# Resseção endoscópica de lipoma submucoso gigante causando obstrução cólica e prolapso anal: técnica de resseção assistida por dupla laqueação

## *Endoscopic resection of a giant submucosal lipoma causing colonic obstruction and ball-valve anal prolapse: A double-ligate and resect technique*

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A 53-year-old woman with Sneddon syndrome and homozygous Factor V Leiden mutation under warfarin was referred to our institution due to intermittent obstructive symptoms such as constipation, abdominal pain and distension. She also reported a mass frequently prolapsing through the anus. The physical examination, including digital rectal examination during straining, was unremarkable.

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A colonoscopy was performed, showing a 65x45mm soft yellowish mobile lesion, with a short and thick pseudo-stalk, at the distal sigmoid colon, at 25cm from the anal verge, almost obstructing the entire lumen (figure 1, A-D). After warfarin withdrawal and bridging with low-molecular-weight-heparin (LMWH), an endoscopic resection was performed using the double-ligate and resection technique: application of two 30mm endoloops® (Olympus, Tokyo, Japan) on the pseudo-stalk, followed by *en bloc* resection above the two endoloops® using a 27mm diathermic snare (Captivator®, Boston Scientific, Boston, USA). Immediate post-resection oozing bleeding was managed with 1:10000 diluted-adrenaline injection and three endoclips were applied on the stump. Histopathology confirmed a submucosal lipoma completely resected (figure 2, A-H). LMWH bridging was prolonged and warfarin started only after seven days. The procedure was uneventful with the resolution of patient symptoms.

Although colonic lipomas are usually asymptomatic, they can cause symptoms such as bleeding, obstruction or intussusception.[1,2] Prolapse through the anus has been rarely reported.[3-5] There is no therapeutic algorithm in the literature for the approach of symptomatic colonic lipomas. Endoscopic treatment by unroofing, dissection-based resection, endoscopic mucosal resection and loop-assisted resection showed similar clinical remission and adverse events rates, with higher resection rates for endoscopic mucosal resection and loop-assisted resection. Therefore, it has been suggested that the ideal resection technique should depend on local expertise and patient profile.[6]

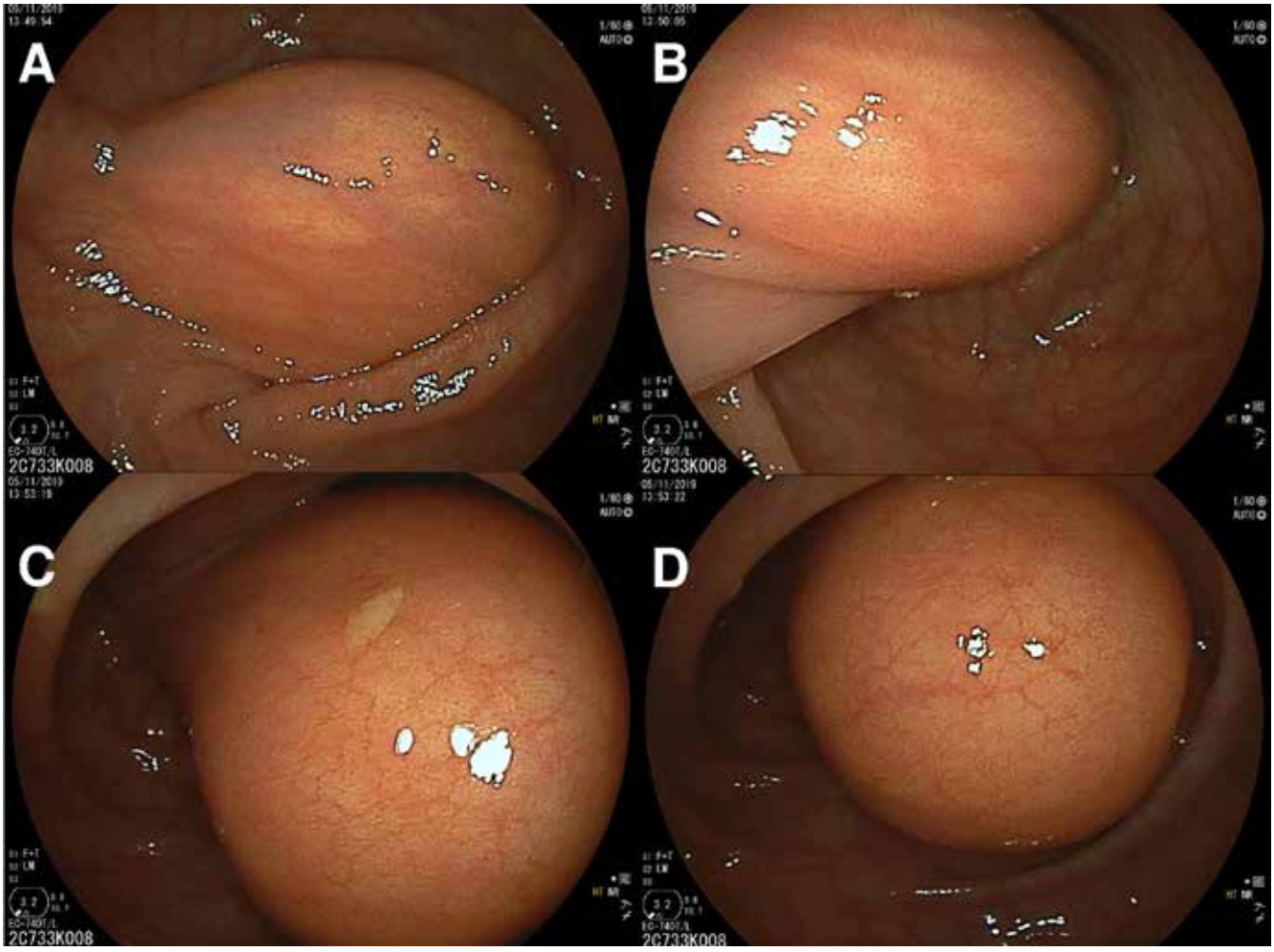


**FIGURE 1. A-D** Endoscopic image of a 65x45mm soft yellowish mobile lesion, with a short and thick pseudo-stalk, located at the distal sigmoid colon, obstructing practically the entire lumen.

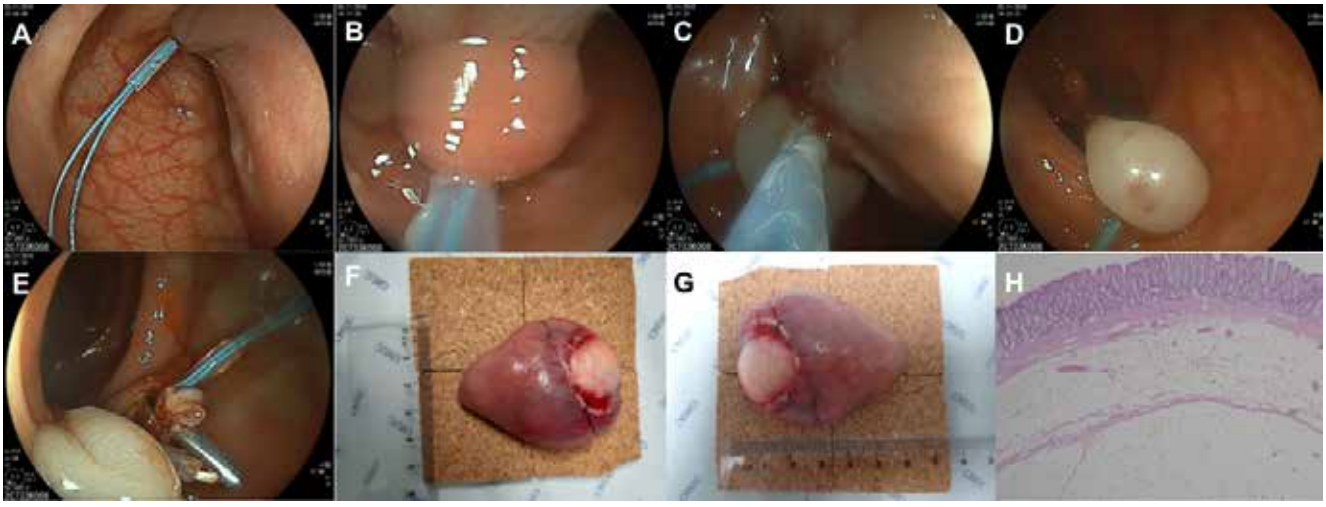


**FIGURE 2. A-H** Double-ligate and resect technique. A,B – Two endoloops® placed at the base of the pseudo-stalk. C – Endoscopic resection using a diathermic snare above the two endoloops®. D,E – Post-resection oozing bleeding at the resection site treated by combined therapy using 1:10000 diluted-adrenaline and three endoclips. F,G – Macroscopic resection specimen sizing 65x45mm. H –Adipocytes located below the muscularis mucosa (H&E 20x).

Given the hemorrhagic and thrombotic risk of our patient, a double loop-assisted resection technique was configured as a successful option, providing a definitive and safe approach. We present a successful endoscopic resection of a giant symptomatic lipoma in an anticoagulated patient complicated by colonic obstruction exhibiting ball-valve anal prolapse using a double-ligate and resect technique.

**Statement of Ethics**
The project was subjected to the standards of good clinical practice and always complied with the ethical precepts of the Helsinki's Declaration.

**Disclosure Statement**
The authors have no conflicts of interest to declare.

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