Introduction
Antrochoanal polyp is a benign tumor of the maxillary sinus mucosa passing through the sinus ostium into the nasal cavity. Nasal obstruction is the most common symptom in all patients. Case Report. The authors present a case of a 28-year-old female who was admitted to hospital with breathing difficulty, unilateral nasal secretion, headache and deformity of the nasal pyramid. Computerized tomography examination of the nose and paranasal sinuses indicated a possibility of giant antrochoanal polyp. The antrochoanal polyp was extirpated completely using forceps, under general endotracheal anesthesia. The length of the giant polyp was 16 cm. A follow-up examination of the nose and the right maxillary sinus was performed using a rigid endoscope, but no remains of the polyp were found. Conclusion. The authors believe that this is probably the first or very rare published case of complete extirpation of a giant antrochoanal polyp of this size.

Key words: Nasal Polyps; Maxillary Sinus; Nasal Obstruction; Adult; Female; Nasal Mucosa; Tomography, X-Ray Computed; Endoscopy; Signs and Symptoms

Case report
A 28-year-old female reported to an ear, nose and throat (ENT) specialist complaining of breathing difficulty, unilateral nasal secretion, headache and deformity of the nasal pyramid, which she had been experiencing for one year. Examination of the nose showed that the right side of the nose was obstructed by a large polypous formation in patients who have undergone a surgery or had a trauma and computerized tomography indicates a mass inside the maxillary sinus [6, 7]. Diagnosis of the disease is made using anterior rhinoscopy, nasal endoscopy, standard radiography, computerized tomography and magnetic resonance [8, 9]. Pathohistological diagnosis is mandatory after polyp extirpation, especially because inverted papilloma may present as a polyp [10].

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Summary
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Sažetak

Ključne reči: Polipi nosa; Maksilarni sinus; Nazalna opstrukcija; Odrasli; Žensko; Nosna sluznica; CT; Endoskopija; Znači i simptomi

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copic examination of the left side of nose indicated a prominent swelling of the mucous membrane of the nose without polypoid changes. Significant mucosal thickening in all paranasal sinuses and complete occlusion of the ostiomeatal complex on the left were confirmed by computerized tomography of the nose and paranasal cavities. Under general endotracheal anesthesia, endoscopy of the nose was performed which indicated that the medial wall of the right maxillary sinus was destroyed by the mass of a giant polyp. A short separation from the neighboring structures was made. The antrochoanal polyp was extirpated completely through the oropharynx using forces. The length of the giant polyp was 16 cm (Figure 2). A follow-up examination of the nose and right maxillary sinus was performed using a rigid endoscope (0, 40 and 70 degrees), but no remains of the polyp were found. After that, the septum was medially located and tamponaded to fix the septum in the medial line. The postoperative course was uncomplicated. Pathological findings proved that the formation was an antrochoanal polyp.

Discussion

Many pathological masses in the nose may look like antrochoanal polyp, for example dermoid cysts, meningoencephaloceles, teratomae or sphenoidal polyps [8]. Diagnosis by clinical examination, computerized tomography and magnetic resonance imaging before extirpation of pathological masses, sinuses and nose is of utmost importance [1, 8, 9]. Giant antrochoanal polyps can become dangerous in case of auto amputation [11]. Obstruction of breathing may require urgent tracheostomy before the polyp removal [12]. Preoperative airway maintenance was performed by endotracheal intubation. Prevention of antrochoanal polyp recurrence was enabled by endoscopy of the nose and maxillary sinus. According to Freitas et al. [13], recurrence after polypectomy was up to 12.5%. Prevention of serious postoperative bleeding was carried out using tamponade of the nose. In the case presented here, the symptoms were common to nasal polyp, but the clinical findings and computerized tomography findings indicated existence of a giant antrochoanal polyp.

By searching published articles in the PubMed database, using keywords “antrochoanal polyp” for the ten year period (October 2004 – July 2014), 74 articles were found which contain terms “nasal”, “choanal” and “antrochoanal” polyp in their headlines. They are related to children, young adults and adults. By adding terms “giant” for the same period, only five articles were found.

Živič et al. [14] extirpated a polyp of an “unusual size” of 8x5 cm by removing antral portion of the polyp applying the Caldwell-Luc procedure, and the epipharyngeal portion was extirpated by using forces, through oropharynx. Yaman et al. [3] present a 9-cm polyp removed completely by functional endoscopic sinus surgery, which they believe is a safe and efficient method for antrochoanal polyp removal. Çetinkaya [15] reports a case of a giant antrochoanal polyp of 14 cm, removed completely through oropharynx using forces, while the inferior portion was ligated with 1/0 silk. Kolwadkar et al. [12] removed a giant antrochoanal polyp of 15x4 cm completely through oropharynx. Bhat et al. [16] report a case of a giant antrochoanal polyp of 15 x 6 cm in an adult person, which was removed by endoscopy.

In the case presented in this paper, the polyp of 16 cm probably represents the longest giant antrochoanal polyp extirpated completely and without postoperative complications.

Conclusion

In cases of tumor of the nose and maxillary sinus, the existence of a giant antrochoanal polyp should be considered. The authors believe that this is a rare published case of a giant antrochoanal polyp extirpated completely and without postoperative complications.
References


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