


INTESTINAL OBSTRUCTION WITH SUBMUCOSAL BOWEL LIPOMA

OBSTRUÇÃO INTESTINAL POR LIPOMA INTESTINAL SUBMUCOSO

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ABSTRACT

The digestive tract is an uncommon location for lipomas, but when present, they usually have their origin in the submucosa. Rarely, they can cause hemorrhage, intestinal obstruction and perforation. We report a case of a 79 year-old male presenting in the Emergency Department complaining of abdominal pain and vomiting for 2 days. Abdominal plain radiography was suggestive of intestinal obstruction. Computed tomography showed a jejunal obstruction. Laparotomy was performed and a mobile intra-luminal mass was identified and removed. Histology reported a submucosal lipoma. Submucosal lipomas are rare intestinal lesions. They most often occur on the colon, but can be present in any location of the gut. Lipomas can be sessile or pedunculated lesions and complications are mostly associated with lesions greater than 2cm. Surgical treatment can be an option.

Key-words: *submucosal lipoma; bowel obstruction.*

RESUMO

O tracto gastrointestinal é uma localização pouco frequente de lipomas mas, quando presentes, têm maioritariamente origem na submucosa. Raramente são causa de hemorragia, oclusão intestinal e perfuração. Apresentamos o caso clínico de um doente do género masculino, com 79 anos, que recorreu ao Serviço de Urgência por quadro clínico caracterizado por dor abdominal e vómitos com 2 dias de evolução. A radiografia abdominal foi compatível com quadro de oclusão intestinal. A tomografia computadorizada revelou uma obstrução jejunal. Foi submetido a laparotomia exploradora, tendo-se constatado uma massa intra-luminal que foi removida por enterotomia. O diagnóstico histológico foi de lipoma submucoso. Os lipomas submucosos são lesões intestinais raras que ocorrem maioritariamente no cólon, mas podem surgir em qualquer localização do tracto gastrointestinal. Os lipomas podem ser lesões sésseis ou pediculadas e as complicações ocorrem mais frequentemente em lesões de dimensões superiores a 2cm. O tratamento cirúrgico é uma opção.

Palavras-chave: *lipoma submucoso; obstrução intestinal.*

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INTRODUCTION

Lipomas are benign mesenchymal lesions that can rarely be located on the digestive tract, but when present they have their origin on the submucosa in approximately 90% of the cases (the other 10% are located on the subserosa)¹.

This slow growing lesions are the second most common type of benign tumor of the colon, after adenomatous polyps, but can also occur on the esophagus, stomach and small bowel. Submucosal lipomas are usually presented as polypoid lesions, either sessile or pedunculated².

Most commonly, intestinal lipomas are asymptomatic and found incidentally, but several complications can result from this pathology, such as hemorrhage, intestinal obstruction and perforation, which may cause surgical emergencies^{1,2,3}.

The authors are describing the presence of these uncommon benign lesions and their diagnosis, complications and treatment options.

CASE PRESENTATION

A 79 year-old male presented in the Emergency Department complaining of colicky abdominal pain and vomiting for 2 days. On physical examination the patient had bloating, hyperactive bowel sounds and diffuse abdominal pain, without tenderness. Laboratory tests were normal and an abdominal plain radiography was suggestive of intestinal obstruction (small bowel dilation and several gas-fluid levels). Computed tomography showed dilated small bowel proximal to a jejunal obstruction caused by a 52x29mm sized lesion (figure 1) without any sign of vascular compromise.

Laparotomy was performed. A mobile intraluminal mass with regular surface and elastic consistency was identified and removed by longitudinal enterotomy (figure 2). The enterotomy was closed in a transverse fashion. Minimal invasive surgery was not considered as an option due to

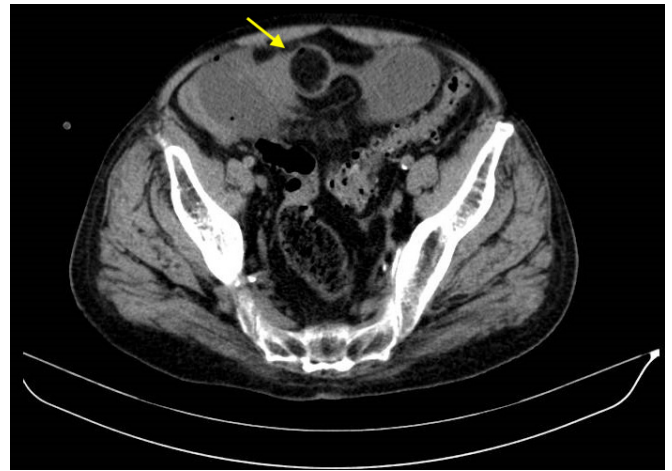


FIGURE 1 – CT-scan findings.



FIGURE 2 – Intraoperative findings.

severe intestinal dilation and high probability of iatrogenic lesions.

Macroscopic appearance was suggestive of a benign lesion, presenting a small pedicle. Histology reported a submucosal lipoma (figure 3).

The patient was under continuous hemodynamic monitoring for 24h. Liquids were started on postoperative day 1 (POD) and regular diet on POD day 3. Empiric antibiotherapy with Amoxiciline



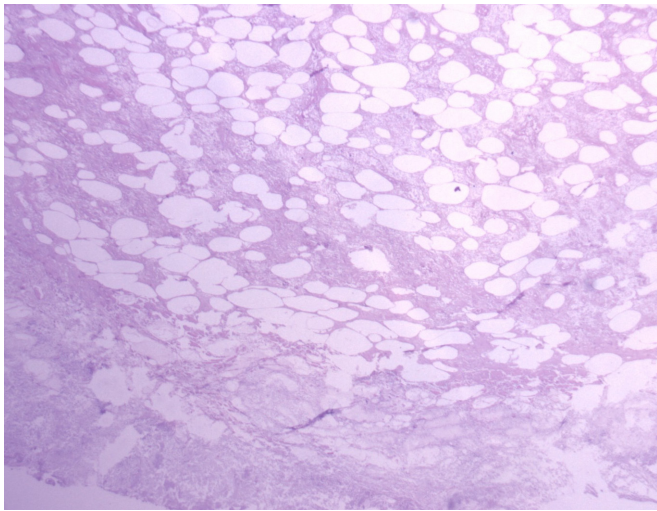


FIGURE 3 – Histologic findings

and Clavulanic Acid was administered for 5 days considering the probability of bacterial translocation from the intestinal tract. He was discharged by the fifth postoperative day. No complications were noted at the first and sixth months of follow-up.

DISCUSSION

Submucosal lipomas are rare intestinal lesions with a reported frequency of less than 5% of all intestinal masses⁴. They most often occur on the colon (approximately 60%)^{1,2,5}, but can be present in any other location of the gut. Lipomas can be incidentally found during convention endoscopy, surgery or radiological examination performed for other reasons. Janevska and Paskaukas demonstrated that complications (such as intussusception, obstruction and hemorrhage) are mostly associated with lesions larger than 2cm and symptoms are more common in those larger than 4cm, as the one described in this paper^{1,6}. Ultrasound may detect large lipomas as hyper- or hypo-echoic masses. Sausage-shaped lesions

with hyper-echoic central part and hypo-echoic peripheral area usually represent intussusception⁴. Computed tomography is useful for assessing the location and exclude the presence of other lesions and complications, specially if oral and IV contrasts are used^{3,4}. Similarly to this case results (figure 1), CT scan findings usually demonstrate a well delineated intraluminal mass with lipid attenuation (-100 to -50 HU)^{7,8,9}. Magnetic resonance imaging lacks effectiveness due to motion artifact caused by peristalsis [8]. Barium studies, capsule endoscopy and conventional radiography images are less used due to lack of accuracy¹⁰. Treatment is indicated when submucosal lipomas become symptomatic, particularly in the emergency setting as this one. In these cases, surgery is the treatment of choice and may be associated with bowel resection, depending on size and invasion. Minimal invasive surgery can be performed, depending on clinical factors (such as bowel dilation and previous abdominal interventions) and the team experience. Endoscopic management can be an option for esophagogastric and colonic lipomas^{1,2,3,5}.

CONCLUSIONS

With this case report, the authors described the relevance of intestinal lipomas, which are rare lesions of the digestive tract. These benign neoplasms can cause several complications, such as intestinal obstruction. Diagnosis can be challenging, with CT scan being the best imaging exam to study this pathology. Surgical or endoscopic treatment is indicated in symptomatic patients. This report showcases the importance of taking this diagnostic as a possible cause of intestinal obstruction when imaging shows a well delineated intra-luminal mass. In the presented case, most probably a torsion of the pedicle occurred, followed by mobilization and intestinal obstruction.



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