

Unusual Origin of Pleomorphic Adenoma: Lateral Nasal Wall

Li-Hsiang Cheng¹, Chih-Hung Wang¹, and Bor-Hwang Kang^{1,2*}

¹Department of Otolaryngology-Head and Neck Surgery, Tri-Service General Hospital, National Defense Medical Center, Taipei; ²Institute of Undersea & Hyperbaric Medicine, National Defense Medical Center, Taipei, Taiwan, Republic of China

Pleomorphic adenoma is the most common benign salivary glands tumor, but it rarely originates in the nose, and is especially rare in the lateral nasal wall. We present a case of intranasal pleomorphic adenoma arising from the lateral nasal wall and discuss the clinical presentation, diagnosis and treatment.

Key words: pleomorphic adenoma, lateral nasal wall

INTRUDUCTION

Pleomorphic adenoma is a benign mixed tumor mainly arising in the major salivary glands. Rarely, they can be found in the minor salivary glands of the upper aerodigestive tract, including the nasal cavity, pharynx, larynx, and trachea. Intranasal pleomorphic adenomas are rare and nasal septum is the most common site of origin. Here, we present and discuss an unusual case of intranasal pleomorphic adenoma arising from the lateral nasal wall.

CASE REPORT

A 28-year-old female presented to an outside institution with a 2-year history of right-sided nasal obstruction and 2-month history of repeated epistaxis. Anterior rhinoscopy revealed a smooth, reddish, not easily hemorrhagic tumor causing obstruction of the right nasal cavity (Figure 1). Her head and neck examination showed no other lesions or lymphadenopathy. Computed Tomography (CT) scan showed a $2.8 \times 3.2 \times 1.1$ cm soft tissue tumor in the right middle meatus at the medial aspect abutting the nasal septum and protruding to the inferior nasal cavity without maxillary antrum involvement (Figure 2).

Received: December 1, 2009; Revised: January 12, 2010; Accepted: February 6, 2010

*Corresponding author: Bor-Hwang Kang, Department of Otolaryngology-Head and Neck Surgery, Tri-Service General Hospital, National Defense Medical Center, No. 325, Sec. 2, Cheng-gong Road, Taipei 114, Taiwan, Republic of China. Tel: +886-2-8792-7192; Fax: +886-2-8792-7193; E-mail: bhk@ndmctsgh.edu.tw



Fig. 1 Anterior rhinoscopy revealed a smooth, reddish, not easily hemorrhagic tumor with obstruction of right nasal cavity.

The patient underwent endoscopic resection of the 2.5×3 cm tumor (Figure 3) and a tumor arising from the lateral wall of the right nasal cavity was confirmed. The histology was typical of plemorphic adenoma and comprised an admixture of epithelial, myoepithelial and stromal components with acini or ducts and a myxochondroid stroma (Figure 4). There was no invasion of the adjacent structure microscopically. The patient's postoperative course was uneventful. She healed well without evidence of residual or recurrent disease on follow-up.

DISCUSSION

Pleomorphic adenoma is a benign mixed tumor chiefly



Fig. 2 CT scan showed a $2.8 \times 3.2 \times 1.1$ cm soft tissue tumor in the right middle meatus at medial aspect abutting the nasal septum and protruding to the inferior nasal cavity without maxillary antrum involvement.

arising in the major salivary glands. Rarely, they can be found in the minor salivary glands of the upper aerodigestive tract, including the nasal cavity, pharynx, larynx, trachea. The largest existing series of nasal pleomorphic adenoma includes 40 cases presented by Compango and Wong based on a registry of >10,000 salivary gland tumors and 2 series by Suzuki et al (41 cases) and Wakami et al (59 cases) which reviewed patients seen in Japan. Of those observed in the nose, the vast majority of tumors originate from the septum and <10% originate from the lateral nasal wall.

The clinical presentation of patients typically present with unilateral nasal obstruction and epistaxis, which were also seen in our case. Less commonly, epiphora, mucopurulent rhinorrhea and nasal swelling could be present. On physical examination, the intranasal pheomorphic adenoma demonstrates a polypoid, unilateral, sessile, grayish-white mass with a smooth surface that does not bleed on touching.¹⁻⁴

CT scan is useful in demonstrating the pattern and extension of intranasal tumors. The lack of destruction of surrounding structures indicates its benign nature. Pleomorphic adenoma is usually demonstrated with a well-defined soft mass appearance, smooth bony remodeling, and a lack of calcification, as observed in our case.



Fig. 3 The tumor was en bloc resected and measured 2.5×3 cm in size.

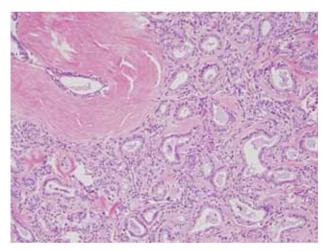


Fig. 4 Microscopic finding showed an admixture of epithelial, myoepithelial, and stromal components with acini or ducts and a myxochondroid stroma (hematoxylin-eosin staining; original magnification × 200).

Surgical excision with clear margins is the way to treat intranasal plemorphic adenoma. Various approaches to excise the tumor including intranasal, mid-facial degloving or lateral rhinotomy can be performed according to the size and location of tumor. The present patient underwent endoscopic resection because the tumor was small enough to observe with an endoscope. In previous reports the intranasal endoscopic approach has been effective in eliminating disease with a low rate of recurrence.¹⁻⁴

Although there are few cases in the literature, the clinician should consider the possibility of this rare tumor in differential diagnosis of intranasal mass. Early diagnosis offers the possibility of a more complete excision.

REFERENCES

- 1. Tahlan A, Nanda A, Nagarkar N, Bansal S. Pleomorphic adenoma of the nasal septum: a case report. Am J Otolaryngol. 2004;25:118-120.
- 2. Kumagai M, Endo S, Koizumi F, Kida A, Yamamoto M. A case of pleomorphic adenoma of the nasal septum. Auris Nasus Larynx. 2004;31:439-442.
- 3. Roh JL, Jung BJ, Rha KS, Park CI. Endoscopic resection of pleomorphic adenoma arising in the nasopharynx. Acta Otolaryngol. 2005;125:910-912.
- 4. Jackson LE, Rosenberg SI. Pleomorphic adenoma of the lateral nasal wall. Otolaryngol Head Neck Surg. 2002;127:474-476.

- 5. Compagno J, Wong RT. Intranasal mixed tumors (pleomorphic adenomas): a clinicopathologic study of 40 cases. Am J Clin Pathol. 1977;68:213-218.
- Suzuki K, Moribe K, Baba S. A rare case of pleomorphic adenoma of lateral wall of nasal cavity-with special reference of statistical observation of pleomorphic adenoma of nasal cavity in Japan. Nippon Jibiinkoka Gakkai Kaiho. 1990:93:740-745.
- 7. Wakami S, Muraoka M, Nakai Y. Two cases of pleomorphic adenoma of the nasal cavity. Nippon Jibiinkoka Gakkai Kaiho. 1996;99:38-45.