

## A rare cause of acute gastrointestinal hemorrhage: ileal lipoma

### Case report



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### A rare cause of gastrointestinal hemorrhage: ileal lipoma. Case report

Primary small bowel tumors account for 1-6% of all Gastrointestinal (G.I.) tract malignancies. Among these pedunculated lipomas are unusual. We report a case of a 66-year-old male with a history of G.I. hemorrhage and acute anemia, negative upper and lower endoscopies and a pedunculated lipoma in distal ileum, revealed by CT enterography. The patient was successfully treated by open surgery. Patients with G.I. hemorrhage and negative upper and lower endoscopies need an accurate evaluation of small bowel. Multislice CT enterography or Magnetic Resonance enteroclysis/enterography represent the fastest and more accurate tools to obtain an exhaustive evaluation of small bowel. In case of small bowel tumors this diagnostic procedures can show site and stage and can even suggest histological type of such neoplasms, with a significant impact in the surgical planning, avoiding time consuming surgical exploration. In this patient multislice TC enterography allowed a correct diagnosis of benign lipoma due to its radiological density and absence of infiltration of the intestinal wall and surrounding tissues.

KEY WORDS: CT enterography, Gastrointestinal hemorrhage, Lipoma, Small bowel

### Introduction

Primary small bowel tumors account for 1-6% of all G.I tract malignancies <sup>1-2</sup>. Primary lipomas of small bowel (S.B.L.) are rare <sup>3</sup>. In a recent review we reported one

S.B.L. on a series of 32 small bowel tumors studied by magnetic resonance <sup>4</sup>. \*Chronic intermittent abdominal pain or anemia are the more frequent symptoms of S.B.L. Acute intestinal hemorrhage is unusual<sup>3</sup>. We report a case of peduncolated ileal lipoma, causing melena and bloody stools and severe acute anemia. By reviewing literature we did not find another case with this clinical presentation.

### Case Report

A 66-year-old male with a history of hypertension treated by beta-blockers since four years and acetylsalicylic acid in the last week, was admitted for melena and repeated, bloody stools. Acetylsalicylic acid was immediately stopped and proton pump inhibitors administered. Upper and lower G.I. endoscopies were negative. At admittance hemoglobin rate was 9,7 g/dl. Fasting and

\*Usually, S.B.L. appear as a sub-mucosal mass in the wall of small bowel peduncolated variant is uncommon.

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infusion of saline solution was given. In the following twelve hours the patient had three further bloody bowel movements and Hb rate became 7,8 g/dl. A continuous scanning with a 128 slices CT with ASIR technology that enable radiation dose reduction by up to 40% (Light VCT-Ge Healthcare, Milwaukee, Wis, USA) was made with the following technical parameters: KVp:120, mA 137, rot. 0,6 and revealed a peduncolated hypo-dense intraluminal mass of (-84 HU) extending for 5,2 cm in a distal ileal loop, compatible with ileal lipoma with initial signs of invagination (Fig. 1).

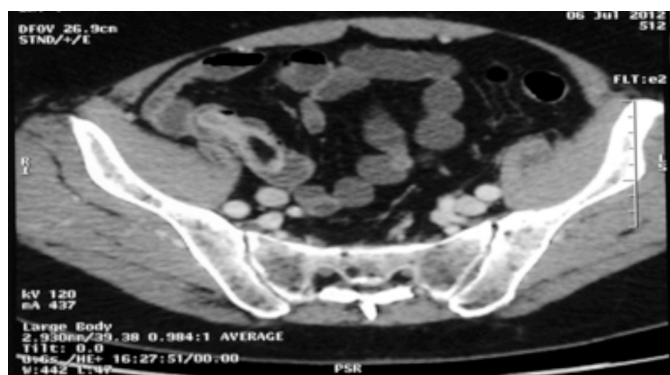


Fig. 1: CT scan with contrast medium shows the presence of a pedunculated mass with fat density in the lumen of a distal ileum loop, to be referred to lipoma. CT scan also shows initial signs of invagination of mucosal and submucosal layers with increased vascularization of the mucosa of the base of the lipoma (arrows).

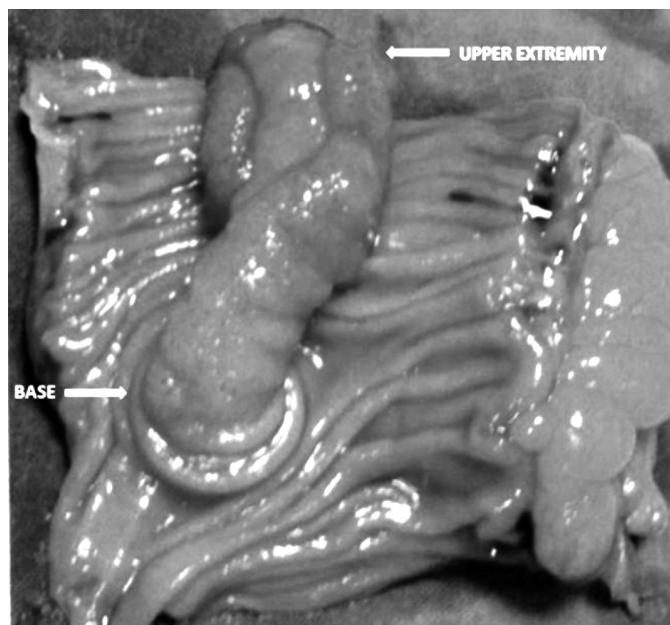


Fig. 2: Intaluminal lipoma 5 cm long. The arrow shows the base surrounded by a mucosal and submucosal ring suggesting an initial intussusception.

The patient was submitted to open surgery with a median umbilical-pubic incision. Ninety cms proximally to ileo-cecal valve, the tumor was manually found in a ileal loop with a depression on serosal surface suggesting an initial intussusception. A segmental ileal resection was performed. Overall operative time was 65 min. The p.o. period was uneventful and the patient was discharged in third p.o. day.

The macroscopic examination showed a 5 cm peduncolated neoplasm with a mucosal ulcer (Fig. 2). The histologic examination showed a well differentiated lipoma.

## Discussion

Patients with G.I. hemorrhage and negative upper and lower endoscopies need an accurate evaluation of small bowel. At the moment multislice CT enterography<sup>6-7</sup> or Magnetic Resonance enteroclysis/enterography (MRE)<sup>4</sup> represent the fastest and more accurate tools to obtain an exhaustive evaluation of small bowel. In case of small bowel tumors these diagnostic procedures can identify the site and stage and can even suggest histological type of such neoplasms. In a recent study on the impact of MRE in the preoperative staging and the surgical planning for treating small bowel neoplasms we obtained an high concordance rate between MRE and operative and pathologic findings in localizing and staging the neoplasms. Preoperative diagnosis of the different histological types with sufficient reliability is not allowed by the available technology, except for lipomas, whose radiological density can guarantee an reliable preoperative diagnosis. The data obtained by CT enterography or MRE had a significant impact in the surgical planning of small bowel tumors avoiding time consuming surgical exploration. In case of endophytic tumors the manual exploration of small bowel, easily obtained by open surgery, permits a faster localization of the neoplasm reducing operative time. Peduncolated lipoma of the small bowel causing acute/severe hemorrhage is really very rare. More frequently these lipomas present intermittent abdominal pain or paroxysmal colic pain due to intestinal obstruction secondary to intussusception<sup>7</sup>. Acute bleeding is more frequent for tumors with different histological types, while lipoma, growing in the submucosal layer of intestinal wall, causes progressive obstructive symptoms. Pedunculated tumors of small bowel are more likely polyps, adenomas or adenocarcinomas while lipomas are unusual. In this patients multislice CT enterography permitted a correct diagnosis of benign lipoma due to its radiological density (HU) and absence of infiltration of the intestinal wall and surrounding tissues. Open surgery allowed a quick surgical procedure (65 minutes), followed by a short (3 days) uneventful p.o. stay.

## Conclusion

Pedunculated lipomas of small bowel causing acute severe hemorrhage are very rare. Multislice CT enterography permits a rapid and exhaustive diagnosis allowing a quick and efficient surgery.

## Riassunto

I tumori primitivi del piccolo intestino rappresentano il 1-6% di tutte le neoplasie maligne del tratto gastrointestinale (GI). Tra questi i lipomi peduncolati sono insoliti. Riportiamo il caso di un uomo di 66 anni con una storia di emorragia GI ed anemia acuta, in cui gli esami endoscopici (EGDS e RSCS) risultavano negativi. Alla TC multislice con enterografia virtuale si evidenziava lipoma peduncolato dell'ileo terminale. Il paziente è stato trattato con successo con chirurgia open seguita da rapido decorso p.o. I pazienti con emorragia GI ed anemia acuta con esami endoscopici negativi necessitano di una valutazione accurata del piccolo intestino. La TC multislice con enterografia virtuale o la Risonanza Magnetica con enteroclisi/ enterografia rappresentano gli strumenti più veloci e più accurati per ottenere una valutazione esaustiva. In caso di tumori del piccolo intestino queste procedure diagnostiche sono in grado di dimostrare il sito e lo stadio e in alcuni casi, possono anche suggerire il tipo istologico di tali neoplasie, con un impatto significativo nella pianificazione chirurgica, riducendo i tempi operativi esplorativi. In questo paziente la

TC multislice con enterografia a permesso di arrivare ad una corretta diagnosi di lipoma benigno, dovuta alla tipica densità radiologica del lipoma e all'assenza di infiltrazione della parete intestinale e dei tessuti circostanti.

## References

1. Martin RG: *Malignant tumors of the small intestine*. Surg Clin North Am, 1986; 66:779-85.
2. North JH, Pack MS: *Malignant tumors of the small intestine: A review of 144 cases*. Am Surg, 2000; 66:46-51.
3. Karadeniz Cakmak G, Emre AU, Tascilar O, Bektas S, Ucan BH, Irkorucu O, et al: *Lipoma within inverted Meckel's diverticulum as a cause of recurrent partial intestinal obstruction and hemorrhage: A case report and review of literature*. World J Gastroenterol, 2007; 13:1141-143.
4. Pappalardo G, Gualdi G, Nunziale A, Masselli G, Floriani I, Casciani E: *The impact of magnetic resonance in the preoperative staging and the surgical planning for treating small bowel neoplasms*. Surg Today, 2012; Jul 29. [Epub ahead of print].
5. Hara AK, Leighton JA, Sharma VK, Fleischer DE: *Small bowel: preliminary comparison of capsule endoscopy with barium study and CT*. Radiology, 2004; 230:260-65.
6. Su X, Ge Y, Liang B, Wu M, Guo Y, Ma B, Li J: *Small intestinal tumors: diagnostic accuracy of enhanced multi-detector CT virtual endoscopy*. Abdom Imaging, 2012; 37(3):465-74.
7. Fang SH, Dong DJ, Chen FH, Jin M, Zhong BS: *Small intestinal lipomas: Diagnostic value of multi-slice CT enterography*. World J Gastroenterol, 2010; 16(21):2677-81.