

Esophageal Inflammatory Polyp and Accompanying Diverticulum: Report of a Case and Review of the Literature

Divertikül ile Birlikte Özofageal İnflamatuar Polip: Bir Olgu Sunumu ve Literatürün Gözden Geçirilmesi

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ABSTRACT Simultaneous polyps and diverticulum of the esophagus has been extremely rarely reported in the medical literature. We report a 38-years-old female complaining of intermittent dysphagia and odynophagia. A barium meal study showed an esophageal diverticulum. Fiberoptic esophagoscopy confirmed multiple small size polypoid lesions and a diverticulum. Right thoracotomy and diverticulectomy was performed because of dysphagia and odynophagia. During surgery, we observed a tight adhesion between the left main bronchus and the esophageal diverticulum. Additionally, we noticed that the diverticulum was about to form a fistula in the esophagus and left main bronchus. However, there was no complete fistula formation. The final pathological diagnosis was inflammatory polyp and diverticulum of the esophagus together with infective cells.

Key Words: Esophageal neoplasms; diverticulosis, esophageal

ÖZET Özofageal divertikül ve poliplerin birlikte bulunması tıbbi literatürde oldukça nadir bir bulgudur. Biz disfaji şikayeti olan 38 yaşında bir kadın olguyu sunmaktayız. Baryumlu çalışmada özofagus divertikülü görüldü. Fiberoptik özofagoskopide birden fazla küçük boyutlu polipoid lezyonlar ve divertikül saptandı. Divertikül varlığı ve yutma güçlüğü şikayeti nedeni ile sağ torakotomi ve divertikulektomi ameliyatı yapıldı. Ameliyat sırasında, sol ana bronş ve özofagus divertikülü arasında sıkı yapışıklık olduğu gözlemlendi. İlave olarak, bu sıkı yapışıklığın özofagus ile sol ana bronş arasında neredeyse fistül oluşumuna yol açmak üzere olduğu, ancak henüz fistül oluşmadığı gözlemlendi. Nihai patolojik tanı inflammatuar polip ve infektif hücrelere sahip özofagus divertikülü olarak rapor edildi.

Anahtar Kelimeler: Özofagus tümörleri; divertikülozis, özofageal

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Esophageal benign tumors, like polyps, are very rare and usually asymptomatic. They are diagnosed only when their size induces dysphagia.¹ Esophageal polyps together with esophageal diverticulum are both extremely rare and sporadic. Esophageal polyps almost always originate from the cervical esophagus, usually at the level of the upper esophageal sphincter. In medical literature, it is hard to define the actual prevalence of esophageal polyps since the occurrence of benign esophageal tumors is less than 1% according to autopsy studies dating back to 1968.² Simultaneous esophageal polyps and esophageal diverticulum has not yet been reported in the literature. We report a new sporadic and very interesting

case of small-size multiple esophageal polyps accompanying an esophageal diverticulum.

CASE REPORT

The case was a 38-year-old woman with the complaints of intermittent dysphagia, odynophagia and 10 kg weight loss over the period of previous six months. She was referred to our clinic from the gastroenterology department. She had these complaints for the previous six months. A barium meal study demonstrated a filling defect and polypoid lesions of the esophagus at the level of the 6th and 8th thoracic vertebrae. It also, showed a diverticulum of the esophagus at the same level (Figure 1A).

Initial endoscopic investigation confirmed multiple small esophageal polypoid lesions between the middle and the distal levels of the esophagus, together with a large diverticulum of the esophagus at the 28 cm level (Figure 1B and 1C). Endoscopic biopsies of the polyps and diverticulum revealed benign disorders like esophagitis.

The case was determined to have a diverticulum and multiple small sized esophageal polyps in the thoracic esophagus. Right thoracotomy was performed because of the complaint of dysphagia and the presence of a diverticulum. Surgical exploration demonstrated a diverticulum in the middle level of the esophagus. There was a tight adhesion between left main bronchus and diverticulum similar to an esophago-left main bronchial fistula, but there was no complete fistula formation. In surgery we performed an esophagotomy, diverticulectomy, and the primary closure of the esophagus with reinforcement using pleura. We sutured two layers in esophagus, first layer (mucosa) was sutured with absorbable 3/0 polyglactin 910 suture (Coated Vicryl; Johnson & Johnson Professional Export Company Ethicon Limited, Edinburgh, England) and second layer (muscle) was sutured with a non-absorbable suture, 3/0 silk (Eurosilk; Medico (Huaian) CO, LTD, Huaian city, Jiangsu province, P.R.C). The final pathological diagnosis was small size fibrous polyps and diverticulum of the esophagus containing infective cells (Figure 2).

The patient was discharged from the hospital on the postoperative 10th day. A control barium meal study performed three months after surgery was normal (Figure 3). The patient was followed up one year postoperatively with no complaints and she was in an excellent state of health one year later, in her final follow-up.

DISCUSSION

Inflammatory fibrous polyps are very rare, benign tumors of the esophagus with a very slow growth rate. However, when they occur, they most frequently originate in the cervical esophagus.³ They commonly present with dysphagia, hematemesis and odynophagia or with chest discomfort.⁴ It may be hypothesized that they grow as nodular submucosal thickenings or redundant folds. The lack of muscular support, the changes in the normal mucosa tension and the peristaltic forces generated during deglutition by the hypopharynx and esophagus may all contribute to mucosal polypoid degeneration.⁵

While esophageal inflammatory fibrovascular polyps are usually found proximal to the cervical esophagus, only extremely rare cases have been reported at mid-esophageal localization.⁶ However in our case the polyps were shown in the thoracic esophagus. Although in rare instances multiple locations have been reported, inflammatory fibrous polyps occur almost always as single lesions.⁷ In contrast, our case presented with multiple small-sized inflammatory polyps in the thoracic esophagus and additionally, a diverticulum with a tight adhesion to left bronchus; an esophago-left main bronchial fistula was about to form, however there was no complete fistula formation. In medical literature, there are only a few articles reporting simultaneous esophageal diverticulum and inflammatory polyps.^{8,9} We presented a case of inflammatory esophageal polyps with an accompanying diverticulum. Localization of the diverticulum suggests that it is a traction type esophageal diverticulum. However, the patient had none of the concomitant diseases mentioned above, and she had a normal physical examination with normal laboratory tests. However, it is hard to explain the

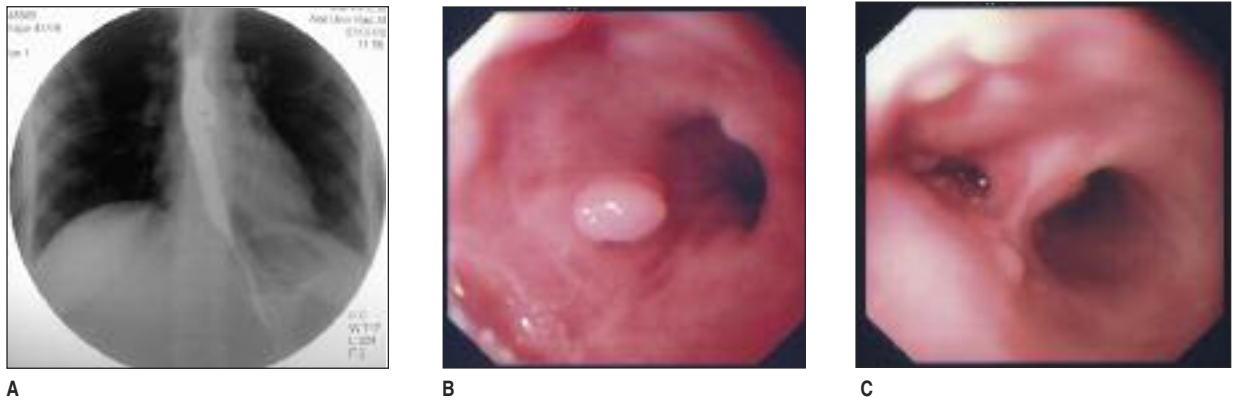


FIGURE 1: A. Preoperative barium meal study showing a filling defect and diverticulum of the middle level of the esophagus. B. Fiberoptic endoscopy showing a small-size polyp of the thoracic esophagus. C. Fiberoptic endoscopy showing a diverticulum of the middle level of the esophagus.

formation of a tight adhesion between esophagus and left main bronchus. The symptoms of the patient depend on the place of the tumor. In cases with esophageal polyps, the most frequent symptom is dysphagia, as in our case. The complaint of dysphagia generally depends upon the size of the tumor, however, we believe it is important to underline that our patient did not have a very large size tumor; nonetheless the size of the polyps in our case was not negligible so that they were able to cause a diverticulum.

Besides clinical approaches, radiologic and endoscopic interventions took an inevitable part in diagnosing this lesion. A differential diagnosis from other benign esophageal tumors (among which the most frequent is leiomyoma) can be made through endoscopy. In our case, the diagnosis of polypoid mass did not depend on the presenting clinical symptom (dysphagia), but the endoscopic findings. It was very interesting to find esophageal polyps and thoracic esophageal diverticulum together in the same patient with dysphagia and odynophagia. Additionally, demonstration of a tight adhesion to the left main bronchus which could easily lead to an esophago-left main bronchial fistula makes this case even more important.

The final diagnosis was achieved by the pathologist, who found a diverticulum that presented eosinophilic infiltration of a characteristic connective stroma with esophagitis. The definitive for polyps without a diverticulum depends on both

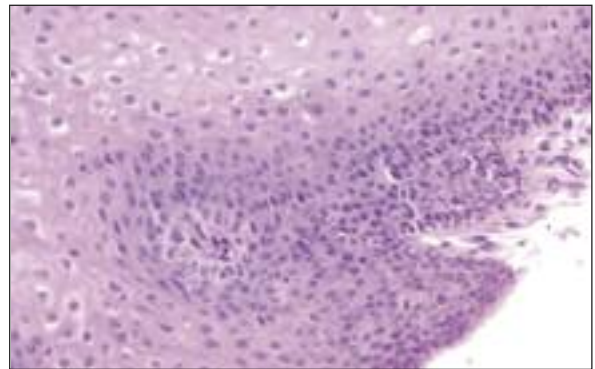


FIGURE 2: Histopathological investigation showing esophageal submucosal fibrous tissue related to esophageal poly H&E, x10.

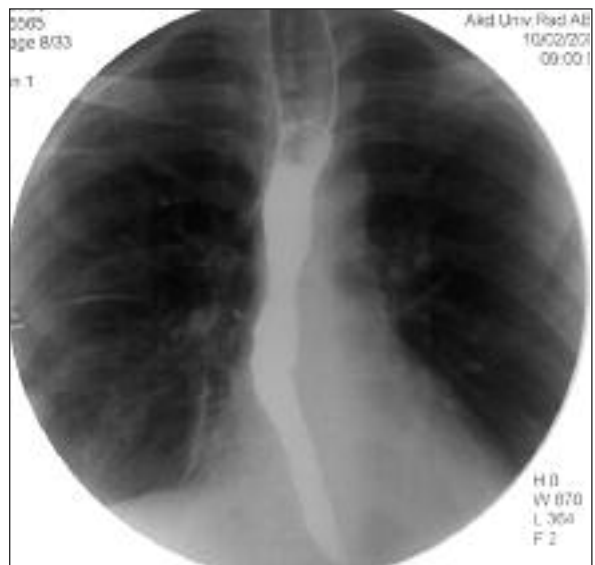


FIGURE 3: Postoperative barium meal study showing a normal esophagogram.

their localization and clinical presentation. In the presence of small esophageal polyps, endoscopic polypectomy can be performed with good results. However, for the larger polyps (more than 3 cm in diameter), the decision of performing endoscopic polypectomy should be made with great caution, and the possibility of bleeding or perforation during the intervention should be taken into account.¹⁰ In our case, although there were quite small-sized esophageal polyps in the thoracic part of the esophagus, the presence of the thoracic esophageal di-

verticulum led to the decision of performing a surgical excision. Thus we performed total surgical excision of the diverticulum via a right thoracotomy.

This case may suggest that; esophageal inflammatory polyps may occur together with esophageal diverticulum.

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