

# A Rare Case of Adult Ileo-Ileal Intussusception Due To a Gastrointestinal Lipoma.

H.B.Janugude<sup>1</sup>, D.H. Janugude<sup>2</sup>, Basavaraj Nagur<sup>3</sup>, Sangeeta Biradar<sup>3</sup>, Mahesh Reddy<sup>3</sup>, Jignesh kumar Savsaviya<sup>3</sup>

<sup>1</sup>Professor, Department of Surgery, KIMS University, Malkapur, karad – 415110, Maharashtra.

<sup>2</sup>Assistant professor in Department of OBGY, KIMS University, Malkapur, karad – 415110, Maharashtra.

<sup>3</sup>Resident Department of Surgery, KIMS University, Malkapur, karad – 415110, Maharashtra.

## ABSTRACT

Intussusception in adults is rare. Gastrointestinal lipomas are rare benign tumors and Intussusception due to a gastrointestinal lipoma constitutes an infrequent clinical entity. The diagnosis of Intussusception was finally raised by a computed tomography (CT) scan of the abdomen. 60 year old normotensive non-diabetic male presented to the surgery opd with the chief complaints of intermittent pain abdomen since 5 weeks. Adult bowel intussusception is a rare but challenging condition to diagnose in a timely manner. Due to their intramural location, lipomas can also serve as the leading point for intussusception. A high index of suspicion and appropriate investigations (abdominal ultrasound, CT scan and colonoscopy) can result in prompt diagnosis. Surgical resection remains the treatment of choice and produces an excellent prognosis.

**Keywords:** Gastrointestinal lipoma, Intussusception, Small bowel.

## INTRODUCTION

The occurrence of intussusceptions in adults is rare, accounting for less than 5% of all cases of intussusceptions and almost 1%-5% of bowel obstruction.<sup>[1]</sup> The condition is found in 1 in 1300 abdominal operations and 1 in 100 patients operated for intestinal obstruction. The child to adult ratio is 20:1. The majority of lipomas in the small bowel is solitary. With variable size ranging from 1 to 30 cm. In general, they form an intramural, discrete, smooth or lobulated, round or ovoid, soft mass covered by intact mucosa but occasionally they protrude subserosally.

Approximately 5% are multiple.<sup>[2]</sup> Lipomas of the small intestine are rare benign tumours with no malignant potential, most commonly encountered incidentally, since they are usually asymptomatic. Symptomatic lipoma manifestations are hemorrhage or intestinal obstruction. Due to their intramural location, lipomas can also serve as the leading point for intussusceptions. We report a rare case of ileo-ileo intussusceptions in an adult secondary to an ileal lipoma.

### Name & Address of Corresponding Author

Dr. Basavaraj Nagur,  
Resident, Dept of Surgery,  
KIMS University, Malkapur, karad – 415110,  
Maharashtra.  
E-mail: sachin.nagur@gmail.com

## CASE REPORT

60 years old normotensive non-diabetic male presented to the surgery opd with the chief complaints of intermittent pain abdomen since 5

weeks that exacerbated and accompanied by nausea since 1 week. The pain was moderate in onset, colicky type, intermittent in nature. It was present mainly around the umbilicus and non radiating, non progressive in nature. The patient had no fever, weight loss and blood in stool reported intermittent defecation without nausea or vomiting. Pain was not associated diurnal variation and has no relieving, aggravating factors and no significant surgical history in the past. The patient had been to another hospital previously where abdominal ultrasound and CT scan has been done. On physical examination patient was a febrile and haemodynamically stable with PR-80/min, BP-110/70 mmHg, a febrile on inspection abdomen contour was normal, on palpitation revealed tenderness around the umbilicus with no guarding and rigidity and no mass was palpable with no organomegaly. Bowel sound was hyper audible. Blood investigation are within normal limits. There was no evidence of obstruction. X-RAY erect abdomen: within normal limits. USG findings: suggestive of ileo ileal intussusception with intramural lipoma. CT SCAN findings: Oval shaped hypodense lesion seen in the lumen of proximal ileum of size 4.4cm\*2.3 cm Telescoping if ileal loop into each other seen S/O ileo-ileal intussusceptions. Wall thickening of ileal loop noted.

Management: Patient underwent elective laparotomy there was evidence of ileo-ileal intussusceptions. [Figure 1] with resection of the ileal bowel with intramural lipoma [Figure 2] and ileo ileal anastomosis. Patient had an uneventful recovery after this patient has been discharged on 11 postoperative days.<sup>[3]</sup>



Figure 1: Ileo-ileal intussusceptions.



Figure 2: Ileal bowel with intramural lipoma.

## DISCUSSION

Intussusception is the invagination of a proximal segment of the bowel with its mesenteric fold (the intussusceptum) into the lumen of the adjacent distal segment (the intussusciptens) as a result of peristalsis. In the small bowel, the neoplasms as the leading point of adult intussusceptions are most often benign, and these include Meckel's diverticulum, postoperative adhesions, adenoma, inflammatory fibrous polyps and lipoma.

Neoplasms are the most frequent causes of adult intussusceptions. Lipomas are benign tumours of mesenchymal origin. They are predominantly submucosal and protrude into the lumen.<sup>[3]</sup> Occasionally, they arise in the serosa. Gastrointestinal lipomas are most commonly located in the colon (65% to 75%, especially on the right side), small bowel (20% to 25%), and occasionally in the foregut (<5%).<sup>[3]</sup> The most common classification system divides intussusceptions into four categories: enteric, ileocolic, ileocaecal and colonic.

In adults, intussusceptions is more likely to present insidiously with vague abdominal symptoms and rarely presents with the classic triad of vomiting, abdominal pain and passage of blood per rectum, making diagnosis difficult.<sup>[4]</sup> The symptoms of lipomas are the result of intussusception (16%-19% of lipoma-associated surgery), intestinal obstruction (occlusion of lumen by a large protruding lesion, retrograde prolapse of a polypoid lipoma of

duodenum into pylorus, volvulus of the small intestine due to subserosal lipoma) and hemorrhage due to ulceration of the overlying mucosa caused by direct pressure from the lipoma or due to intussusception per se.<sup>[5-7]</sup> Intussusception leads to the development of venous and lymphatic congestion, which results in intestinal edema. If not treated promptly, the arterial blood supply to the bowel will be compromised, thus leading to ischemia, perforation and peritonitis.<sup>[8]</sup>

Lipomas can be diagnosed through conventional endoscopy, capsule endoscopy, barium studies, ultrasound and computed tomography. Ultrasound is usually the first modality to be recruited. It may evaluate acute abdominal complaints and bowel obstruction in both children and adults in the emergency room. Intussusception can be diagnosed based on the findings of the "target-like" sign, the "doughnut" sign. Typical endoscopic features are smooth, yellowish surface with pedunculate or sessile base, as seen in this case. Other endoscopic characteristics are the "cushion sign" and "naked fat sign".<sup>[3]</sup>

Computed tomography is the imaging method of choice for diagnosing intussusception.<sup>[7]</sup> Intussusception, on CT scans, appears as one of the following: (a) a mass lesion, representing a thickened segment of bowel, (b) a crescent-like, eccentric low-attenuation fatty mass, representing entrapped mesenteric fat, (c) a rim of contrast material encircling the intussusceptum, representing coating of the opposing bowel walls of the intussusceptum and intussusciptens. Furthermore, CT can give indirect signs of bowel ischemia such as the presence of intraperitoneal fluid and the status of fluid or gas collection in the intestinal wall. Although CT diagnosis of intussusception is relatively straightforward in the majority of cases, negative findings do not preclude intussusception. Once the diagnosis of intussusception in adults is made, surgical intervention is indicated. The treatment plan for adult intussusception consists of segmental resection because most of adult intussusceptions have an underlying structural lesion, and adult intussusceptions have a relatively high incidence of malignancy.

### Ethical Approval

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

### Acknowledgment:

We are thankful to Mrs. M.C. Deshingkar, Rupali and Vikas Nikam from Surgery Dept. office for her secretarial help.

## CONCLUSION

A high index of suspicion and appropriate investigations (abdominal ultrasound, CT scan and colonoscopy) can result in prompt diagnosis for such conditions. Surgical resection remains the treatment of choice and produces an excellent prognosis.

## REFERENCES

1. Balamoun H, Doughan S. Ileal lipoma. A rare cause of ileocolic intussusception in adults: Case report and literature review. *World JGastrointest Surg.* 2011; 3(1):13–15.
2. Atila K, Terzi C, Obuz F, Yilmaz T, Füzün M. Symptomatic intestinal lipomas requiring surgical interventions secondary to ileal intussusception and colonic obstruction: report of two cases. *Ulus Travma Acil Cerrahi Derg.* 2007; 13:227–231.
3. Chou JW, Feng CL, Lai HC, Tsai CC, Chen SH, Hsu CH, et al. Obscure gastrointestinal bleeding caused by small bowel lipoma. *Inter Med.* 2008; 47:1601-1603.
4. Ali A, Morteza N, Rasoul M, Bodaghabadi M, Mardany O, Ali FA, et al. Ileal intussusception secondary to both lipoma and angioliipoma. A case report *Cases J.* 2009; 2:7099.
5. Zografos G, Tsekouras DK, Lagoudianakis EE, Karantzikos G. Small intestinal lipoma as a cause of massive gastrointestinal bleeding identified by intraoperative enteroscopy. A case report and review of the literature. *Dig Dis Sci.* 2005; 50: 2251-2254.
6. Thompson WM. Imaging and findings of lipomas of the gastrointestinal tract. *AJR Am J Roentgenol.* 2005; 184: 1163-1171.
7. Huang BY, Warshauer DM. Adult intussusception: diagnosis and clinical relevance. *Radiol Clin North Am.* 2003; 41: 1137-1151.
8. Lin HH, Chan DC, Yu CY, Chao YC, Hsieh TY: Is this a lipoma?. *Am J Med* 2008, 121(1):21-23.

**How to cite this article:** Janugude HB, Janugude DH, Nagur B, Biradar S, Reddy M, Savsaviya JK. A Rare Case of Adult Ileo-Ileal Intussusception Due To a Gastrointestinal Lipoma. *Ann. Int. Med. Den. Res.* 2016;2(2):30-2.

**Source of Support:** Nil, **Conflict of Interest:** None declared