

Fibro-Vascular Polyp of the Hypopharynx -- A Case Report

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Abstract: We report the unusual case of a 85 year old woman presented with difficulty in swallowing food, sensation of mass in the throat since one year and cough with regurgitation of pink tubular mass from the mouth hung out of the mouth down to the chin since 15 days. On clinical examination the polyp was found arising from left side of hypopharynx. The polyp was excised per orally by laryngo microscopic technique using CO₂ Laser. We report the case because of rarity of Hypo pharyngeal polyp.



Fig: 1- Regurgitated Hypopharyngeal Polyp.

I. Introduction

Fibrovascular polyps of oesophagus and hypopharynx are benign tumors of upper digestive tract. They represent approximately 0.03% of all esophageal and hypo pharyngeal neoplasms(1). The majority originate from the upper third of the oesophagus, rarely from the hypopharynx and extremely rarely from the oropharynx. They may vary greatly in size. They can grow to extreme size over several years resulting in common designation as “giant fibrovascular polyps”. In most cases they are completely asymptomatic, present with nonspecific symptoms that are occasional with oesophageal and respiratory obstruction.

The most common symptoms are difficulty in swallowing and the feeling of foreign body in the throat. Specific feature FVP is regurgitation of fleshy mass into mouth. Other complaints are difficulty in breathing, dysphonia and weight loss, anaemia, asphyxia and laryngeal destruction.

They histologically comprise of fibrous tissue, adipose tissue and vascular structures which are covered with squamous epithelium. The world literature contains about 110 cases of giant oropharyngeal oesophageal polyps (>5 cms) they are most often successfully treated by per oral, cervicotomic or thoracotomy surgery, they also can be managed by endoscopy(2).

II. Case Report

We report a 85 year old female patient presented with Difficulty in swallowing food since 1 year more so since last one month. Sensation of mass in the throat during swallowing food. Cough with expectoration since 15 days. Pink tubular mass coming out and hanging from the mouth while coughing since 15 days. There is No H/o Change of Voice or Breathlessness, no Chocking attacks. No Significant Nasal /Ear Symptoms. No Bowel and Bladder Disturbances. Known Hypertensive on Treatment. Not a known Asthmatic /TB/ Diabetic.

On Imaging: Barium swallow oesophagus – showed filling defect in the upper end of oesophagus. MRI & CT SCAN – delineated polypoidal mass attached to the left side of the hypo pharynx.

Surgical Management:

The polyp was excised transorally by laryngoscopic surgery with CO 2 Laser ablation. The excised mass is pink smooth, sausage shaped and is measured 7 cms in length

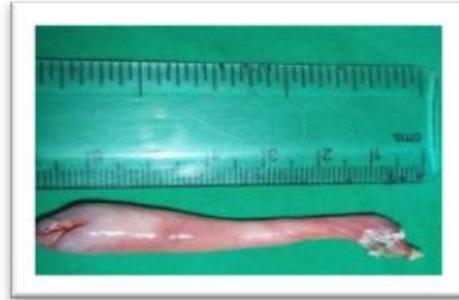


Fig: 2 Gross appearance of FVP, the dimension is about 7x2 cm-the polyp is covered with mucous membrane similar to that of the oesophagus.

Histopathology : Microscopy shows (Fig 3-A & 3-B) squamous lined mucosa of variable thickness and the stroma shows fibrovascular and fat tissue with small to large irregular lumened blood vessels showing no atypical features. Focal lymphocytic infiltrates present.

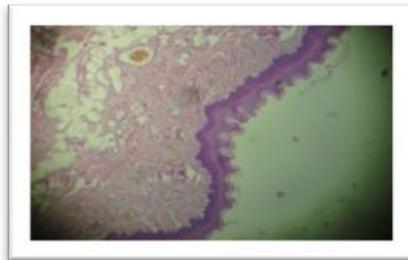


Fig: 3-A

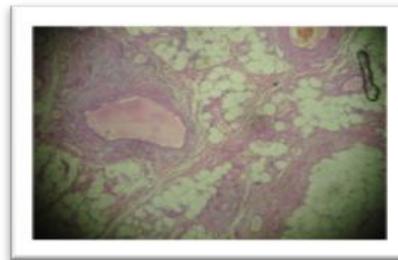


Fig: 3-B

Patient complaints completely disappeared in the early postoperative period and recurrence was not detected for one year follow up period.

III. Discussion

Fibrovascular polyps of oesophagus and hypopharynx are rarely encountered benign tumors of the upper digestive tract. Benign esophageal/hypopharyngeal tumors are rare and represent less than 1% of esophageal/hypopharyngeal neoplasms, Eg: Moersch and Harrington (3) discovered 44 (0.59%) benign esophageal tumors in 7459 consecutive autopsies at the mayo clinic. Most of these tumors are intramural, represented by leiomyomas, neurofibromas, and hemangiomas; the intraluminal lesions are represented by fibrolipomas, fibromyxomas, hamartomas, fibromas, and lipomas (4). These tumors are globally ranked by the world health organization as fibrovascular polyps. Fibro vascular polyps are mostly localized in the proximal oesophagus and are rarely originated from hypopharynx(5). In our case the fibro vascular polyp originated from the lateral wall of the hypopharynx. Fibro Vascular Polyps occur commonly in older men between 60 to 70 yrs of age and these polyps grow slowly(6). However seshul et al(7) and paik et al (8) reported a FVP in an infant respectively. FVP usually occur as solitary masses in the hypopharynx, were as Yet Nuyen et al(9) has reported a case of multiple polyps in the hypopharynx.

Fibrovascular polyps are expansions of the lamina propria, and are composed of a mixture of loose, collagenized, highly vascularized tissue and adipose tissue in various proportions(10). Depending on the predominant histologic components, these lesions have been called, lipomas, fibromas, fibrolipomas, fibromyxomas, fibroepithelial polyps or myxoid neurofibromas(10-12). To avoid potential misdiagnosis, the World Health Organization's international histologic classification of tumors recommends that the term fibrovascular polyp be used to classify all the lesions with the aforementioned characteristics (13).

Fibro vascular polyps are postulated to originate from areas of **Diminished resistance** in the pharyngeal musculature and to be initiated secondary to changes in pressure during the different Phases of swallowing (6-8). In a review of oesophageal and Hypopharyngeal fibrovascular polyps, Owens et al (6) describe two areas of Inherent weakness in the posterior wall of the hypopharynx. One between the superior and inferior cricopharyngeal muscles (**Killians dehiscence**) and the second between the inferior Cricopharyngeal muscle and the pharyngeal end of the Oesophagus also known as the area of laimer -haeckermann, or **laimer triangle**). Polyps are thought to originate from **nodular sub mucosal thickenings** or redundant sub mucosal

folds, which because changes in intrinsic mucosal tension and lack of muscular support, evaginate into the surrounding lax connective tissue. Then, through a mechanism of traction triggered by peristaltic activity, the size of these mucosal/submucosal “evaginations” increases to attain giant proportions (14-16).

Clinical spectrum varies from vague prolonged symptoms to life-threatening episodes of asphyxiation. Most commonly patients with FVPs report with progressive dysphagia, initially with solid food and then with liquids. The second most frequent symptom is the regurgitation of the polyp into the hypopharynx or oral cavity with the risk of aspiration into the airways, resulting in asphyxia (17-20). In a small percentage of patients, aspiration of the polyp may be the presenting symptom. Other symptoms include pharyngeal globus, weight loss, dysphonia, odynophagia, pharyngodynia, vomiting, abdominal pain, gastro-oesophageal reflux, hiccups, malena, and anaemia(21). The latter two symptoms are a result of ulceration of the apical part of the polyps due to gastric activity or reflux of gastric contents into the oesophagus. Malignant degeneration of these polyps is rare. When symptoms are vague, patients may be misdiagnosed as having a psychiatric disorder.

Fibrovascular polyps can be detected by either a barium esophagogram or gastroscopy. The former may reveal a dilated oesophagus, with a gross intraluminal defect usually arising in proximity to the UES. However the examination may be entirely negative especially if the polyp remains in contact with the oesophageal wall. The diagnosis, however, by gastroscopy, sometimes may be difficult or impossible because the fibrovascular polyp can completely or partially occupy the esophageal lumen, move against the oesophageal wall and thus present a similar appearance to the mucosa. Diagnostic suspicion can be confirmed with a rear view, because if the terminal part of the polyp protrudes into the gastric cavity, it may image as a “clapper of a bell”, thus illustrating the circumferential space between the two walls. EUS may be useful for diagnosis because it clearly highlights the fibrovascular axis of the polyp, the echogenic aspect of adipose tissue, and the presence of anechoic areas due to its vascular network. Finally, this imaging procedure can help in a diagnosis via a needle aspiration. CT and magnetic resonance (MR) can be useful in confirming diagnostic suspicion and in deciding the proper surgical approach. In particular, MR with axial, coronal and sagittal scans allows a precise identification of the stalk, an essential requirement for proper treatment.

Due to potentially disastrous complications, removal of benign oesophageal and hypopharyngeal polyps is strongly recommended. This can be achieved using a transoral, transcervical, transthoracic, or endoscopic approach, depending on the location and size of the polyp. Generally the removal of these polyps is curative and recurrence after resection is rare, however some authors have reported a recurrence (24, 25).

In conclusion, giant oesophageal polyps are extremely rare, benign tumors, whose removal is recommended because of the possibility of fatal consequences, bleeding and malignant transformation (rare). An adequate pre-operative evaluation to identify the correct origin of the stalk is mandatory for a successful endoscopic or surgical treatment. In addition to the removal of the giant polyp, all mucosal redundancy must be evaluated and possibly removed to avoid recurrences, which are rare but possible.

References

- [1]. Plachta A. Benign tumors of the esophagus. Review of literature and report of 99 cases. *Am J Gastroenterol* 1962; 38: 639-652 [PMID: 13943914].
- [2]. Caceres M, Steeb G, Wilks SM, Garrett HE. Large pedunculated polyps originating in the esophagus and hypopharynx. *Ann Thorac Surg* 2006; 81: 393-396 [PMID: 16368421 DOI: 10.1016/j.athoracsur.2005.05.106].
- [3]. Moersch HJ, Harrington SW. Benign tumor of the esophagus. *Ann Otol Rhinol Laryngol* 1944; 53: 800-817.
- [4]. Avezano EA, Fleischer DE, Merida MA, Anderson DL. Giant fibrovascular polyps of the esophagus. *Am J Gastroenterol*. 1990; 85:299-302.
- [5]. Jang GC, Clouse ME, Fleischner FG. Fibrovascular polyp: a benign intraluminal tumor of the esophagus. *Radiology*. 1969; 92:1196-1200.
- [6]. Shamji F, Todd TR. Benign tumors. In: Pearson FG, Cooper JD, Deslauriers J, Ginsberg RJ, Hiebert CA, Patterson GA, Urschel HC Jr, editors. *Esophageal Surgery*. 2nd ed. Philadelphia: Churchill Livingstone; 2002. pp. 637-654.
- [7]. Seshul MJ, Wiatrak BJ, Galliani CA, Odrezin GT. Pharyngeal fibrovascular polyp in a child. *Ann Otol Rhinol Laryngol*. 1998;107:797-800
- [8]. Paik HC, Han JW, Jung EK, Bae KM, Lee YH. Fibrovascular polyp of the esophagus in infant. *Yonsei Med J* 2001; 42: 264-266 [PMID: 11371118].
- [9]. Nuyens MR, Bhatti NI, Flint P. Multiple synchronous fibrovascular polyps of the hypopharynx. *ORL J Otorhinolaryngol Relat Spec* 2004; 66: 341-344 [PMID: 15668534].
- [10]. Lewin K, Appelman H. *Tumor of the esophagus and stomach*. 3rd ed. Washington, DC: Armed Forces Institute of Pathology, 1996; 145-61.
- [11]. Choong CK, Meyers BF. Benign esophageal tumors: Introduction, incidence, classification, and clinical features. *Semin Thorac Cardiovasc Surg* 2003; 15: 3-8.
- [12]. Ozelik C, Onat S, Dursun M, Arslan A. Fibrovascular polyp of the esophagus: Diagnostic dilemma. *Interact Cardiovasc Thorac Surg* 2004; 3: 260-2.
- [13]. Watanabe H, Jass JR, Sobin LH. *World Health Organization: Histological typing of oesophageal and gastric tumours*. 2nd ed. Berlin: Springer-Verlag, 1990; 16.
- [14]. Owens JJ, Donovan DT, Alford EL, McKechnie JC, Franklin DJ, Stewart MG, Schwartz MR. Life-threatening presentations of fibrovascular esophageal and hypopharyngeal polyps. *Ann Otol Rhinol Laryngol* 1994;103:838-842
- [15]. Whitman GJ, Borkowski GP. Giant fibrovascular polyp of the esophagus. CT and MR findings. *AJR Am J Roentgenol* 1989;152:518-520

- [16]. Partensky C, Partensky C, Caillon P, Berger F, Valette PJ, Moulinier B X-ray computed tomography in the diagnosis and treatment of fibrovascular polyp of the esophagus. *Chirurgie* 1988;114:217-222
- [17]. Penfold JB. Lipoma of the hypopharynx. *Br Med J.* 1952; 1:1286.
- [18]. Allen MS, Talbot WH. Sudden death due to regurgitation of a pedunculated esophageal lipoma. *J Thorac Cardiovasc Surg.* 1967;54:756-758
- [19]. Lejeune FE. Benign pedunculated esophageal tumors; report of a case. *Ann Otol Rhinol Laryngol.*1955;64:1261-1269
- [20]. Cochet B, Hohl P, Sans M, Cox JN. Asphyxia caused by laryngeal impaction of an esophageal polyp. *Arch Otolaryngol.* 1980;106:176-178.
- [21]. Kau RL, Patel AB, Hinni ML. Giant fibrolipoma of the esophagus. *Case Rep Otolaryngol.*2012;2012:406167
- [22]. Drenth J, Wobbes T, Bonenkamp JJ, Nagengast FM. Recurrent esophageal fibrovascular polyps: case history and review of the literature. *Dig Dis Sci.* 2002; 47:2598-2604.
- [23]. Lee SY, Chan WH, Sivanandan R, Lim DT, Wong WK. Recurrent giant fibrovascular polyp of the esophagus. *World J Gastroenterol.* 2009; 15:3697-3700.
- [24]. Drenth J, Wobbes T, Bonenkamp JJ, Nagengast FM. Recurrent esophageal fibrovascular polyps: case history and review of the literature. *Dig Dis Sci.* 2002;47:2598-2604. [[PubMed](#)]
- [25]. Lee SY, Chan WH, Sivanandan R, Lim DT, Wong WK. Recurrent giant fibrovascular polyp of the esophagus. *World J Gastroenterol.* 2009;15:3697-3700. [[PMC free article](#)] [[PubMed](#)]