



Giant Transverse Colon Lipoma, A Cause of Chronic Abdominal Pain. A Case Report

Lipoma gigante de colon transverso, causa de dolor abdominal crónico. Presentación de caso

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Summary

Lipomas are benign tumors derived from mature adipocytes, most frequently located in the colon. Patients are generally asymptomatic, so they are mostly diagnosed incidentally; however, in very few occasions they can generate symptoms due to complications, such as digestive hemorrhage due to ulceration, intestinal obstruction or chronic pain. This article aims to report the case of a 60-year-old patient with chronic abdominal pain, who received medical management with antispasmodics without achieving improvement of the condition. Due to the lack of improvement, an abdominal computed tomography was performed as part of the diagnostic studies, where the presence of a giant transverse colon lipoma was evidenced, to which the etiology of the pain was attributed. For this reason, it is important to consider benign non-epithelial colon tumor lesions as causes of abdominal pain and therefore a careful evaluation of the gastrointestinal tract in imaging studies by the radiologist.

Resumen

Los lipomas son tumores benignos derivados de adipocitos maduros, ubicados con mayor frecuencia en el colon. Los pacientes generalmente son asintomáticos, por lo que en su mayoría se diagnostican de manera incidental; sin embargo, en muy pocas ocasiones pueden generar síntomas por complicaciones, como hemorragia digestiva por ulceración, obstrucción intestinal o dolor crónico. Este artículo tiene como objetivo informar el caso de una paciente de 60 años de edad, con dolor abdominal crónico, quien recibió manejo médico con antiespasmódicos. Ante la falta de mejoría, se le realizó tomografía axial computarizada (TAC) de abdomen, como parte de los estudios diagnósticos, en la que se evidenció un lipoma gigante de colon transverso, al cual se le atribuyó el dolor. Por ello, es importante considerar las lesiones tumorales benignas no epiteliales del colon como causas de dolor abdominal y por tal motivo una evaluación cuidadosa del tracto gastrointestinal en los estudios de imagen, por parte del médico radiólogo.

Case presentation

This is a 60-year-old female patient, with no important pathological or family history, who consulted for intermittent abdominal pain of 6 years of evolution, located in the mesogastrium and hypogastrium, without weight loss, without gastrointestinal bleeding, without constipation or other associated symptoms. She was chronically treated with antispasmodics with partial improvement of symptoms; however, due to persistence of symptoms she was evaluated by the general surgery service who in a complete physical examination showed pain in the mesogastrium, without palpable adjacent mass or signs of peritoneal irritation, for this reason a CT scan of the abdomen and pelvis was performed, with oral contrast medium. The CT scan showed an intraluminal mass in the transverse colon, with fat density -100 Hounsfield units (HU),

ovoid in shape, with well-defined borders, measuring 5 cm × 3 cm in its transverse and anteroposterior axis, respectively, a typical image of a colon lipoma. No other relevant findings were observed (Figure 1).

Introduction

Lipomas of the gastrointestinal tract are infrequent, slow-growing lesions that can appear in any part of the gastrointestinal tract. They are benign, soft tissue tumors derived from mature adipocytes; they can be single or multiple, and the colon is the most affected (65% to 75% of cases). Approximately 90% to 95% of lipomas are located in the submucosa and the remaining 5% to 10% are in the subserosa. A large proportion of these lesions are asymptomatic and are found as incidental findings during endoscopic studies, surgery or radiological study (1-3). CT provides an important aid for the diagnosis and

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evaluation of these tumors, since it allows excluding other conditions that have a malignant behavior (4, 5)

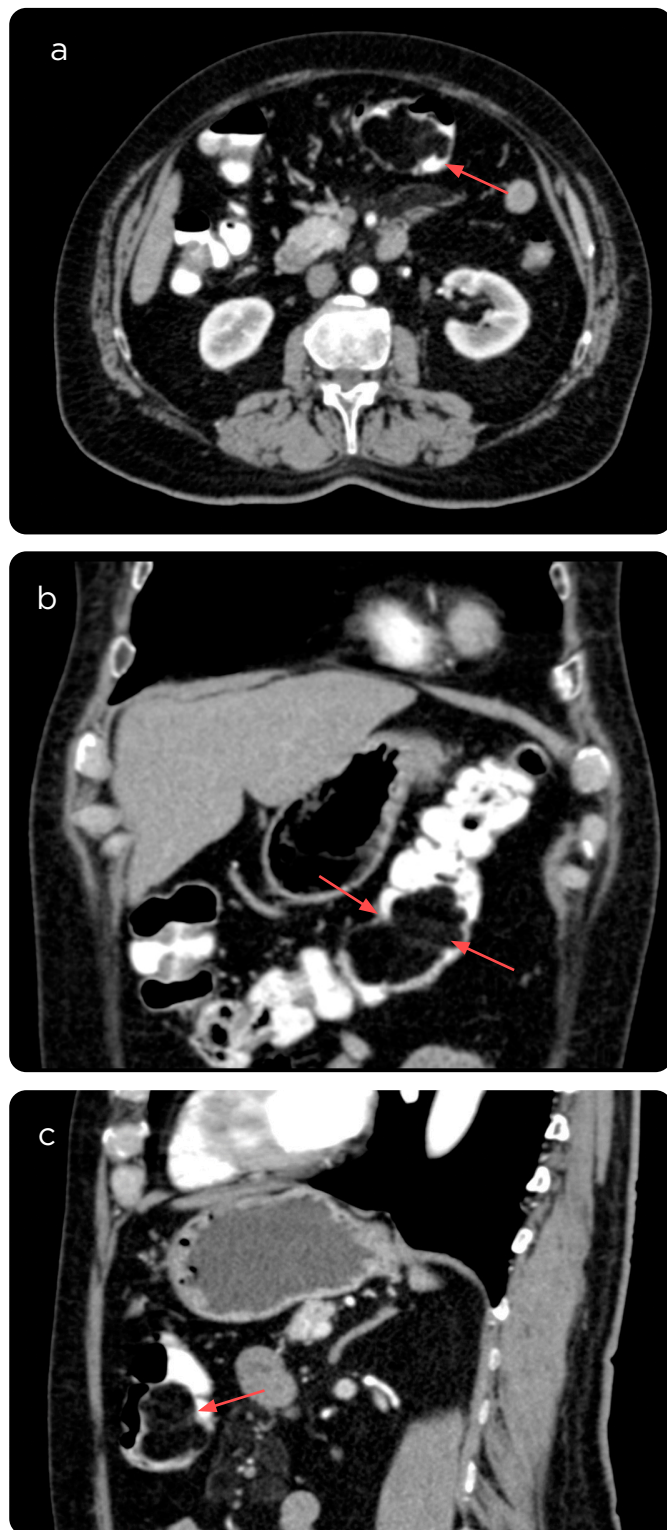


Figure 1. Abdominal CT with oral and intravenous contrast medium. a) soft tissue algorithm in axial section, b) coronal and c) sagittal reconstructions. Low density mass, with well-defined borders (red arrow), with typical fat density (-100 HU). It is located in the transverse colon. It has no signs of intestinal obstruction, wall invasion or extramural involvement. It is compatible with colon lipoma.

Epidemiology

Lipoma is the most common benign non-epithelial tumor of the colon. It was first described by Bauer in 1757 (6). It can be single or, very rarely, multiple, with an incidence that varies between 0.035% and 4.4%, and tends to grow slowly. It is usually an incidental finding in routine studies such as colonoscopy, radiological studies, surgery and even in autopsies, in which an incidence of approximately 0.26% has been described. The location of these tumors in most cases is in the submucosa; for this reason, it is completely intraluminal and has the appearance of subcutaneous fat. This type of lesions appear with the following distribution: 61% in the right colon, 15.4% in the transverse colon, 20.1% in the left colon and 3.4% in the rectum (3, 6, 7).

Clinical presentation

They are usually found incidentally; only 6% of lipomas are symptomatic, their clinical findings are nonspecific, and signs and symptoms depend on their size and location. Symptoms occur in those larger than 2 cm, and include abdominal pain, diarrhea, constipation, intestinal obstruction, bleeding and even anemia (3, 6, 8).

Diagnosis can be made by imaging studies, colonoscopy or surgery. However, colonoscopy can have several drawbacks, such as perforation, which is the most relevant; in addition, it is a method that depends on the skill of the operator. This affects the incidence in the diagnosis by this method, so that the figures vary between 57% and 85% (5). In doubtful cases, with important clinical repercussions, the diagnostic option is surgical management, taking into account the inherent risks of anesthesia. There are reports in the medical literature of cases of spontaneous expulsion through the rectum, as a consequence of self-amputation, which is explained by necrosis secondary to torsion of its pedicle, or according to the theory of Manheim and Peskin, by tearing of the mucosal base of the lipoma (2).

Images

Lipomas are well-defined, smooth, pedunculated or sessile lesions. They are characteristically spherical or ovoid and can change their configuration with peristaltic movements or extrinsic compression. CT has the capacity to differentiate fat from other tissues -and it is a useful and non-invasive technique for the diagnosis of these tumors-, since, according to the density, it is possible to establish the real fat content, therefore, those found between -20 HU and -30 HU have a low fat content, unlike those with density between -80 and -120 HU which are true fat masses (4, 5).

The main differential diagnosis is liposarcomas. However, they are extremely infrequent in the literature review, with characteristic location in the retroperitoneum or subcutaneously (3).

Conclusion

In conclusion, colon lipomas are a group of benign tumors of common occurrence and usually asymptomatic; however, they should be considered as a cause of chronic abdominal pain that is not explained by another etiology. This article highlights the importance of oral contrast-enhanced CT in diagnosing these lesions. It is important to remember that liposarcoma is the most dangerous differential diagnosis, although its incidence is extremely rare.

References

1. Yen H-H. Colonic lipoma. *Video J Encycl GI Endosc.* 2014;1:661-2.
2. Sidani SM, Tawil AN, Sidani MS. Extraction of a large self-amputated colonic lipoma: A case report. *Int J Surg.* 2008;6:409-11.
3. Taylor AJ, Stewart ET, Dodds WJ. Gastrointestinal lipomas: a radiologic and pathologic review. *Am J Roentgenol.* 1990;155:1205-10.
4. Thompson WM. Imaging and findings of lipomas of the gastrointestinal tract. *Am J Roentgenol.* 2005;184:1163-71.
5. Heiken JP, Forde KA, Gold RP. Computed tomography as a definitive method for diagnosing gastrointestinal lipomas. *Radiology.* 1982;142:409-14.
6. Franc-Law JM, Bégin LR, Vasilevsky CA, et al. The dramatic presentation of colonic lipomata: report of two cases and review of the literature. *Am Surg.* 2001;67:491-4.
7. Bentama K, Chourak M, Chemlal I, et al. Intestinal subocclusion due to colonic lipoma: a case report. *Pan Afr Med J.* 2011;10(22).
8. Zhang H, Cong J-C, Chen C-S, Qiao L, Liu E-Q. Submucous colon lipoma: A case report and review of the literature. *World J Gastroenterol WJG.* 2005;11:3167-9.

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