely rare case of lateral nasopharyngeal cysts.
Method
Case reports and a review of the world literature on lateral pharyngeal cysts are presented.
Results
A 45-year-old male patient presented with a swelling in the nasopharynx. This swelling was oblong in shape, with a smooth bluish red surface with its inferior aspect projecting toward the oropharynx. Endoscopic nasal examination showed its attachment to be superior to the left side of the nasopharynx. Computed tomography scan axial cut showed a radio-opaque shadow of the cyst occupying the left half of the nasopharynx.
Conclusion
Congenital branchiogenic cysts of the nasopharynx are quite rare. They originate from the second pharyngeal pouch and attach to one side of the nasopharyngeal roof just behind the posterior choanal opening.

Keywords:
branchiogenic cyst, congenital cysts, cysts, nasopharynx, vestigial cyst

Egypt J Otolaryngol 28:156–157

1012-5574

Introduction

Branchiogenic cysts from the second pharyngeal pouch are rare. They may originate from either the ventral or the dorsal portion of this pouch. It is usually situated in the lateral wall of the nasopharynx; hence, a better name for such a cyst is a 'lateral vestigial cyst'. It is lined by ciliated columnar epithelium [1].

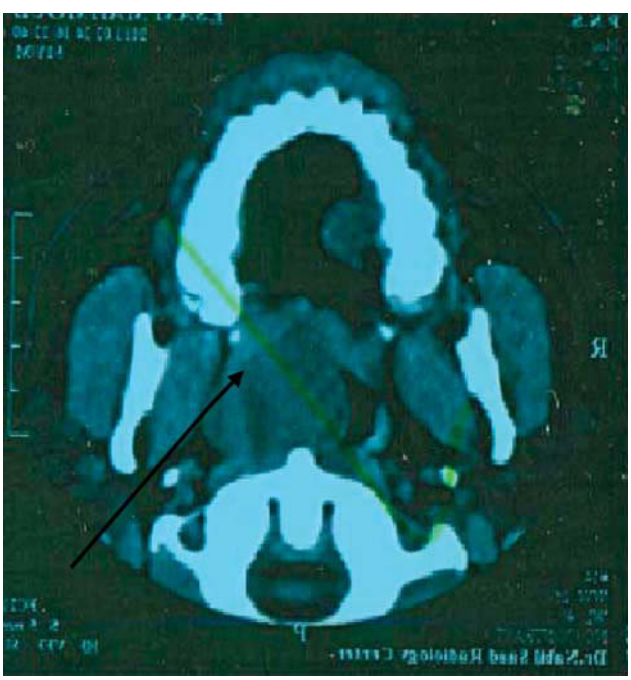
Case report

A 45-year-old male patient presented to our clinic with a history of near complete nasal obstruction, snoring, and decreased hearing. This condition was progressive, with no response to medications. Physical examination revealed a swelling in the nasopharynx. This swelling was oblong in shape, with a smooth bluish red surface with its inferior aspect projecting toward the oropharynx. Endoscopic nasal examination showed its attachment superior to the left side of the nasopharynx just posterior to the left posterior choana, covering the left fossa of the Rosenmuller. The swelling was cystic to palpation and had a smooth surface. Computed tomography scans showed a soft tissue swelling in the left half of the nasopharynx (Fig. 1).

Audiometry revealed a conductive hearing loss secondary to bilateral middle ear effusion. Routine hematological examination was within normal limits.

Under general anesthesia, using a mouth gag and retraction of the soft palate by catheters, the mass was found to be cystic. Aspiration produced a dark brown chocolate-like fluid, oily in consistency. The cyst was then marsupialized. Postoperative recovery was uneventful. No recurrence has been noted up to date. The operation was performed 6 months ago.

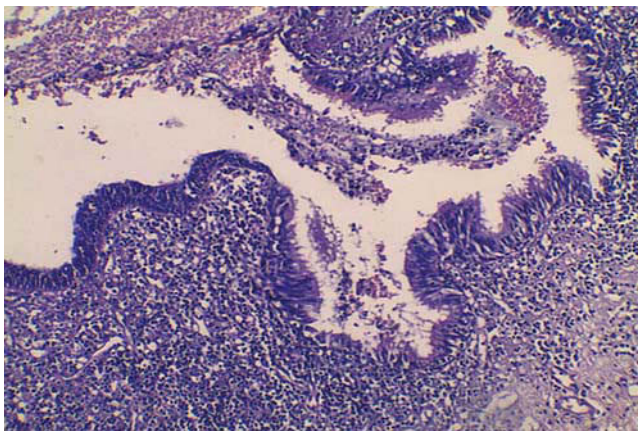
Figure 1



Computed tomography scan axial cut, showing a radio-opaque shadow of the cyst occupying the left half of the nasopharynx (arrow).

 DOI: 10.7123/01.EJO.000041310 7.44617.15

Figure 2



A low-power view showing the cyst space with some nuclear debris, lined by respiratory epithelium, with the subepithelium showing mononuclear inflammatory cells and blood capillaries (H&E, × 200).

Microscopic and bacteriologic studies of the cystic fluid revealed a few white cells and Gram-negative cocci, but no growth was obtained on cultures (Fig. 2).

Discussion

Cysts of the nasopharynx are rare. They may be either congenital or acquired. The congenital cysts may arise from midline-like cysts from the pharyngeal bursa, Rathke's pouch, meningoceles, and dermoid cysts [2].

Lateral nasopharyngeal cysts are branchiogenic in origin. These branchiogenic cysts are very rare, and may originate from either the ventral or the dorsal portion of the second pharyngeal pouch [3].

There are no specific microscopic features for the different types of congenital cysts. However, their site and anatomical relations help in the diagnosis.

The cyst presented basically developed congenitally. Any form of acquired cyst or diverticulum would not have so much uniformly dispersed salivary gland tissue in its wall, and there was absence of any evidence of retention of salivary gland secretion or of any obstructive condition [4].

Summary

Congenital branchiogenic cysts of the nasopharynx are quite rare. They originated from the second pharyngeal pouch and may be attached to one side of the nasopharyngeal roof just behind the posterior choanal opening. It is simply treated by marsupialization, with good long-term results.

Acknowledgements

Conflicts of interest

There are no conflicts of interest.

References

1 Badrawy R, Safwat F, Fahmy S. Cysts of the nasopharynx. J Laryngol Otol 1974; 88:571–578.

2 Snyman J, Claassen AJ. Lateral nasopharyngeal cysts. A case report. South Afr Med J 1984; 65:702.

3 Gray SW, Skandalakis JL. *Embryology for surgeons*. Philadelphia: Saunders; 1972.

4 Singh KP, Pahor AL. Congenital cyst of nasopharynx. J Laryngol Otol 1977; 91:75–79.