

# A New Technique for the Management of Postoperative Esophagojejunal Stricture: Balloon Dilation after Endoscopic Incision with Sphincterotomy

Postoperatif Özofagojejunal Darlık Tedavisinde Yeni Bir Teknik: Sfinkterotomi ile Endoskopik İnsizyon ve Balon Dilatasyonu Gastroenteroloji Başvuru: 07.09.2019 Kabul: 08.11.2019 Yayın: 13.01.2020

Murat Kekilli<sup>1</sup>, Alpaslan Tanoğlu<sup>2</sup>, Tolga Düzenli<sup>2</sup>, Serkan Öcal<sup>3</sup>

<sup>1</sup> Ankara Eğitim ve Araştırma Hastanesi
<sup>2</sup> Sultan Abdülhamid Han Eğitim ve Araştırma Hastanesi
<sup>3</sup> Başkent Üniversitesi Tıp Fakültesi

# Özet

Özofagojejunal anastomoz darlıkları postoperatif süreçte karşılaşılabilen ve genellikle minimal invaziv prosedürler ile tedavi edilen bir komplikasyondur. Bu yazıda, postoperatif benign özofagojejunal darlığı olan ve yeni bir endoskopik teknik ile tedavi edilen 63 yaşındaki hasta tanıtılmıştır. Sfinkterotomi ile özofagusta darlık olan alana paralel olarak 4-5 radyal insizyon yapılmış ve 25 mm çaplı endoskopik balon ile dilate edilmiştir. Bu olguyu sunma nedenimiz, sfinkterotomi ile insizyonel tedavinin kolay, iyi tolere edilebilen ve güvenli bir tedavi şekli olduğunu göstererek, bu tedavi şeklini desteklemektedir. Bu yeni teknik, balon dilatasyon ve stent verleştirmeye uygun olmayan veya ameliyatı reddeden hastalar için faydalı ve etkili bir alternatif prosedür olabilir.

**Anahtar kelimeler:** Endoskopik insizyon, Özofagojejunal darlık, Sfinkteratomi

# Abstract

Esophagojejunal anastomotic stricture is not an uncommon situation and minimal invasive procedures can easily save patients from big surgical operations. Herein, we present a 63- year-old patient with postoperative benign esophagojejunal stricture who was managed with a new endoscopic technique. We performed four to five radial incisions parallel to the longitude of the esophagus with sphincterotomy and then dilated the esophagus by 25 mm diameter endoscopic balloon. This endoscopic technique showed that sphincterotomic incisional treatment is easy to perform, well tolerated, and safe. This technique may be useful and an effective alternative procedure in patients with esophagojejunal anastomotic strictures who are not suitable for balloon dilation and stent placement or denying surgery.

**Keywords:** *Esophagojejunal stricture, Endoscopic incision, Sphincterotomy* 

### Introduction

In this era gastric cancer is globally one of the most commonly seen, highly mortal malignancy in the world. Approximately one third of the patients with gastric cancer undergo total gastrectomy (TG) with esophagojejunal anastomosis <sup>1</sup>. In the literature, frequency of benign postoperative anastomotic strictures at the esophagojejunostomy site ranges from 1.2% to 7.9% and strictures usually occur due to intraoperatively mechanical stapling. <sup>2,3</sup> Generally, benign esophagojejunal anastomotic strictures are managed by endoscopic techniques including bougie or balloon dilation, electrocautery therapy, self expanded stent placement, laser ablation, corticosteroid injection and surgery <sup>4</sup>. In this clinical problem, endoscopic balloon dilation techniques are usually performed with good outcomes, but no one dilation method is superior to others <sup>5</sup>. On the other hand, sometimes patients with severe anastomotic strictures are not suitable for endoscopic balloon dilation. In these cases, using new therapeutic endoscopic techniques before endoscopic balloon dilation may secure favorable consequences. Here, we present a case of postoperative benign esophagojejunal stricture which was managed with a new endoscopic technique.

Corresponding Author: Tolga Düzenli , Sultan Abdülhamid Han Eğitim ve Araştırma Hastanesi, Tıbbiye Caddesi, Üsküdar/İstanbul

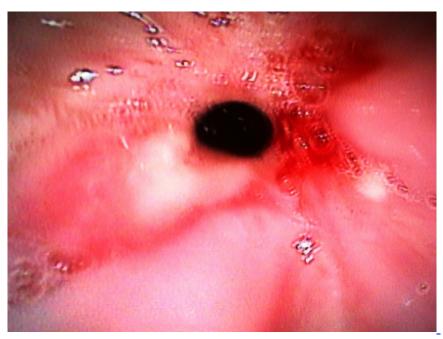
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tolgaduzenli@yahoo.com



## **Case Report**

A 63-year-old male was admitted to our gastroenterology outpatient clinic because of nausea, vomiting and weight loss. Five months ago, he underwent TG with esophagojejunal anastomosis using mechanical stapling technique. One month after TG he was admitted to another health center because of nausea and vomiting. Endoscopic intervention was performed and esophagojejunal anastomotic stricture was diagnosed. At that center, endoscopic balloon dilation was performed successfully and his symptoms were relieved. Four months after the endoscopic balloon dilation, he was referred to our outpatient clinic because of similar complaints. In our endoscopic examination severe anastomotic stricture was diagnosed (Figure 1).



#### Figure 1

Severe anastomotic stricture. Endoscopic balloon dilation could not be performed because of near total stricture and the case was not suitable for the endoscopic stent placement.

Endoscopic balloon dilation could not be performed because of near total stricture and the case was not suitable for the endoscopic stent placement. Then, he was consulted by general surgeons and surgical management was proposed to him for his severe anastomotic stricture, but he denied surgical intervention. As there was no other therapeutic alternative, we decided to perform repeat endoscopy using a new technique for the management of this benign anastomotic stricture. Under direct vision, four to five radial incisions parallel to the longitude of the esophagus were carefully performed with sphincterotomy and the procedure was terminated when the endoscope could easily pass through the stricture (Figure 2).





Figure 2 Four to five radial incisions parallel to the longitude of the esophagus were carefully performed with sphincterotom.

Olympus electrosurgical unit (UES-30 generator; Olympus, Ülke genellik ile ekleniyor) was used with a purecutting current at a power output setting of 50 W/s. After sphincterotomic incisions, 25 mm diameter endoscopic balloon dilation was performed successfully (Figure 3).



#### Figure 3

After sphincterotomic incisions, 25 mm diameter endoscopic balloon dilation was performed successfully.

No complication occurred during the procedure. 15 days later, control upper endoscopy was performed and



esophagojejunostomy site was seen as normal.

### **Case Discussion**

Esophagojejunal anastomotic stricture is not an uncommon situation and minimal invasive procedures can easily save patients from big surgical operations. Ournew endoscopic technique showed that sphincterotomic incisional therapy is easy to perform, well tolerated, and safe. This technique may be useful and an effective alternative procedure in patients with esophagojejunal anastomotic strictures who are not suitable for balloon dilation and stent placement or denying surgery.

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