

# Huge Antrochoanal Polyp Mimicking Double Tongue

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## ABSTRACT

Antrochoanal polyp, though a common clinical entity, is reported here for its unusual presentation. Antrochoanal polyp usually arises from the maxillary sinus extending posteriorly into the nasopharynx. Typically it presents as a unilateral nasal obstruction with mucus rhinorrhea, sleep disturbance and postnatal drip. A 16 year old female patient presented to emergency with inability to close her mouth due to a mass, filling and hanging out into the oral cavity. As a result of which, she could not swallow or speak. Following an emergency nasal endoscopic sinus surgery, the mass was removed perorally. This case is reported as there are not many articles in world literature of large antrochoanal polyp.

**KEYWORDS:** Antrochoanal polyp, Maxillary sinus, Nasopharynx

## INTRODUCTION

Antrochoanal polyp is a slow growing, benign lesion which usually originates in the maxillary sinus, herniates through the maxillary sinus ostium into the middle meatus, extends posteriorly into the choana as well as nasopharynx. Typically, the patients with antrochoanal polyps present with a history of unilateral nasal obstruction. However, bilateral nasal obstruction may be the presenting feature if the mass occupies the nasopharynx. Symptom of nasal obstruction may be associated with snoring, headache, sleep disturbances and mouth breathing.. It was first described by Professor Killian in 1906.<sup>1</sup> It appears in 3 to 6 % of cases of sinus nasal polyposis.<sup>1</sup> Etiology is not clearly labelled, but it is considered that an infection is present in 25% of patients.<sup>2</sup> It is usually found in nonatopic patients.<sup>2</sup> It most frequently appears in adults between the third and fifth decades of life. They are more frequent in male than in female population.<sup>2</sup> For diagnostic purposes classical x-ray images of the paranasal sinuses are not sufficient, but a CT of the paranasal cavities is necessary due to possibility of defining the content of sinuses, its expansion into the nasopharynx and status of the bone structures.<sup>3</sup> The treatment includes removal of the polyp itself as well as its attachments to the maxillary sinus.<sup>4</sup> The surgical treatment techniques are the classical ones including the Caldwell-Luc approach as well as the contemporary functional endoscopic sinus surgery (FESS).<sup>4,5</sup>

## CASE REPORT

A 16 year girl presented to emergency department of Otorhinolaryngology, GMC, Jammu, with complaints of

right sided nasal obstruction, watery discharge, decreased sense of smell, change of voice, mouth breathing, snoring, occasional headaches since 10 months and acute difficulty in breathing since 4 hours. On anterior Rhinoscopy, a pale polypoidal mass was seen in the right nasal cavity which was insensitive and did not bleed on touch. On oral examination, a pinkish reddish cylindrical mass was seen hanging from nasopharynx occupying most of the oropharynx and going down up to the level of laryngeal inlet mimicking a picture of a double tongue (Fig 1). The indirect laryngoscopic examination was not possible due to the huge mass in the oropharynx. Neck and ear examination were normal. On diagnostic nasal endoscopy, a solitary polyp was noticed coming from right middle meatus going posteriorly towards right choana. Soft tissue neck (lateral view) radiograph showed well defined soft tissue density lesion in the nasopharynx extending to the oropharynx. CECT scan of nose and paranasal sinuses showed the exact view of a well defined soft tissue density lesion arising from right maxillary sinus, extending posteriorly into nasopharynx and oropharynx obliterating right nasal cavity which was non-enhancing with contrast media. There was no bony destruction. Emergency temporary tracheostomy was done to secure the airway and Endoscopic Sinus Surgery (ESS) was performed on the very next day with extraction of the mass measuring 14 cm in length and 6 cm in breadth via oral cavity under general anaesthesia followed by maxillary antrostomy. Postoperatively it was seen that there was pressure necrosis of the right tonsillar pillars due to that huge antrochoanal polyp (Fig 2). Histopathology confirmed the presence of pseudostratified ciliated epithelium with squamous and

How to cite this article:

Sharma M, Singh P, Kapoor M, Goel M. Huge Antrochoanal Polyp Mimicking Double Tongue. Int J Dent Med Res 2015;1(6):130-132.

glandular metaplasia. Underlying stroma showed few inflammatory cells and blood vessels were seen suggestive of antrochoanal polyp (Fig 3). The patient is on regular follow-up with no recurrence till now.



Fig 1: Preoperative picture of the patient showing a mass in the right nostril and a huge mass in the oral cavity mimicking double tongue



Fig 2: Postoperative picture of the same patient showing pressure necrosis of right tonsillar pillars.

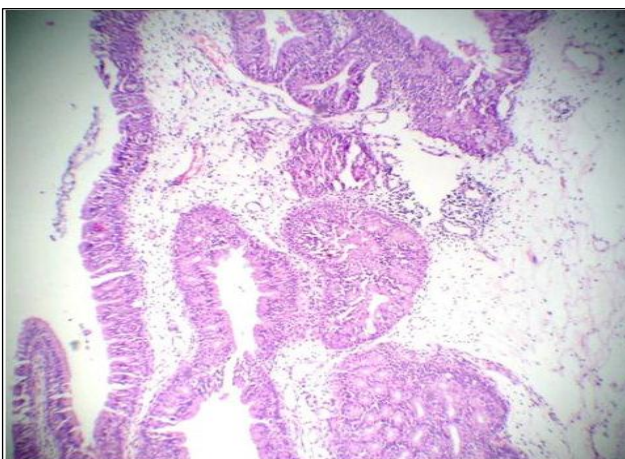


Fig 3: Histology of the specimen

## DISCUSSION

Antrochoanal polyps are benign soft tissue masses arising from the maxillary sinus, passes through the sinus ostium, grows into choana and may pass into the nasopharynx.<sup>6,7,8</sup> Nasal obstruction and nasal discharge are most common presenting symptoms but in severe and neglected cases the symptoms may be dyspnea, stridor and epistaxis. Removal of the antrochoanal polyp involves not only endo nasal portion but also its antral portion in the maxillary sinus. In this way the chances of the relapse is decreased.<sup>9</sup> Besides the classical surgical techniques like Caldwell-Luc operation, the functional endoscopic sinus surgery (FESS) is also applied for the treatment of antrochoanal polyps.<sup>9</sup> Each of these techniques has its advantages and disadvantages. The Caldwell-Luc approach enables clear insight into all the structures of the maxillary sinus, but can also carry the consequences in the form of paraestheses of the half of the face, asymmetry.<sup>10</sup> The advantage of the FESS method is in nondisturbance of the natural structures, though the insight into the status of the sinus cavity is smaller and especially it is difficult to remove the polyp's attachment, if it is localized in the frontal and lower wall.<sup>10</sup> However, as a result of the development of fine surgical instruments like angled endoscopes, angled forceps and microdebrider, FESS is regarded as the treatment of choice for antrochoanal polyp. The essence of the surgical approach is in enabling the clear insight into all the structures of the maxillary sinus and total removal of all antrochoanal components.<sup>10</sup> Insufficient surgery results in recurrence. Recurrence rate is especially high if the portion of the antrochoanal polyp in the maxillary sinus is not completely removed.<sup>9</sup> In our case, 16 yrs female presented with a huge right sided antrochoanal polyp (14 cms in length and 6 cms in breadth) causing dyspnea. Though rare, bilateral antrochoanal polyp is also reported. First one in an adult patient was reported in 2007.<sup>11</sup>

A similar presentation is reported in a twelve-year-old boy who presented in a paediatric emergency with a polypoidal mass obliterating the oral cavity and reaching as far as the incisors.<sup>12</sup> Another similar presentation was reported in an elderly female patient with the polypoidal mass measuring 14 cms length and 5 cms in diameter, and protruding out from mouth.<sup>13</sup>

In our case, the mass was hanging in the oral cavity and was 14 cm in length, 6 cm in breadth. The increasing size and weight of the mass can cause its autoamputation, thereby causing stridor and choking which can prove fatal in such presentations.<sup>14</sup> In our patient, self-neglect and the delay in presentation led to such life-threatening complication. The above presentation is rare and for this reason we believe that the case should be shared with everyone.

## CONCLUSION

Antrochoanal polyp, though a common condition, can take a worse shape, usually when neglected as was seen

in this case. A huge polyp can be life threatening if not treated at time. So, early diagnosis and treatment is the key for antrochoanal polyp.

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Source of Support: Nil  
Conflict of Interest: Nil