Case Report Open Access

Giant hypopharyngeal fibroepithelial polyp: a case report and literature review

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Abstract

Fibroepithelial pharyngeal polyps are rare. We herein report a case of a 56-year-old Asian woman who presented with voice hoarseness and throat discomfort for several years because of a giant pharyngeal polyp. We resected the polyp under general anesthesia. It originated in the left hypopharyngeal wall. Postoperative recovery was uneventful. Her sore throat was diminished within 1 week after the operation. Pathological findings revealed a benign fibroepithelial polyp. At the time of this writing, the polyp had shown no regrowth. To our knowledge, this report describes the second largest fibroepithelial polyp among those reported previously.

Keywords: fibroepithelial polyp, hypopharynx, nasoendoscopy

Introduction

Large fibroepithelial polyps of the pharynx are benign tumors that are rarely seen in our practice. They represent only about 0.03% of all pharyngeal and esophageal neoplasms.[1] The upper third of the esophagus is the most common site at which these lesions are found, followed by the hypopharynx; in contrast, they are seldom found in the oropharynx. Fibroepithelial polyps exhibit great differences in size and may extend throughout the whole length of the esophagus until they reach the gastric cavity.[2] They are mostly asymptomatic and are discovered incidentally. Globus pharyngeus, intermittent choking, and coughing can occasionally occur.[3,4] Anemia caused by chronic bleeding has also been reported.[2] However, on rare occasions, these polyps can lead to suffocation and may become life-threatening by occluding the oral cavity and laryngeal lumen.[1] We herein report a case involving a middle-aged woman who presented with a 2-year history of voice hoarseness and throat discomfort because of a giant pharyngeal polyp.

Case Presentation

A 56-year-old Asian woman presented with a 2-year history of voice hoarseness and discomfort in her throat with no history of other medical problems, regular medications, or smoking. She consulted an otorhinolaryngologist and was diagnosed with chronic pharyngitis. Three months later while performing yoga exercises, she unexpectedly spat out a long piece of mucous membrane, which she then forced down her throat. Because she did not feel discomfort in her throat for a while thereafter, she did not consult a doctor. However, her throat discomfort later returned and gradually worsened, and she therefore consulted a gastroenterologist. Gastrointestinal endoscopy revealed a hanging sausage-like polyp that originated in her left hypopharyngeal wall and extended to the middle portion of her esophagus. Examination of a biopsy specimen showed a benign tumor. Her gastroenterologist referred her to our university hospital for surgical treatment. The decision was made to perform an endoscopic examination and subsequent intervention under general anesthesia. We obtained informed consent from the patient for performing this operation.

With the patient under general anesthesia, we resected the left pharyngeal tumor. We used a rigid laryngoscope and esophagoscope. We found that the tumor, which appeared to descend into her esophagus, originated in the left hypopharyngeal wall and confirmed that the tumor was not adhered to the esophagus by freely passing an instrument past the tumor. We applied gauze around the tumor, as shown in Figure 1, and withdrew it from her esophagus to her mouth by pulling on the gauze (Figure 2). We then removed the tumor from her left hypopharynx using electric cautery. After successful removal of the polyp, we confirmed that no residual tissue remained at the attachment site. Moreover, no active bleeding was observed during or after the operation. No intraoperative or postoperative complications occurred. At the time of this writing, the polyp had shown no regrowth.

Macroscopic examination revealed an elongated sausage-shaped mass of homogeneous tissue. The covering of the pharyngeal mucosa appeared to be healthy. The size of the lesion was approximately $170 \times 20 \times 25$ mm (Figure 3). Histopathological examination revealed that the lesion was consistent with a diagnosis of a fibroepithelial polyp covered by squamous epithelium showing focal edema and arteriovenous vasculature (Figure 4). The stroma consisted of adipose tissue. There was no evidence of malignancy.

Discussion

Fibroepithelial pharyngeal polyps are a rare entity in our practice. To our knowledge, only five cases of pharyngeal polyps have been reported in the literature, as shown in Table.[2-6] Few theories regarding the etiology of these polyps have been postulated. One of these theories suggests that these polyps are secondary to focal losses of elastic tissue, but formal proof of this proposal is lacking.[7] Another theory claimed that

Received 18 December, 2015 **Accepted** 13 May, 2016

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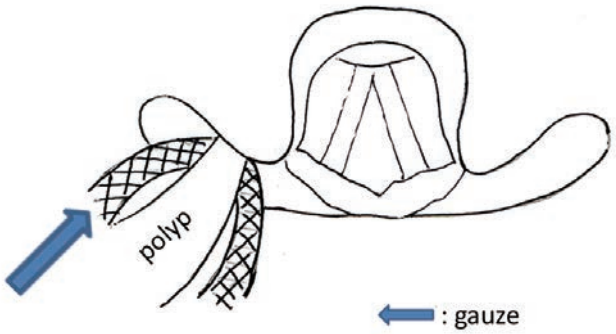
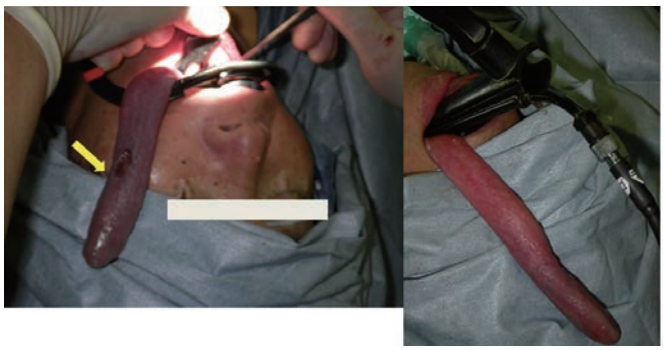
Figure 1



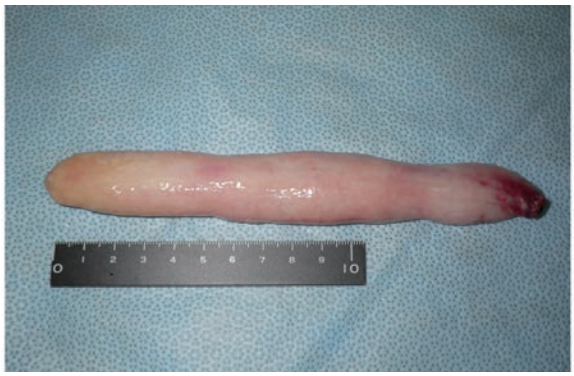
Schematic illustration of the operation. The polyp originated from the left hypopharyngeal wall and extended to the esophagus. A piece of gauze was applied around the polyp to facilitate its removal.

Figure 2



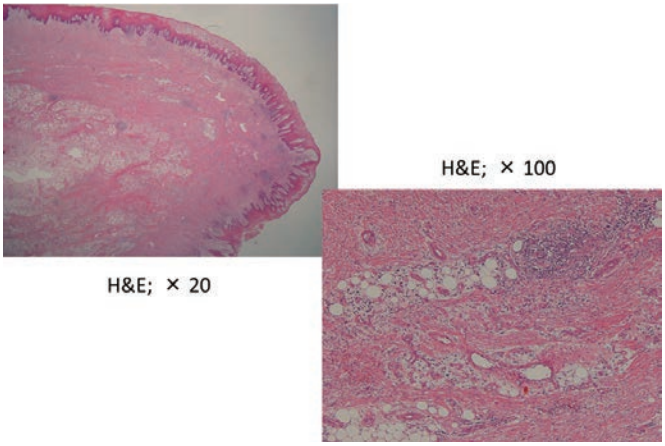
Intraoperative appearance of the pharyngeal polyp. Intraoperative gross appearance of the giant polyp withdrawn from the oral cavity with the aid of a laryngoscope under general anesthesia.

Figure 3



Macroscopic view of the pharyngeal polyp. The giant polyp measured 170×25 × 20 mm.

Figure 4



Microscopic appearance of the pharyngeal polyp.

Table. Fibroepithelial pharyngeal polyps reported in literature including our case.

Study	Year	Patient Sex/Age (y) Ethnicity	Size (mm)	Smoking
Mangar et al.[3]	2004	M/60 Caucasian	60×35×5	ND
Farbound et al.[5]	2010	M/33 Asian	30×20×10	(+)
Janjatov et al.[4]	2012	M/57 Serbian	Right:60×20×20 Left:95×20×20	(-)
Jain and Shetty[6]	2012	M/42 Māori	110×30×ND	(+)
Pallabazzer et al.[2]	2013	M/60 Italian	180×54×40	ND
Current study	2013	F/56 Asian	170×25×20	(-)

y＝years; ND=not described; M=male; F=female

Size: length × transverse diameter (major axis) × transverse diameter (minor axis)

these polyps are a collection of several tissue elements that represent a hamartoma of the lamina propria with a slow rate of growth or a fibroma that exhibits the features of a benign lesion.[8] Pharyngeal polyps are rarely symptomatic, and when present, the symptoms vary according to the site of origin. Globus pharyngeus is the usual presentation.[5,6] The previously reported large polyps originating in the nasopharynx or oropharynx were accompanied by choking, respiratory distress, and coughing of abnormal tissue masses.[5] Furthermore, chronic bleeding from the polyp can occur, resulting in iron

deficiency anemia.[2] Our patient presented with a 2-year history of throat discomfort and slight voice hoarseness. These vague presentations, in addition to a lack of proper early investigations, may have been the cause of the delay in diagnosis.

Our case highlights several key points. Despite the high risk of suffocation, this patient remained relatively asymptomatic for a long period. Although the location of the polyp in the hypopharynx enabled a gastrointestinal endoscopist to visualize the attachment of the polyp, we could not find the polyp by nasoendoscopy. In addition, magnetic resonance imaging was not an effective examination technique with which to determine the exact location or extension of this polyp. Accordingly, if the presence of a fibroepithelial polyp in the esophagus is suspected, we suggest that a barium meal and computed tomography might be more valuable in patients with a long history of deceptive complaints and no positive findings on clinical examination. Although we were able to successfully remove this polyp via endoscopic guidance, it might be difficult to manage the removal endoscopically in some cases, and an open approach via pharyngotomy might be needed.[6] Regardless of the approach, we believe that prompt management with surgical resection is indispensable, especially when polyps are associated with laryngeal airway obstruction that results in cerebral anoxia and death.[9] Early recognition and resection of such a polyp is highly recommended.

In conclusion, we have herein reported a rare case of a fibroepithelial pharyngeal polyp and discussed its management. We conclude that such pharyngeal polyps must be kept in mind and diagnosed early via proper imaging to alleviate the patient's symptoms and prevent serious complications such as airway obstruction.

Conflict of interest

The authors certify and declare that no part of the research presented has been funded by any industry sources and that there is no conflict of interest.

References

1. Plachta A. Benign tumors of the esophagus. Review of literature and report of 99 cases. Am J Gastroenterol 1962;38:639-52.
2. Pallabazzer G, Santi S, Biagio S, D'Imporzano S. Difficult polypectomy-giant hypopharyngeal polyp: case report and literature review. World J Gastroenterol 2013;19:5936-9.
3. Mangar W, Jiang D, Lloyd RV. Acute presentation of a fibroepithelial pharyngeal polyp. J Laryngol Otol 2004;118:727-9.
4. Janjatov B, Erić M, Šojić D. An unusual bilateral fibroepithelial pharyngeal polyps: report of a case. Eur Rev Med Pharmacol Sci 2012;16:701-2.
5. Farbound A, Trinidade A, Harris M, Pfleiderer A. Fibroepithelial polyp of the tonsil: case report of a rare, benign tonsillar lesion. J Laryngol Otol 2010;124:111-2.
6. Jain R, Shetty R. Nasopharyngeal polyp in a New Zealand Māori man. N Z Med J 2012;125:93-6.
7. Adams BB, Mutasim DF. Elastic tissue in fibroepithelial polyps. Am J Dermatopathol 1999;21:466-8.
8. Lloyd S, Lloyd J, Dhillon R. Chondroid metaplasia in a fibroepithelial polyp of the tongue. J Laryngol Otol 2001;115:681-2.
9. Cochet B, Hohl P, Sans M, Cox JN. Asphyxia caused by laryngeal impaction of an oesophageal polyp. Arch Otolaryngol 1980;106:176-8.