

# DISTAL ILEAL STENOSING SUBSEROVAL LIPOMA: A CASE REPORT

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## ABSTRACT

Lipoma is the commonest soft tissue tumour and ubiquitous in distribution. The gastrointestinal tract is a rare site for this neoplasm. This 38 years old patient presented to the surgical emergency unit of the Jos University Teaching Hospital with features of intestinal obstruction which was confirmed by plain abdominal X-ray. Patient was resuscitated and had exploratory laparotomy. At surgery, a dilated, oedematous, and pale segment of ileum was seen measuring 56cm in length and 10cm short of the ileo-caecal junction, where an obstruction had occurred. The distal segment was collapsed. A limited right hemi-colectomy was done with ileocolic anastomosis. Specimen received at the Histopathology Laboratory consisted of 45cm of the ileum, the caecum, appendix, and proximal 25cm of the colon in continuity. There was stenosis affecting the distal 30cm of the ileum. The wall of the stenosed part of ileum had intramural fat at the sub-serosal locale. Histology confirmed the presence of sheets of matured adipocytes between the muscularis propria and serosa. Patient condition improved and was discharged seven days after surgery. This case is reported five months after surgery. We recommend that lipoma be at all times considered in the differential diagnosis of intestinal obstruction.

KEYWORDS: SUBSEROVAL LIPOMA, ILEAL STENOSIS, INTESTINAL OBSTRUCTION.

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## INTRODUCTION

The benign mesenchymal neoplastic proliferation of matured adipocytes-lipoma, has earned the designation “universal/ubiquitous tumour.”<sup>1</sup> This coinage derives from the fact that it could develop within any tissue in the body. It also doubles as the commonest soft tissue tumour.<sup>1,2</sup> The most frequent site of occurrence of this tumour is the subcutaneous tissue: the shoulder, back, and neck being the leading sites.<sup>2,3</sup> Occurrence of lipoma at other sites is rare but well documented in available literature. These rare sites include the brain, oral cavity, tracheobronchial tree, lungs, heart, uterus, and intra-osseous tissue.

The gastrointestinal tract is one of these rare locations of Lipomas.<sup>4</sup> Any part of this tract can be affected, with the colon most frequently afflicted<sup>5</sup>. A study by Mayo et al. of 4000 surgical resections of benign tumours of the

gastrointestinal tract found lipomas constituting 4% of cases. These were distributed as follows: colon, 64%; duodenum and intestine, 31.2%; stomach, 3.2%; and oesophagus, 1.6%.<sup>6</sup> Another study by Sieqal and Witz that reviewed 20 gastrointestinal lipomas in 18 patients found the spread as follows: colon, 15(75%); distal ileum, 3(15%); duodenum, 1(5%); and stomach, 5(5%).<sup>7</sup> Up to 90-95% of gastrointestinal lipoma are sub-mucosal, with only few occurring at sub-serosal locale.<sup>8,9</sup>

Lipomas usually occur between the 5<sup>th</sup> and 7<sup>th</sup> decade of life, although any age could be affected.<sup>3,8</sup> The cause of the disease is largely unknown. Associations include: heredity, female sex, obesity, alcohol, trauma, and also for unknown reasons could be congenital.<sup>3,10,11,12</sup> The mean duration between discovery and excision of the tumour is 3.2 years to 3.5 years.<sup>1,10</sup>

We hereby present a case of Lipoma of the distal ileum in a young adult male manifesting with intestinal obstruction. This to our knowledge is the first reported case in our locality.

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## THE CASE

A 38 years old male was rushed to the surgical emergency unit of the Jos University Teaching Hospital with five days history of abdominal pain, vomiting, and constipation. The pain was located at the periumbilical region of the abdomen and was colicky in nature. The vomiting was non-projectile, postprandial, and bilious. Patient had not passed stool for five days, and developed progressive abdominal distension a day prior to presentation (he was however passing flatus). Patient was managed for gastro-enteritis with anti-emetics and antibiotics (Ciprofloxacin and Metronidazole) four days prior to presentation when diarrhoea was part of the initial symptoms. There was no associated fever and no past history of abdominal surgery.

On examination, he was fully conscious, not pale, afebrile, anicteric, and acyanosed. He had a regular normal volume pulse of 88 beats/ minute, and blood pressure of 160/120mmHg (blood pressure was later controlled as patient is not a known hypertensive). Respiratory rate was 18 circles/minute. The abdomen was distended and moved with respiration. There was tenderness at the periumbilical area and left flank, with no rebound tenderness, guarding or rigidity. Digital rectal examination revealed scanty faeces in the rectum

Plain abdominal x-ray (erect/supine) showed multiple air-fluid levels and distended loops of bowel located centrally. Abdominal Ultrasound Scan showed free intra-peritoneal fluid with no mass seen.

Haematological investigations and blood chemistry were essentially normal. A diagnosis of acute small bowel obstruction (partial) with no peritonitis was made, and patient was resuscitated and had exploratory laparotomy.

At surgery, a dilated, oedematous, and pale segment of ileum was seen measuring 56cm in length and 10cm short of the ileo-caecal junction, where an obstruction had occurred. The distal segment was collapsed. A limited right hemi-colectomy was done with ileocolic anastomosis. Patient's condition improved and he was discharged 7 days after surgery. He had three out-patient follow up visits which were uneventful. This case is reported five months after surgery.

## PATHOMORPHOLOGY

The specimen received in the Histopathology Laboratory was preserved in 10% neutral buffered formalin, and consisted of 45cm of the ileum, the caecum, appendix, and proximal 25cm of the colon in continuity. There was stenosis affecting the distal 30cm of the ileum with intraluminal diameter of 1.1cm. The wall of the stenosed part of ileum had intramural fat at the sub-serosal locale (Figure, 1 and 2). Histology confirmed the presence of sheets of matured adipocytes between the muscularispropria and serosa (Figure, 3and 4).



Figure 1



Figure 2

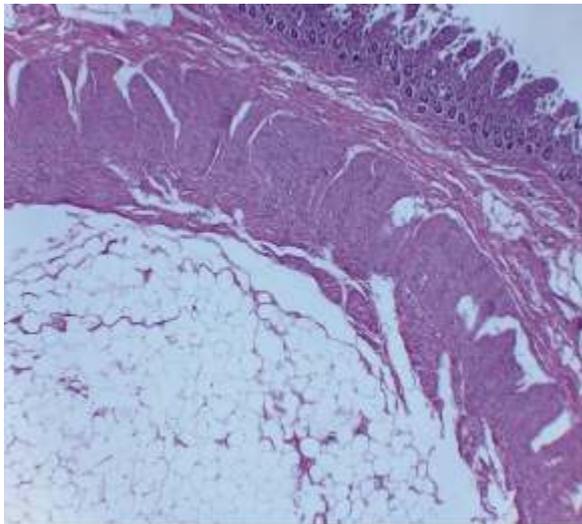


Figure 3

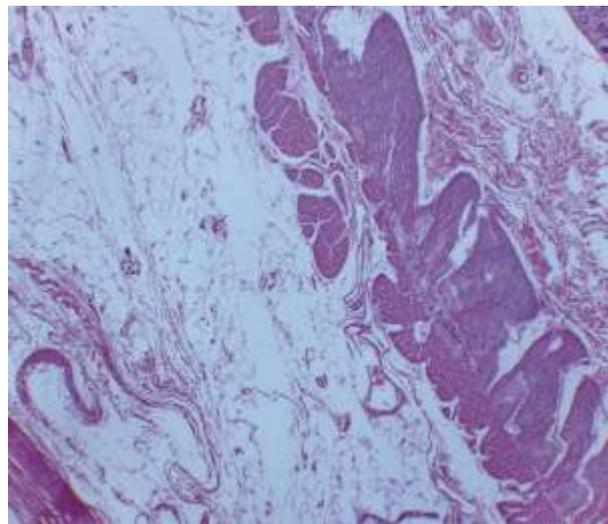


Figure 4

## DISCUSSION

The case here presented, beats the rule and conforms to the rarity. Firstly, the GIT is a rare site for lipoma. Secondly, within the GIT, the ileum is not a common site of the disease. Also, GIT lipomas, are mostly submucosal. Furthermore, lipomas are common within the 5<sup>th</sup> and 7<sup>th</sup> decade of life. And additionally, intestinal obstruction is a rare presentation of GIT lipomas.

This case of distal ileal-subserosal lipoma occurring within the third decade of life, and presenting as an emergency with intestinal obstruction is therefore worthy of reporting.

Generally, lipomas are asymptomatic. Symptoms evolve with time with increase in size of the lesion depending on the site and function of the affected tissue or organ. In the gastrointestinal tract, vague symptoms that could arise include: abdominal pain and alteration in bowel habits, and rarely perforation and intestinal obstruction.

The features of obstruction prompted the exploratory laparotomy leading to resection of the distal ileum and the caecum, appendix, and parts of the proximal colon. Laparotomy has been successfully employed in treatment of gastrointestinal lipomas when indicated. The study by Siqal and Witz alluded to earlier report that laparotomy was carried in 16 cases of the 20 gastrointestinal lipomas seen, of which 10 cases had colectomy. The remaining four cases were managed with endoscopy.

Two questions of interest arose in this case: what is the aetiology of the disease? What is the duration between the smallest lesion and the stenosis? Lipoma has been linked to heredity, female sex, obesity, alcohol, and trauma.<sup>3,10,11,12</sup> Moderate alcohol intake in this patient is the only risk factor so far noted. As other associations

are either absent or cannot be substantiated, the underlying cause remains to be uncovered.

For lipomas at accessible sites like the subcutaneous tissue and oral cavity, a mean duration between discovery and excision of the tumour is 3.2 years to 3.5 years.<sup>1,10</sup> For an internal organ like the ileum, it is difficult to ascertain this lag in time.

## CONCLUSION

Lipoma of the gastro-intestinal tract is rare, and symptoms of intestinal obstruction could result in surgical emergency. A prompt surgical response is ultimately curative. Therefore we recommend that lipoma at all times be integrated into the differential diagnosis of intestinal obstruction.

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