

# Large Pedunculated Lipoma of the Colon: Endoscopic Resection Using “Loop-and-Let-Go” Technique

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## Keywords

Pedunculated lipoma · Colon · Endoscopic resection · Loop-and-let-go technique

**Lipoma Pediculado do Cólon de Grandes Dimensões: Resseção Endoscópica Usando a Técnica “Loop-and-Let-Go”**

## Palavras Chave

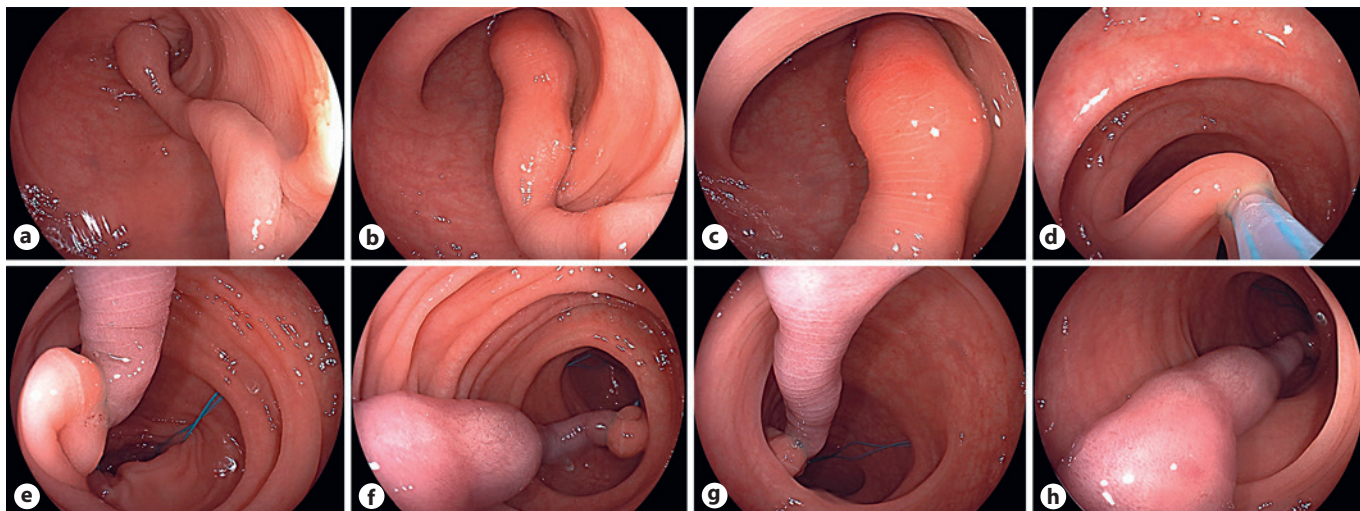
Lipoma pediculado · Cólon · Resseção endoscópica · Técnica “loop-and-let-go”

We report the case of a 57-year-old female patient with a medical history of osteoporosis, chromophobe renal cell carcinoma submitted to laparoscopic right radical nephrectomy, and nontoxic multinodular goiter under levothyroxine. There was no personal/family history of colorectal cancer. A total colonoscopy was performed due to abdominal pain in the lower quadrants of the abdomen, showing a large polypoid lesion located at 40 cm from the anal verge. The patient was then referred to our institution for colonic polyp resection. A rectosigmoidos-

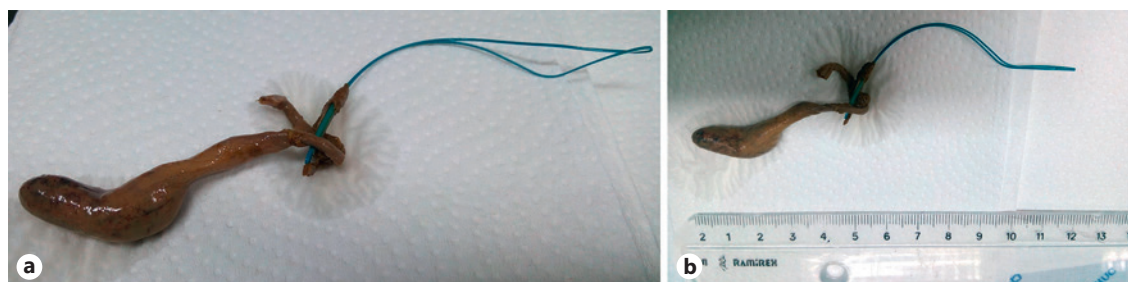
copy was performed showing a large, yellowish, and pedunculated subepithelial lesion with 30 mm of head diameter and 45 mm of stalk length, located at the sigmoid colon (Fig. 1a–c). Considering the lesion benignity in a symptomatic patient, it was decided to perform the polyp resection using a minimally invasive technique – “loop-and-let-go.” A 30-mm endoloop<sup>®</sup> (Olympus, Tokyo, Japan) was maneuvered to capture the lipoma’s head and then carefully placed at the stalk base. A visible reduction in lesion vascularization was verified following sheath-controlled closure (Fig. 1d–g). A formalin-filled container was given to the patient in case of polyp recovery. The patient recovered the colonic polyp within 4 days of endoscopic ligation and it was sent for histological characterization (Fig. 2a, b). Specimen histopathology showed a 30-mm adipose tissue on the submucosal layer, in relation to a fully-resected submucosal lipoma (Fig. 3a–c). The patient became asymptomatic with an uneventful course. Follow-up colonoscopy at 2 months was normal.

Gastrointestinal lipomas are rare subepithelial benign tumors, being more common in the colon [1–4]. Diagnosis is usually easy because of typical endoscopic features.

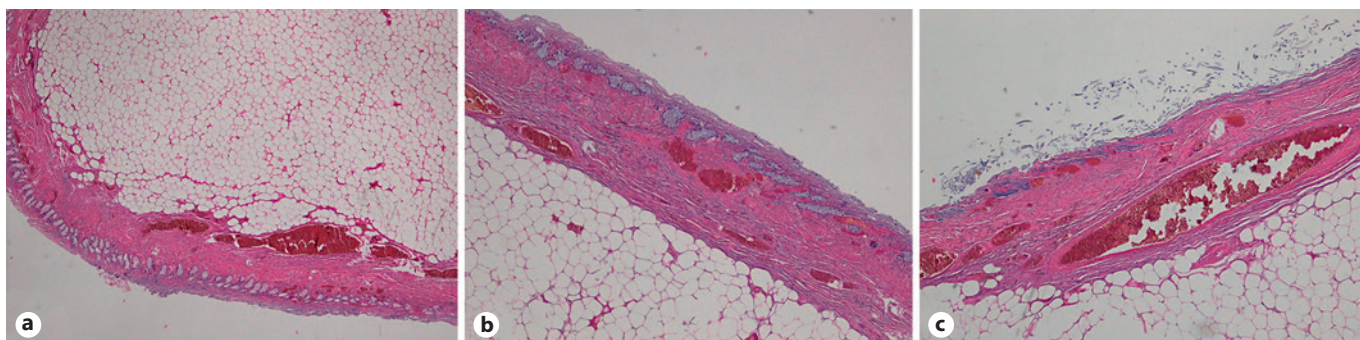
E.G.-S. and M.G.-S. contributed equally to this work.



**Fig. 1.** Endoscopic appearance of a large, yellowish, and pedunculated subepithelial lesion with 30 mm of head diameter and 45 mm of stalk length, located at the sigmoid colon (a–c). A “loop-and-let-go” technique was performed using a 30-mm endoloop® (Olympus, Tokyo, Japan), maneuvered to capture the lipoma’s head and then carefully placed at the base of the stalk, along its insertion on the colonic mucosa, with visible reduction of lesion vascularization following controlled closure using a sheath (d–g).



**Fig. 2.** Macroscopic appearance of the polyp recovered by the patient showing a 30-mm beige polypoid formation with a smooth outer surface and a very long and relatively thin stalk with 45 mm in length (a, b).



**Fig. 3.** Histopathology of recovered specimen showing 30 mm × 15 mm × 0.5 mm of mature adipose tissue at the submucosal layer, composed by adipocytes with small and peripheral nuclei and one large-sized vacuole, occasionally interspersed with thin fibrous septa, in relation to a submucosal lipoma (R0 resection) (a–c).

Large lipomas (>20 mm) may cause symptoms, such as abdominal pain, intestinal obstruction, or bleeding [1–5]. Treatment of colonic lipomas remains controversial. For symptomatic large lipomas, endoscopic resection may be considered. There is no standard technique for their resection and it should therefore be tailored according to the lesion characteristics [1–5]. Currently, there are several available techniques using electrocautery (snare polypectomy, unroofing, “ligate-and-resect,” “ligate-and-unroofing,” endoscopic mucosal resection (EMR), and endoscopic submucosal dissection) or not (“ligate-and-let-go”) [5]. Techniques using electrocautery are associated with a high risk of bleeding and perforation due to the lower water content of lipomas and consequently less efficacy in conducting electrosurgical current and need for higher amounts of energy or prolonged current delivery to complete the resection [1–3, 5]. Catchable pedunculated lipomas can be managed with “loop-and-let-go,” EMR, or “loop-and-resect” [1–5]. “Loop-and-let-go” is a recent noninvasive alternative technique with a negligible risk of these complications because of slow transection of the polyp stalk with a high success rate [1, 2, 4, 5]. Drawbacks of this technique include the need for correct stalk visualization, failure to recover the lesion for histopathological characterization and the potential need of further procedures [1, 4, 5]. The patient repositioning, two-endoloops® use, and unroofing can effectively obviate these limitations [4].

In our case of a large pedunculated lipoma with a long and relatively thin stalk, a “loop-and-let-go” technique using one endoloop® revealed a simple, safe, and effective procedure. Additionally, the subsequent recovery of the resected specimen by a cooperating patient represents another way to histological attainment, as an alternative to unroofing or “ligate-and-resect.”

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### Statement of Ethics

The informed consent was obtained for this case report

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### Disclosure Statement

None to declare.

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### Funding Sources

There was no grant support.

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### Author Contributions

Elisa Gravito-Soares and Marta Gravito-Soares contributed equally, writing the manuscript and reviewing the literature. Elisa Gravito-Soares is the article guarantor. João Fraga reviewed histopathological findings. Pedro Figueiredo reviewed the manuscript.

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