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Esophagectomy in esophageal lipoma: Report of a case

Özofagus lipomunda özofajektomi: Vaka takdimi

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Lipoma is an uncommon benign tumor of the alimentary tract and its overall incidence is 4.1%, but that of the esophagus is extremely rare, with an incidence of only 0.4%. We present a case of esophageal lipoma. A 55-year-old man had a two-year history of dysphagia and odynophagia. Upper gastrointestinal system endoscopy showed a mass in the wall of the esophagus, occupying the lumen, and causing obstruction. Computed tomography and abdominal ultrasonography were performed because of endoscopic suspicion of submucosal tumor, and the mass was confirmed to be a lipoma in the wall of the esophagus. It was removed surgically by a thoracic approach. His symptoms resolved after the operation. Surgical excision by enucleation of the tumor is the preferred treatment of esophageal lipoma, but opening of the esophageal mucosa during this procedure is a rare cause for esophageal resection.

Key words: Esophagus, lipoma, esophagectomy

Lipom; insidansı %4.1 olan sindirim sisteminin nadir görülen benign bir tümörüdür, fakat özofagusta %0.4 gibi son derece düşük oranda olduğu saptanmıştır. Bu makalede bir özofagus lipomu vakası takdim edilmektedir. 55 yaşında bir erkek hastada 2 yıldır disfaji ve odinofaji mevcuttu. Üst gastoinestinal system endoskopisinde özofagus duvarında, lümeni daraltan kitle saptandı. Endoskopik olarak submukozal bir tumor şüphesi olduğu için hastaya bilgisayarlı tomografi ve abdominal ultasonografi yapıldı ve kitlenin özofagus lipomu olduğu doğrulandı. Bu kitle torasik yaklaşımla cerrahi olarak eksize edildi. Hastanın şikayetleri ameliyattan sonra tamamen geriledi. Özofagus lipomunun tercih edilen tedavi şekli cerrahi olarak tümörün enükleasyonla eksizyonudur, fakat işlem sırasında özofagus mukozasının açılması bu hastalıkta özofagus rezeksiyonu gerektirebilen nadir bir nedendir.

Anahtar kelimeler: Özofagus, lipom, özofajektomi

INTRODUCTION

Lipoma of the alimentary tract is uncommon, with an overall incidence of 4.1%, but that of the esophagus is extremely rare with an incidence of only 0.4% (1). We report herein a patient with dysphagia and odynophagia due to compression by an esophageal lipoma. We present a rare cause for esophageal resection in patients suffering from esophageal lipoma and suggest a treatment modality for inadvertent opening of the lumen of the esophagus.

CASE REPORT

A 55-year-old man was seen three months before in the Gastroenterology Department in another hospital, with long-duration dysphagia and odynophagia (2 years). A large intraluminal mass in the esophagus was determined in the upper gastrointestinal endoscopy.

He was admitted to our clinic. His clinical findings included weight loss, mild fever and mild leukocytosis. The general physical examination was normal. The erythrocyte sedimentation rate was 89 mm and tumor markers were in normal range. Endoscopy was reperformed and showed a large intraluminal mass, occupying the proximal half of the esophageal lumen, covered by normal mucosa and arising on the posterior wall (Figure 1).

Computed tomography and abdominal ultrasonography were performed because of endoscopic suspicion of submucosal tumor. The mass was confirmed to be a lipoma in the wall of the esophagus.

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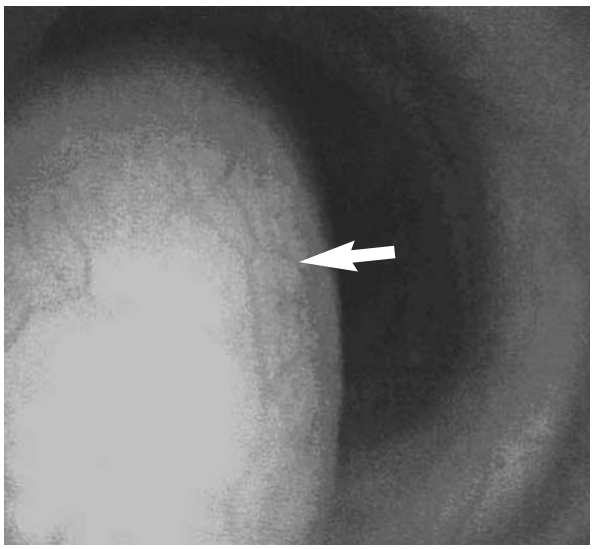

Figure 1. Endoscopy of lipoma of the esophagus. Upper gastrointestinal endoscopy shows a large, lobulated intraluminal mass within proximal half of the esophageal lumen, covered by normal mucosa, which arose on the posterior wall (arrow = lipoma of the esophagus)

Computed tomography demonstrated an intraluminal pedunculated mass, with a consistency suggesting lipoma; abdominal ultrasonography showed no remarkable lesion in the abdomen.

The tumor was removed by right-side thoracotomy. Enucleation of the mass was the planned operative strategy. During dissection of the mass, the lumen of the esophagus was opened. Therefore, segmental esophagectomy and esophagogastrostomy were performed.

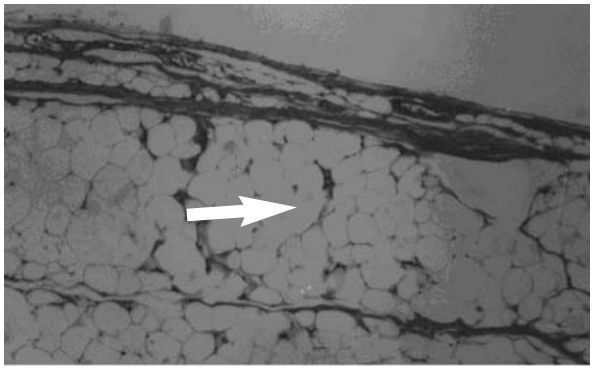

Figure 2. Light microscopy of lipoma of the esophagus. Histopathological examination of the specimen shows lobules of mature adipose tissue (hematoxylin and eosin, ×100; arrow = mature adipose tissue)

Gross examination of the specimen showed a well-circumscribed encapsulated mass, which measured 4.5×3×2 cm. The cut surface was soft and bright yellow, resembling lipoma. Histological examination revealed large mature lipocytes. There was neither increased mitotic activity nor lipoblasts (Figure 2).

The post-operative course of the patient was uneventful. His symptoms resolved after the operation.

DISCUSSION

Lipomas of the esophagus commonly present with dysphagia (2). There may be symptoms of odynophagia, recurrent melena (3) and mechanical compression of the upper respiratory tract (4). In adults, most esophageal lipomas are pedunculated and located in the cervical esophagus (5), which commonly assume giant proportions occupying a significant length of the esophagus (6) and may be regurgitated and cause death by suffocation (7, 8).

Esophageal lipomas may have malignant differentiation because of the vascularity of large benign polyps (9), and ulceration may complicate the problem (6). The diagnosis depends on endoscopic examination and computed tomography, to evaluate the origin, extent, surface and consistency of the mass (10).

Surgical excision by enucleation is the preferred treatment of esophageal lipoma. Oral route (7, 8), cervical esophagotomy (5), and endoscopic removal (11) are available options. If the tumor is in the thoracic esophagus, thoracotomy is advocated as an invasive, but safe technique (5). In our case, the tumor was in the thoracic esophagus and therefore was removed by right-side thoracotomy. Operative treatment was planned by enucleation of the mass, but despite careful dissection, the esophageal lumen was opened. Since primary repair of the esophageal wall carries high incidence of obstruction and leakage and subsequent mediastinitis, segmental esophagectomy and esophagogastrostomy were performed despite the invasiveness and morbidity. Symptoms of the patient resolved after operation. Surgical excision by enucleation of the tumor is the preferred treatment of esophageal lipoma, but opening of the esophageal mucosa during this procedure is a cause for esophageal resection.

In conclusion, we suggest esophagectomy in cases with inadvertent opening of the esophageal lumen during enucleation of the lipoma, due to safety of the procedure and improvement in the patient's symptoms.

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REFERENCES

1. Mayo CW, Pagtalunan RJG, Brown DJ. Lipoma of alimentary tract. Surgery 1963; 53: 598-603.
2. Sossai P, De Bernardin M, Bissoli E, et al. Lipomas of the esophagus: a new case. Digestion 1996; 57: 210-2.
3. Zschiedrich M, Neuhaus P. Pedunculated giant lipoma of the esophagus. Am J Gastroenterol 1990; 85: 1614-6.
4. Hasan N, Mandhan P. Respiratory obstruction caused by lipoma of the esophagus. J Pediatr Surg 1994; 29: 1565-6.
5. Akiyama S, Kataoka M, Horisawa M, et al. Lipoma of the esophagus-report of a case and review of the literature. Jpn J Surg 1990; 20: 458-62.
6. Patel J, Kieffer RW, Martin M, et al. Giant fibrovascular polyp of the esophagus. Gastroenterology 1984; 87: 953-6.
7. Taff ML, Schwartz IS, Boglioli LR. Sudden asphyxial death due to prolapsed esophageal fibrolipoma. Am J Forensic Med Pathol 1991; 12: 85-8.
8. Allen MS Jr, Talbot WH. Sudden death due to regurgitation of a pedunculated esophageal lipoma. J Thorac Cardiovasc Surg 1967; 54: 756-8.
9. Bak YT, Kim HJ, Kim JG, et al. Liposarcoma arising in a giant lipomatous polyp of the esophagus. Korean J Intern Med 1989; 4: 86-9.
10. Kang JY, Chan-Wilde C, Wee A, et al. Role of computed tomography and endoscopy in the management of alimentary tract lipomas. Gut 1990; 31: 550-3.
11. Yu JP, Luo HS, Wang XZ. Endoscopic treatment of submucosal lesions of the gastrointestinal tract. Endoscopy 1992; 24: 190-3.