

# Fibrovascular polyp of the hypopharynx

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**F**ibrovascular polyps are extremely rare benign neoplasms of the hypopharynx that can arise from any site in the pharynx.<sup>1,2</sup> Because of the mixture of stromal tissues, it is hypothesized that the fibrovascular polyp may be a hamartoma or an unusual type of inflammatory polyp. Another theory is that they arise secondary to mucosal injury,<sup>3,4</sup> gastroesophageal reflux or ectopic gastric mucosa.<sup>5,6</sup> To our knowledge, this is the first report in the Middle East of an extremely rare case of fibromatous polyp in the hypopharynx arising from the piriform sinus mucosa.

## CASE

A 31-year-old woman was admitted to King Abdulaziz University Hospital with a 2-year history of an unpleasant sensation in the throat, and frequent choking when awake and sleeping. Sometimes she noticed a mass coming from the deep throat and felt this mass in the oral cavity for a short period of time before swallowing, especially when vomiting or gargling. She had dysphonia and recurrent sore throat, but no dysphagia or symptoms of gastrointestinal gastroesophageal reflux.

Physical examination revealed an abnormality on flexible fiberoptic laryngoscopy, which demonstrated a pedunculated mass originating from the left lateral hypopharyngeal wall when she tried to protrude the mass outside but otherwise no mass was obvious. A CT scan of the neck revealed no mass lesion on the thick left aryepiglottic fold. A barium swallow was not done because of a technical problem. Upper gastrointestinal tract endoscopy revealed an 18-centimeter mass with a stalk, suggesting a fibrovascular polyp. We performed a complete tumor resection under general anesthesia. Before administering anesthesia, the patient was able to spit out the mass, which was stitched with 2-0 silk. After anesthesia, we followed the mass by direct laryngoscopy and hypolaryngoscopy and the origin of the mass was identified at the lateral wall of the pyriform sinus and the tumor was completely resected. The defective mucosa was cauterized and there were no complications. The base of the polyp was identified at the lateral wall

of the piriform sinus and there were no complications. The size of the polyp was 50 mm×17 mm in diameter and the cut surface was a homogenous yellow-white in color (Figure 1, 2). Pathological findings (Figure 3) were as follows: the surface was stratified squamous epithelium; diffuse vessels and inflammatory cells under the mucosa and center of the polyp consisted of loose fibro-adipose tissue. The immediate postoperative period was uneventful. At postoperative visits at one week and 3 months, flexible fiberoptic laryngoscopy revealed a normal mucosa in the left pyriform fossa and the lateral pharyngeal wall. At 6 months, the patient felt fine with no symptoms. At a 2-year follow-up, there was no polypoid lesion and the patient had no symptoms.

## DISCUSSION

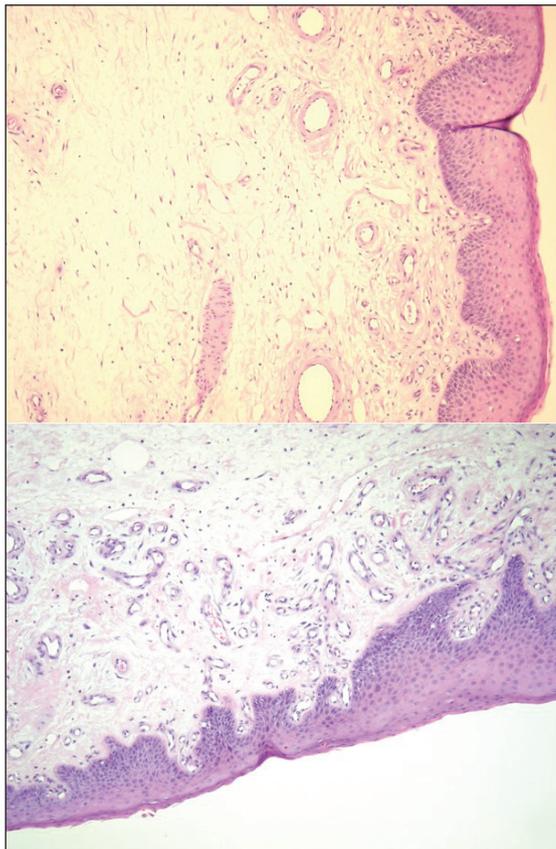
Benign tumors and cysts of the hypopharynx and esophagus are relatively rare, accounting for 20% of hypopharyngeal and esophageal tumors.<sup>7</sup> Occurring less frequently than malignant tumors, hypopharyngeal and upper esophageal lesions can be classified as intraluminal, intramural or extramural. The most common is the benign mesenchymal tumor, which starts as an



**Figure 1.** Intraoperative picture of the fibrovascular polyp held outside the oral cavity through gentle traction, after administering general anesthesia and before excision.



**Figure 2.** Fibrovascular polyp after excision.



**Figure 3.** The histopathology of the fibrovascular polyp (hematoxylin and eosin stain; magnification,  $\times 100$ ) showing the polyp lined by mature squamous epithelium with mild hyperkeratosis (upper). Ectatic vascular channels are also seen beneath the squamous mucosa with loose fibroadipose tissue in the center (lower).

intramural lesion and then forms a polypoidal swelling that may reach considerable size.<sup>8</sup> Fibrovascular polyps of the esophagus and hypopharynx are the most common intraluminal tumor but are exceedingly rare,<sup>9</sup> accounting for less than 1% of all hypopharyngeal and esophageal tumors.<sup>4</sup> They are also known as giant be-

nign esophageal polyps, polypoid fibromas, giant fibrovascular polyps, myomas, fibrolipomas, pedunculated lipomas, fibroepithelial polyps, and lipomas of the hypopharynx.<sup>7-9</sup> These are usually solitary lesions (rarely multiple) occurring predominantly in males in the third to fifth decades of life.<sup>7</sup> Most are large and pedunculated, with a stalk or pedicle attached to the region of the cricopharyngeus muscle.<sup>7</sup> Originating from any site in the pharynx or upper esophagus, they start as small sessile lesions which elongate due to peristalsis within the esophagus and the looseness of the submucosa.<sup>7,4</sup> The common origin for the mass was the cricopharyngeal part of the hypopharynx.<sup>1,4</sup>

Patients typically present with dysphagia or a sense of fullness in the throat, vomiting, excessive mucus expectoration, regurgitation, aspiration of food, and weight loss. In addition, nonspecific respiratory symptoms, including chronic cough, recurrent pneumonia, dyspnea, and total airway obstruction have been reported.<sup>7,8</sup> Regurgitation of the mass into the mouth is possible in some cases especially after a spell of coughing or emesis.<sup>8</sup> As in our case, the patient had episodes in which the polyp prolapsed into her mouth and she could do this voluntarily. Because of the danger of an upper airway obstruction with asphyxia or even death, patients with fibrovascular polyps should have their condition diagnosed as early as possible.<sup>9</sup>

Ease of diagnosis of fibrovascular polyps in the hypopharynx and esophagus depends on the location of the lesion and clinical presentation.<sup>1</sup> When the polyp is prolapsed into the mouth and pharynx, it can easily be visualized and diagnosed with oral examination and fiberoptic laryngoscopy.<sup>1,2</sup> When these tumors are situated further into the aerodigestive tract, however, the diagnosis may be challenging. A combination of imaging studies, esophagography, and endoscopy are often necessary for diagnosis.<sup>1</sup> The polyp was observed as a tumorous lesion with a smooth surface under an endoscope. On barium swallow, a large smooth filling defect usually extends from the cervical esophagus to the gastroesophageal junction. CT or MRI may also be useful in the evaluation of these tumors,<sup>4</sup> which appeared normal in our case. Grossly these tumors are large (up to 25 centimeters),<sup>1,9</sup> sausage-shaped, and pedunculated, with a thin pedicle, or stalk. They may be multilobulated or have a bulbous expansion of the tip. They are covered by smooth gray mucosa,<sup>4</sup> as in our case. Histology shows a normal stratified squamous mucosa covering spindle cells within a loose fibrovascular stroma with occasional adipocytes. A mononuclear cell infiltrate is common, with eosinophils sometimes prominent. The vessels are a mixture of muscular arteries, veins, and capillaries, which was

similar to the picture described by our pathologist with no evidence of malignant changes although malignant degeneration is rarely encountered.<sup>10,11</sup> Surgical resection is the only treatment method;<sup>1</sup> the trans-oral resection is recommended if the polyp is observed sufficiently.<sup>5</sup> If

the lesion is too large to observe fully, the mass should be removed through a lateral pharyngotomy.<sup>2,4,8</sup> A hypopharyngeal fibrovascular polyp is a benign lesion. However, it should be resected completely to prevent serious morbidity and mortality associated with these lesions.

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