

**Title:**

**Endoscopic submucosal hydro-dissection as a rescue treatment of a large recurrent lateral spreading tumor in an ileorectal anastomosis: a case report**

**Authors:**

Joaquín Rodríguez Sánchez, Mónica Sánchez Alonso, José Olmedo Camacho

DOI: 10.17235/reed.2018.5690/2018

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:

Rodríguez Sánchez Joaquín, Sánchez Alonso Mónica, Olmedo Camacho José. Endoscopic submucosal hydro-dissection as a rescue treatment of a large recurrent lateral spreading tumor in an ileorectal anastomosis: a case report. Rev Esp Enferm Dig 2018. doi: 10.17235/reed.2018.5690/2018.



*This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.*

NC 5690

**Endoscopic submucosal hydro-dissection as a rescue treatment of a large recurrent lateral spreading tumor in an ileorectal anastomosis: a case report**

Joaquín Rodríguez Sánchez, Mónica Sánchez Alonso and José Olmedo Camacho  
*Gastrointestinal Endoscopy Unit. Hospital General Universitario de Ciudad Real. Ciudad Real, Spain*

Received: 05/05/2018

Accepted: 13/07/2018

**Correspondence:** Joaquín Rodríguez Sánchez. Gastrointestinal Endoscopy Unit. Hospital General Universitario de Ciudad Real. C/ Obispo Rafael Torija, s/n. 13005 Ciudad Real, Spain. e-mail: joakinrodriguez@gmail.com

**ABSTRACT**

**Background:** subtotal colectomy with ileorectal anastomosis (IRA) is currently the most common surgical option in young patients with familial adenomatous polyposis (FAP). However, this surgery does prevent the appearance of lesions in the rectal remnant. In these cases, the endoscopic submucosal dissection might be a feasible option. However, drawbacks such as extreme fibrosis and a difficult maneuverability in the rectal remnant make this technique rather challenging. An ESD by the pocket creation method was planned with the purpose of overcoming these handicaps.

**Case report:** an en-bloc resection of 30 mm of the recurrent adenoma located in rectal remnant of a 42-year-old woman with FAP was successfully achieved following this approach. Two months of follow up endoscopy did not show residual adenomatous tissue.

**Discussion:** in summary, endoscopic submucosal dissection by the pocket creation method allowed a safe and effective dissection and an en-bloc resection of this challenging polyp was achieved.

**Key words:** Endoscopic submucosal dissection. Familial adenomatous polyposis. Pocket creation method. Ileorectal anastomosis.

## BACKGROUND

In patients with familial adenomatous polyposis (FAP), prophylactic subtotal colectomy with ileorectal anastomosis (IRA) does not prevent lesions appearing in the rectal remnant (1). When this occurs, endoscopic resection becomes difficult and highly ineffective (2). Therefore, patients are usually treated by additional proctectomy with a permanent ileostomy. Otherwise, endoscopic submucosal dissection (ESD) might be a rescue option. However, these cases remain a challenge even for ESD, due to several drawbacks such as dramatic fibrotic tissue and a hypervascularized area with a difficult access due to the anastomosis (dog ear sign) (3).

## CASE REPORT

We present the case of a 42-year-old female with FAP, who was diagnosed two years previously with a 3 cm granular homogeneous lateral spreading tumor (G-LST) that was located in the rectal remnant and extended to the IRA (Fig. 1). The lesion was treated ineffectively in two previous attempts via endoscopic mucosal resection and argon plasma coagulation. The patient was offered the endoscopic option prior to surgery and signed the informed consent prior to the procedure.

The tunnel below the lesion was performed using an Erbejet-2-HybridKnife (Erbe Elektromedizin GmbH, Tübingen, Germany). Therefore, the anastomotic area was reached using this technique, shown as a suture staple line. Subsequently, the staples were removed using a grasper in order to maintain an appropriate dissection plane. Once, the tunnel below the whole lesion was made, the dissection was completed in the retroflex position to achieve the en-bloc resection (Fig. 2). The pathological assessment identified a tubulovillous adenoma with high-grade dysplasia. Unfortunately, one lateral margin was affected by adenomatous tissue with low-grade dysplasia. Therefore, a close endoscopy follow-up 2 months after the resection was performed, which showed a scar with non-residual adenomatous tissue (Fig. 3).

## DISCUSSION

ESD as a rescue treatment of dramatic fibrotic adenomas seems to be a suitable approach, especially in areas close to the dentate line. Besides, the anatomy of this area allows us to safely descend the dissection plane, below the submucosal layer. According to our previous reported experience (4), we performed the pocket creation method (PCM) to easily overcome the two expected drawbacks: extreme fibrosis and difficult maneuverability (

5). In order to achieve the en-bloc resection, the ileorectal anastomosis had to be dissected, which caused a transmural defect (Fig. 2.F) that was closed by second intention healing. These encouraging results overlap with the previous reported experience (3). Therefore, the endoscopic treatment of challenging adenomas (fibrotic, recurrent or large size) located in the rectal remnant, even those affecting the surgical anastomosis, should be attempted. This is due to the fact that the lower rectum is a safe area and also the severe consequences of surgery, especially with regard to quality of life. On the other hand, it is important to underline that the rectal remnant has a poor maneuverability owing to the extreme stiffness caused by the surgery (dog ear sign), which could affect the technical feasibility of the ESD.

In conclusion ESD, especially performed by PCM, allows a complete en-bloc resection, even in difficult scenarios such as extreme fibrotic areas including colorectal anastomosis.

## REFERENCES

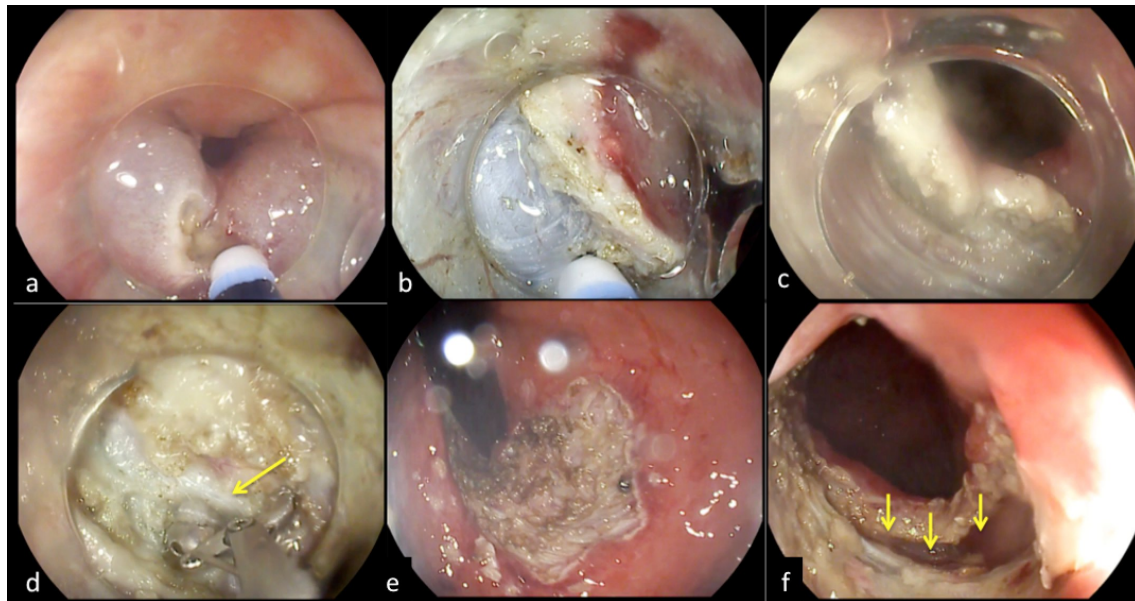
1. Koskenvuo L, Renkonen-Sinisalo L, Jarvinen HJ, et al. Risk of cancer and secondary proctectomy after colectomy and ileorectal anastomosis in familial adenomatous polyposis. *Int J Colorectal Dis* 2014;29:225-30. DOI: 10.1007/s00384-013-1796-4
2. Albéniz E, Pellise M, Gimeno-García AZ, et al. Clinical guidelines for endoscopic mucosal resection of non-pedunculated colorectal lesions. *Rev Esp Enferm Dig* 2018;110:179-94. DOI: 10.1016/j.gastrohep.2017.08.013

3. Sansone S, Nakajima T, Saito Y. Endoscopic submucosal dissection of a large neoplastic lesion at the ileorectal anastomosis in a familial adenomatous polyposis patient. *Dig Endosc* 2017;29:390-1. DOI: 10.1111/den.12834
4. Rodríguez Sánchez J, de la Santa Belda E, González López L, et al. Endoscopic transmural hydro-dissection as a rescue therapy for rectal fibrotic adenoma. *Endoscopy* 2018;50(6):E121-3. DOI: 10.1055/s-0044-101598
5. Sakamoto H, Hayashi Y, Miura Y, et al. Pocket-creation method facilitates endoscopic submucosal dissection of colorectal laterally spreading tumors, non-granular type. *Endosc Int Open* 2017;5:E123-9. DOI: 10.1055/s-0042-122778



**Fig. 1.** 3 cm LST-Granular type in rectal remnant involving the ileorectal anastomosis.





**Fig. 2.** ESD procedure. A: Initial steps of PCM close to the dentate line. B: Inside the tunnel. C: Tunnel below the whole lesion. D: Removing the staples (yellow arrow) of the ileorectal anastomosis. E&F: Scar appearance with the ileorectal anastomosis dissected (yellow arrows).



**Fig. 3.** Endoscopic follow-up 2 months after the procedure.