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CASE REPORT

## Nasal obstruction due to septochoanal polyp<sup>☆</sup>



### Obstrução nasal por pólipos septocoanais

Hyun Sang Cho, Kyung Soo Kim \*

Department of Otorhinolaryngology – Head and Neck Surgery, Chung-Ang University College of Medicine, Seoul, South Korea

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### Introduction

Choanal polyps are one form of the nasal polyps that grow toward the choana with a single stalk.<sup>1</sup> Septochoanal polyp is a rare entity that originates from the mucosa of the nasal septum with choanal extension,<sup>2</sup> and three cases have been reported to date.<sup>2–4</sup> This article reports an additional, new case of septochoanal polyp, together with a literature review of its clinical features, pathogenesis, and treatment options, in order to increase the understanding of this unusual choanal lesion.

### Case report

A 59-year-old woman presented to this department with left-sided nasal obstruction of two months' duration. The condition had become progressively worse over time, and upon visiting the local ENT clinic, a nasal mass was found on the left choana. Endoscopic nasal examination revealed a unilateral mass based in the superior aspect of the posterior portion of the nasal septum in the left nasal cavity. There was a thin pedicle, and the polyp was hanging loosely

through the choana (Fig. 1A and B). Computed tomography demonstrated a 1.7 cm × 0.9 cm × 1.2 cm lobulated and pedunculated mass, originating from the left nasal septum, which protruded into the nasopharynx without any sinus involvement (Fig. 1D and E).

Under local anesthesia, the mass was completely excised using endoscopic instrumentation. The base of the lesion, including the healthy mucosa of the left posterior septum, was removed and cauterized using suction cautery for prevention of recurrence (Fig. 1C). Histological examination revealed chronic inflammatory polyp. There were no signs of recurrence during a follow-up period of 12 months.

### Discussion

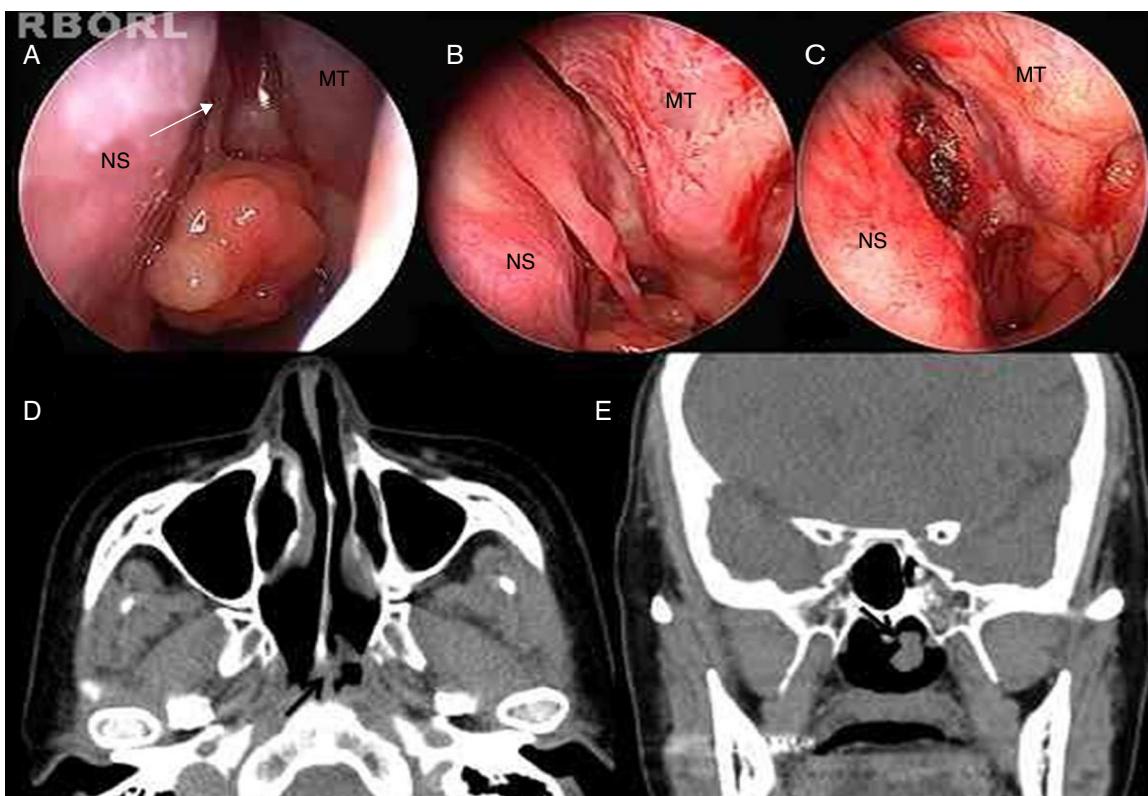
Based on the sites of origin, choanal polyps are classified as antrochoanal, sphenochoanal, and ethmochoanal.<sup>2</sup> Although the location of occurrence of choanal polyps varies, choanal polyps arising from the nasal septum are known to be very rare.<sup>2–4</sup> Choanal polyp arising from the nasal septum was first reported by Bailey in 1979,<sup>3</sup> and the term "septochoanal polyp" was used for this rare lesion by Birkent in 2009.<sup>2</sup>

Septochoanal polyps are benign, unilateral, and invade the posterior nasal cavity through the nasopharynx. The most common site of their origin is mainly the superior aspect of the posterior portion of the nasal septum.<sup>2–4</sup>

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Corresponding author.

E-mail: [99-21045@hanmail.net](mailto:99-21045@hanmail.net) (K.S. Kim).



**Figure 1** Endoscopic view and PNS CT findings. (A) Close-up view of the nasal polyp based in the left posterior septum (whitish arrow, pedicle; NS, nasal septum, MT, middle turbinate). (B) Pedicle between the nasal polyp and the nasal septum is noted. (C) Postoperative endoscopic appearance shows clear left choana with the pedicle site cauterized on the posteroinferior septum. (D and E) Computed tomography (D, axial; E, coronal) shows the left choanal polyp originating from the septum protruding into the nasopharynx (black arrow, origin site).

Pathogenically, Mills et al. have reported that choanal polyps arise from the recovery process of sinusitis, where there is expansion of mucinous cyst resulting from the obstruction and rupture of the mucous gland.<sup>5</sup> Clinical presentations of septochoanal polyps include nasal obstruction and snoring.<sup>2-4</sup> Preoperative detection of the polyp origin by nasal endoscopy may be important for differential diagnosis and surgical planning. Characteristically in endoscopic findings, there is a pedicle in the nasal septum, with the main polypoid mass in the choana.<sup>3</sup> Although CT is not essential for the diagnosis, it allows for accurate confirmation of sinus involvement and origin site.

For differential diagnosis of nasopharyngeal tumors, benign tumors such as juvenile angiofibroma, teratoma, meningoencephalocele, chordoma, paraganglioma, inverted papilloma, adenoid hypertrophy, and angiomyxoma need to be ruled out.<sup>6</sup>

If choanal polyps have an endoscopically proven pedicle on the nasal septum without sinus involvement, the treatment of choice is endoscopic surgery under local anesthesia. Because the recurrence rate for choanal polyps after surgical treatment is reported to be 26.6%, the septochoanal polyps must be completely removed by endoscopic surgery, and resection of a small amount of healthy mucosa surrounding the point of origin of the pedicle is necessary in order to prevent recurrence.<sup>1</sup>

## Final remarks

Although choanal polyps arising from the nasal septum are known to be very rare, septochoanal polyp must be included in the differential diagnosis of choanal mass-like lesions.

## Conflicts of interest

The authors declare no conflicts of interest.

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