

Giant Polypoid Tumor of the Esophagus

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- ✓ A patient with a giant polypoid tumor of the esophagus, measuring 22 cm in length is described in this report. The patient presented with cough attacks and respiratory distress. Diagnostic and therapeutic intervention was required with aggressive airway management, radiographic and endoscopic evaluation, and definitive surgical treatment. Benign esophageal tumors are rare and originate from the upper third of esophagus, frequently close to the cricopharyngeus muscle. They may attain giant proportions. A variety of clinical presentations are described, the most serious being asphyxia secondary to laryngeal obstruction. We observed a giant esophageal tumor which was interpreted as angiofibromyolipoma and causing laryngeal obstruction. We present the clinical picture and histopathological findings of the tumor.

Key words: Esophagus, polyp, giant

✓ **Özefagusun Büyük Polipoid Tümörü**

Bu olgu sunumunda özefagustan kaynaklanan 22 cm uzunluğunda büyük polipoid tümörü olan hasta rapor edildi. Hasta bize öksürük atağı ve solunum sıkıntısı ile başvurdu. Tanısal ve tedavi edici yaklaşımımızda hava yolu kontrol altına alındı ve radyolojik, endoskopik inceleme yapılarak kesin cerrahi tedavi uygulandı.

Benign özefagus tümörleri özefagusun üst 1/3 kısmından kaynaklanan, sıklıkla krikofarengeal sfinkteri kapatan, az görülen bir durumdur. Büyük boyutlara ulaşabilirler. Çoğunlukla laringeal obstrüksiyona bağlı olarak asfiksi ile başvururlar. Laringeal obstrüksiyona yol açan anjiofibromyolipoma tanısı almış benign büyük özefagus tümörü tanımladık. Bu tümürün klinik görünümü ile histopatolojik bulgularımızı yayımladık.

Anahtar kelimeler: Özefagus, dev polip

CASE REPORT

A 56-year old male patient admitted to emergency center with the mass out of his mouth. Two hours before admission, he mentioned that he awoke with cough attacks, and felt a piece of meat in his mouth (Fig. 1). Cough attacks and respiratory distress resolved completely when he took this mass out of his mouth. When he swallowed this fleshy mass into his oral cavity respiratory distress began again. He was taken to the operating room, where he underwent endoscopy of laryngeal and esophageal inlet.

There were no laryngeal abnormalities. Rigid esophageal endoscopy demonstrated a large, mucosa covered, polypoid lesion that arose from inlet of the esophagus. The tumor was attached to the esophageal lumen by a stalk. After 25 cm from the incisors the esophagus was normal. Because of dubious nature of the lesion, the tumor was not immediately excised; however, a tracheotomy was performed for airway management.

The following day, an esophagogram, computed tomogram (CT) and magnetic resonance imaging (MRI) of the head and

neck were obtained. An esophagogram showed a large smooth polypoid filling defect on a long stalk that appeared to extend from the cervical esophagus to oral cavity (Fig. 2). CT revealed a large smooth mass with fluid component beginning at the filling pharynx and oral cavity. MRI showed a mass filling oral cavity, oropharynx and hypopharynx (Fig. 3). The mass extended from the esophagus to the oral cavity and contained fluid component.

The esophagus was approached through an oblique incision along the anterior border of the sternocleidomastoid muscle. A longitudinal esophagotomy just inferior to the esophageal sphincter was performed and a large intraluminal tumor was identified. The tumor originated from a pedicle arising from cricopharyngeal valve and extending to postcricoid area and left pyriform sinus. The

entire tumor was brought out through the esophagotomy and then removed by excision from the site of attachment to the cricopharyngeal valve, pyriform sinus and postcricoid area. The neck incision was closed and small penrose drain was left for drainage. The tumor was fleshy in consistency, measured 22 cm in length, 8 cm in width (Fig. 4). The tumor was covered with a smooth pinkish gray mucosa similar to that of normal esophagus. Microscopic diagnosis was a giant angiomyofibrolioma of the esophagus.

DISCUSSION

Benign esophageal tumors are rare and may be classified as intraluminal, intramural or extramural. Benign intraluminal tumors are far less common and include fibrovascular polyp, hamartoma, lymphangioma, squamous



Figure 1. The polypoid tumor regurgitated into oral cavity

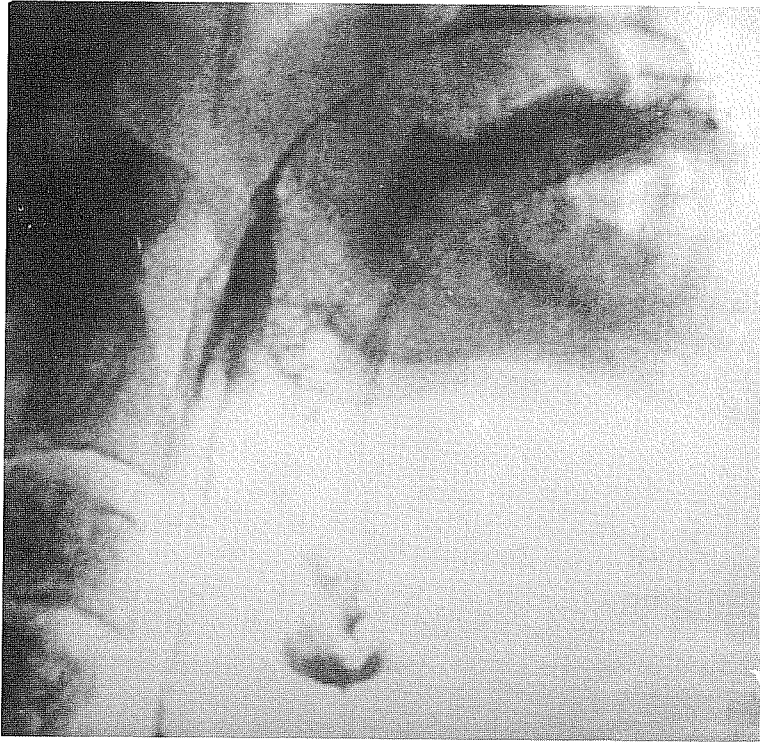


Figure 2. The esophagogram demonstrates a large polypoid filling defect with smooth surface, extending the oral cavity.

papilloma and lipoma^(1,2). In the present case, pathological findings demonstrated that the polyp was angiofibromyolipoma. Microscopically it was covered by nondysplastic squamous mucosa and composed of fibrous tissue, vascular structure and muscular fibers. There was no case with a mass consisting four components in a same tumor belonging to esophagus in the literature. Benign intraluminal esophageal tumors are slow growing, pedunculated masses that usually arise from the wall of the upper third of the esophagus. One can infer from the anatomy and physiology of the cricopharyngeal valve and the upper esophagus, the manner in which polypoid lesions could

develop in this location. The cricopharyngeal valve, also known as the upper esophageal sphincter comprises the cricopharyngeal muscle sling laterally and posteriorly and the posterior lamina of the cricoid cartilage anteriorly⁽²⁾. It is theorized that the polypoid tumors begin as nodular submucosal thickenings or redundant folds⁽¹⁾. The lack of muscular support, changes in the intrinsic tension of the mucosa over the loose underlying submucosa when the larynx is elevated during deglutition and pressure differentials between the tonically contracted cricopharyngeal muscle and the smooth peristaltic wave of the lower pharyngeal and the upper esophageal musculature may

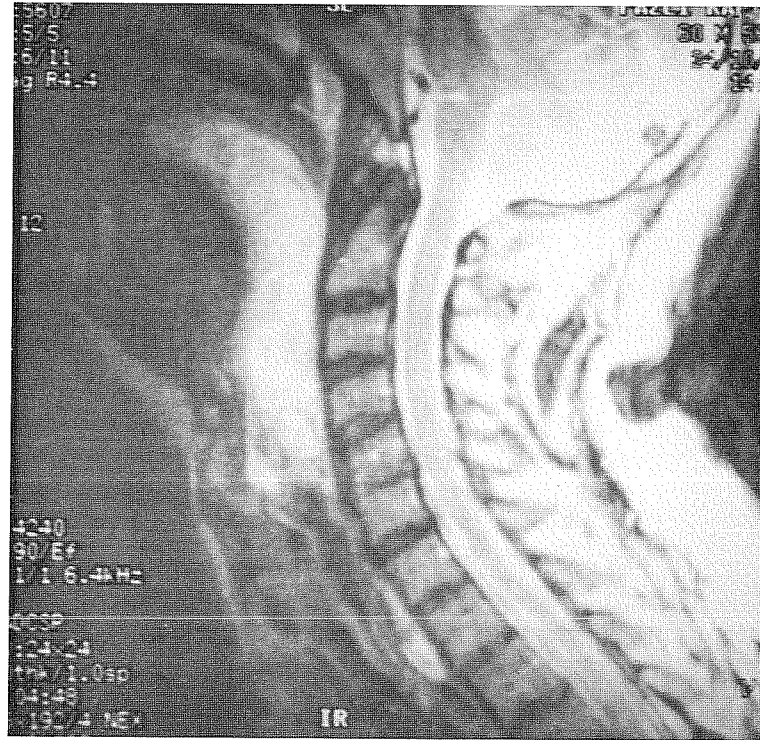


Figure 3. MRI finding: Sagittal T2 weighted image.

contribute to mucosal polypoid degeneration. The peristaltic forces generated during swallowing then mold the polypoid tumor into giant proportions⁽³⁾.

Giant esophageal tumors, especially fibrovascular polyps, produce few symptoms until they reach an impressive size. They can attain giant proportions, usually >10 cm and as large as 22.9 cm⁽⁴⁾. Dysphagia is the most common symptom. Some of the other complaints include regurgitation of recently ingested food, odynophagia, anorexia and weight loss. Respiratory complaints have also been described such as cough attacks, dyspnea or sore throat. Asphyxia due to laryngeal impaction of a regurgitated fibrovascular polyp has been well described

in the literature⁽⁵⁾. The unusual presentation of the patient who regurgitated a fleshy mass and unsuccessfully attempted to bite off the mass as it protruded through the mouth, only to reswallow it, has been cited. In the case presented here respiratory complaints such as cough attacks, asphyxia, dyspnea were seen. The patient admitted with the mass out of his mouth and hold in his hand. The tumor was 22 cm in length, which was one of the largest polypoid tumors seen in the literature.

The diagnosis is suggested clinically, by endoscopy or barium esophagogram in most cases⁽⁶⁾. On the barium swallow the polypoid tumor appears as a smooth intraluminal filling defect attached by a stalk at the level of



Figure 4. Gross specimen of resected polypoid tumor.

the cricopharyngeal muscle. Endoscopically it can be seen as a smooth intraluminal mass, lined by normal appearing mucosa resembling that of the esophagus. During endoscopy it is essential to establish the pedunculated nature of the mass and the level of attachment of the stalk, information that would prove helpful in planning the surgical excision. It is not easy to determine the site of surgical approach if the tumor is more larger than obvious.

CT and MR imaging can be helpful in describing the tissue elements of the mass and anatomic information about the site of origin of the stalk.

Surgical excision is the definitive treatment for these tumors. Lateral esophagotomy is advocated for optimal exposure and control of the airway during

excision. This approach allows for suture ligation of any large vessels, which have been reported to be a source of serious hemorrhage when removed endoscopically via a snare technique. Tracheotomy allows for controlled ventilation until the polyp can be completely excised. If for some reason surgical resection is not immediately feasible, tracheotomy will ensure airway protection until definitive excision can be performed.

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