Lipomas of the colon are rare and usually presenting in the later ages of life. This case describes and discusses the symptoms and signs of lipomas, recommendations and rationale for treatment.

**Key words:** lipoma, colonic invagination, laparoscopic surgery, case report

Submucous lipomas of the intestines are rare benign tumours arising from adipocytes with an estimated incidence of 1/30000 and estimated to be found in 1/1300 abdominal operations (1). The condition was first described in 1757 (2). Submucous lipomas can be placed in all parts of the gastrointestinal tract such as stomach (3), jejunum (4), ascending colon (5), transverse colon (6), sigmoid colon (5) but are most often localized near the ileocecal valve (7).

Histologically 90% are located submucosally and the rest are subserosal (8). They are most often solitaire, but about 10% of the cases are multiple. They seem to present at ages above 50 (2). The ratio between sexes is not clear; most authors suggest equal ratio (1, 2, 7), but some suggest a distribution with more females affected than males, although females has no increased risk for lipomas elsewhere in the body than males (9).

The tumours often lead to symptoms such as bleeding but may also give symptoms such as abdominal distension, pain, diarhrea, change of bowel habits or intusception. Thereby they have clinical presentations that simulates more serious conditions as colorectal cancer (CRC) (10). They often remain asymptomatic and are found by coincidence in acute operation or by routine endoscopy.

The literature was found via Pubmed.com using search terms “Lipoma” and “Submucous.” No limits regarding time were set.

**CASE REPORT**

A 49 year old female was referred to our department due to polyps seen on rectoscopy of the sigmoid part of the colon. She was otherwise healthy, had slightly overweight with a Body Mass Index (BMI) of 29 and with an American Society of Anaesthesiologists (ASA) score of 1.

Several times she experienced a rectal prolapse of a tumour which she was able to repositionate digitally. She had experienced one event of blood in her stool, and a 3 months intermittent left abdominal pain, but no weight loss or changes of stool habits. Preoperative tests were normal including plasma haemoglobin. She had no family history of CRC, but was afraid that she was suffering from a malignant disease.

A colonoscopy revealed a polyp that filled the entire lumen of the sigmoideum 60 cm from the anus. A polypectomy with endoscopic mucosal resection (EMR) was planned. At this procedure a penducular lipoma with venous stasis was found but impossible to remove due to the advanced size (fig. 1).

A laparoscopic resection of the sigmoid colon was performed. Peroperatively two large lipomas with fibrosis were seen in the resected colon sigmoideum (fig. 2). In addition diverticulas were found. The diagnosis lipoma with submucosal origin was confirmed by histologic examination where 2 lipomas measuring...
Prolapse of submucous lipoma of the sigmoid colon

40x15x15 mm. and 80x40x25 mm. were found.

The patient unevently left the hospital 2 days after the operation and 3 months later she had a control colonoscopy without signs of other lipomas, but with a metaplastic looking polyp measuring 1 cm. in diameter removed by coagulation. Another colonoscopy is planned within three years.

DISCUSSION

This case story is atypical with regards to the location of the lipomas. Lipomas are most often placed near the ileocecal valve and only 10% are multiple (2, 7). This case is unique in reporting of intermittent prolapse of the large lipoma.

Furthermore, the lipomas found in this patient are different with respect to the finding of two large lipomas and the fact that the lipomas filled up almost the entire circumference, but without ileus symptoms. Lipomas are most often found by coincidence or as a finding in a patient presenting with an acute abdomen. Therefore the diagnosis is most often done by either X-ray or CT scan, although some authors suggest ultrasonography as the most appropriate method for diagnosing these tumours (2, 7, 11).

If seen on X-ray lipomas often lead to dilatation of the intestines (12) or as a ovoid filling. On CT sharp margins and soft tissue density can be seen (2, 7, 12) and thereby the lipoma mimicks other causes of pathology in the bowel. By endoscopy lipomas are often encountered as yellow spots most often located around the ileocecal valve (2,7).

There seems to be an international consensus that surgical treatment is the right treatment for these patients. Yet surgery is only recommended if the lipoma is more than 20 mm in size as smaller lipomas often remain asymptomatic and the risk of invagination therefore is insignificant (1, 2, 7, 13). Some authors, however, have reported that these can be treated endoscopically (14). In these cases it should be considered thoroughly as the risk of perforation is large (9,15). In one report of 7 patients 3 patients experienced colonic perforation when treated endoscopically (15). Presently surgical resection seems to be the method of choice providing the lipomas are symptomatic. If the lipomas are less than 20mm. no evidence for treatment exists. Lipomas have not been reported to undergo malignant transformation.

In conclusion lipomas have clinical manifestations that can be very different and may simulate malignant disease. The most important clinical aspect of lipomas is that they are a differential diagnosis to CRC and that an accurate diagnosis is difficult to achieve pre-operatively.

REFERENCES


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