

## Case Report

# Jejunal intussusception in an adult due to small intestine lipomatosis: a case report and review of literature

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### ABSTRACT

Intussusception is rare in adults. Benign neoplasm are common causes for intussusception in adults, lipoma is the commonest. Lipomas are usually solitary but 5% are multiple. Lipomatosis of small bowel is rare condition and presenting, as intestinal obstruction is even rarer. A 55 year old male patient presented with pain abdomen, distention and constipation. CECT revealed intussusception due to multiple lipomas of jejunum causing jejunojejunal intussusception. On exploratory laparotomy bowel was gangrenous and hence a resection and anastomosis was done. On 12 months follow up patient was normal. First described by Helmstrom in 1906. Fat deposition in intestine are classified as isolated lipoma, multiple lipomas, nodular lipomatosis and diffuse fatty infiltration of wall without projecting into lumen. Usually present as malena or intussusception, volvulus. Radiologically identified by “pseudo kidney sign” and “target sign”. Reduction should not be attempted in the signs of ischemia or malignancy. Lipomatosis should kept in mind as one of the cause for intussusception in adults and CECT is the best modality to ascertain the nature of lesion in most of the cases.

**Keywords:** Lipomatosis, Intussusception, Small bowel, CECT abdomen

## INTRODUCTION

Intussusception is common in children 4 months to 6 years of age without a lead point. Intussusception is rare in adults, contributing to 5% of all cases of intussusceptions and 1-5% of intestinal obstruction.<sup>1</sup>

Benign tumours of small bowel are relatively rare, lipomas are among the most common ones with incidence of 0.04 to 4.5%.<sup>2</sup> Majority of lipomas are solitary, only 5% are multiple.<sup>3</sup> Intestinal lipomatosis is rare and presenting as intussusception and intestinal obstruction is even rarer.

We present a case of jejunojejunal intussusception due to small bowel lipomatosis.

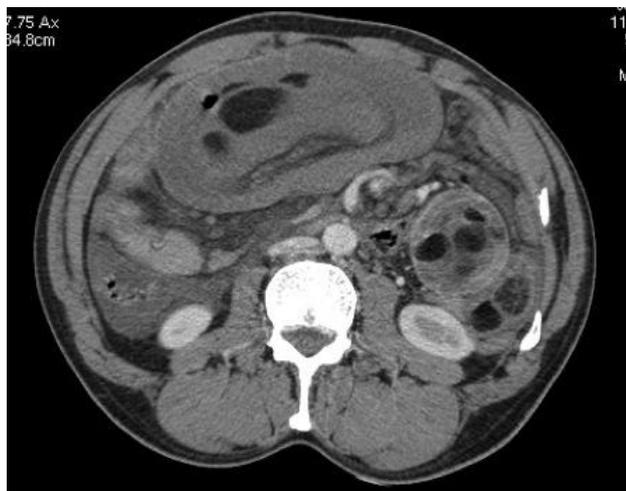
## CASE REPORT

A 47-year-old male presented with severe colicky abdominal pain to emergency department. Pain was present around the umbilicus, colicky in nature, and is constant. Patient was not passing flatus since one day. There was no history of previous surgeries. On examination abdomen was distended. Guarding and tenderness were noted. There was no visible peristalsis. Bowel sounds were absent. Hematological investigations were normal. X-ray abdomen erect was inconclusive. Ultrasound was suggestive of intussusception. CECT abdomen was suggestive of jejunojejunal intussusception with multiple lipomas of small bowel. An exploratory laparotomy was done. Intraoperatively an intussusception of proximal jejunum was noted. Intussusception was 15 cm from DJ flexure and was gangrenous. Resection of

gangrenous bowel and anastomosis was done. Resected specimen showed multiple jejunal lipomas (Figure 1). Large bowel was normal. Postoperative period was uneventful. Colonoscopy and endoscopies were normal. At 12 months of follow-up patient was doing well.



**Figure 1: Resected specimen showed multiple jejunal lipomas.**



**Figure 2: CT showing typical "target sign" or Bulls eye sign.**

## DISCUSSION

Lipomatosis of intestine was described by Helmstrom in 1906.<sup>2,3</sup> Abnormal depositions of fat in intestine are classified as isolated lipoma, multiple lipomas, nodular lipomatosis and diffuse fatty infiltration of wall without projecting into lumen.<sup>3</sup> It is most common in ileum rarer in jejunum.<sup>5,6</sup> The majority of polyps are submucosal, although they can be subserosal or intramuscular. There is no gender prevalence, they are common between fourth and sixth decade of life.<sup>3-6</sup> Most common symptom is

abdominal pain, it may also present as intestinal obstruction due to intussusception or volvulus, malena may be due to mucosal surface ulceration of lipoma.<sup>5</sup> Intussusception in adults often has a lead point, usually the lead point is a benign lesions such as a polyp, adenoma, lipoma, neurofibromas. Lipomatosis usually associated with diverticulosis.<sup>2-5</sup> Ultrasound images show the 'doughnut' sign when the transducer is orientated transversely to the intussusception, the 'trident' sign when the transducer is positioned longitudinally, and the 'pseudo-kidney' sign when it is visualized obliquely.<sup>6</sup> The characteristic of intussusception on CT is early target mass with enveloped eccentrically located area of low density, later layering effect occurs as result of longitudinal compression and venous congestion (Figure 2).<sup>7</sup> The treatment of intussusception in adults consists of segmental resection and primary restoration of the continuity of the gastrointestinal tract, Reduction should not be attempted if there are signs of irreversible bowel ischemia or inflammation, or when malignancy is suspected.<sup>8</sup>

## CONCLUSION

Intussusception is rare in adults, and lipomatosis should kept in mind while diagnosing intussusception. CECT is the best modality to ascertain the nature of lesion in most of the cases.

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