Lateral nasopharyngeal cysts
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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 just behind the posterior choanal opening.

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

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 Rosenmüller. 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).
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.

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Conflicts of interest
There are no conflicts of interest.

References