

# Giant ileal lipoma causing ileo-colic intussusception in Adult : A Case Report

Vissa Shanthi A<sup>1</sup>, Nandam Mohan Rao B<sup>2</sup>, Byna Syam Sundara Rao C<sup>3</sup>, Bhavana Grandhi D<sup>4</sup>, Divya Tejaswi E<sup>5</sup>

<sup>1, 2, 3</sup> Professor

<sup>4</sup> Assoc. Professor

<sup>5</sup> Tutor

Department of Pathology  
Narayana Medical college  
and Hospital  
Nellore  
Andhra Pradesh, India.

## CORRESPONDENCE:

<sup>1</sup> Dr. V. Shanthi  
MD (Pathology)  
Flat no. 103  
Anjani SVGK Towers  
Sri Hari nagar  
Ramalingapuram, Nellore  
Andhra Pradesh, India.  
E.mail: santhijp@gmail.com

## ABSTRACT:

Intussusception occurring in adults is rare and constitutes 5% of all intussusception cases. Lipomas are benign tumours and occur infrequently in gastrointestinal tract. Gastrointestinal lipoma leading to intussusception is uncommon. We report a case of 45 years female patient presenting with features of acute abdominal obstruction. On exploratory laparotomy, ileocecal intussusception was noted with lipoma as lead point. Histopathology confirmed the diagnosis.

**Keywords:** Intussusception, ileocolic, lipoma, adults

## INTRODUCTION

Intussusception of the bowel is a condition where the proximal bowel segment called intussusceptum invaginates in to the adjacent distal bowel segment termed as intussuscepti which causes bowel obstruction.<sup>[1]</sup>

In adults intussusception is rare cause of abdominal pain and constitutes 1-5% of intestinal obstruction cases.<sup>[2]</sup> Intussusception in adults often present with non specific symptoms and signs which may complicate the diagnosis. If the condition is diagnosed early, appropriate surgical treatment can be performed which can reduce the mortality rate from intussusceptions.<sup>[3]</sup>

## CASE REPORT

A 45 years female patient came to surgery outpatient department with chief complaints of pain abdomen since 3 days which was sudden in onset and was gradually increasing. She had history of abdominal distension and vomiting since 2 days. There was no history of fever,

burning micturition, diarrhoea or melena. On examination abdomen was distended and there was no visible peristalsis. Hematological indices showed haemoglobin 7.3g%, total WBC count 8,600/cumm, platelet count of 3,38,000/cumm, RBC count - 3.8million/cumm. Serum electrolytes were within normal range. Patient was diagnosed to have acute intestinal obstruction.

On imaging, signs of obstruction or perforation were not seen on plain abdominal radiography. A computed tomography (CT) scan of contrast enhanced abdomen and pelvis revealed the entrance of small intestine into colon with a 10 cms fat dense leading structure in bowel lumen. On exploratory laparotomy, ileocolic intussusception with lipoma as lead point cause was noticed.

Proximal bowel loops were dilated and bowel vascularity appeared to be normal. Right hemicolectomy was done and ileocolic anastomosis was performed. Specimen was sent to pathology department for histopathological examination. We received right hemicolectomy specimen

measuring 19 cms with a pedunculated globular mass measuring 10 cms in the terminal ileum (Figure 1).

Histopathological examination revealed the pedunculated globular mass covered by benign mucosal glands. Underlying submucosa showed mature adipocytes arranged in lobules separated by thin fibrovascular septa (Figure 2). Sections from adjacent intestinal mucosa showed ulceration in some foci. Patients post operative period was uneventful and was discharged on sixth postoperative day without any complications

## DISCUSSION

Barbettee of Amsterdam in 1964 first reported a case intussusception. Intussusception in adults constitutes less than 5% all intussusception cases.<sup>[4]</sup>

Intussusception is more common in children usually below 3 years of age. Male predominance is noted with male to female ratio of 3:1 approximately. As the age increases male predominance also increases with male to female ration of 8:1 at the age of 4 years. In our case patient is female and elderly with age of 45 years.

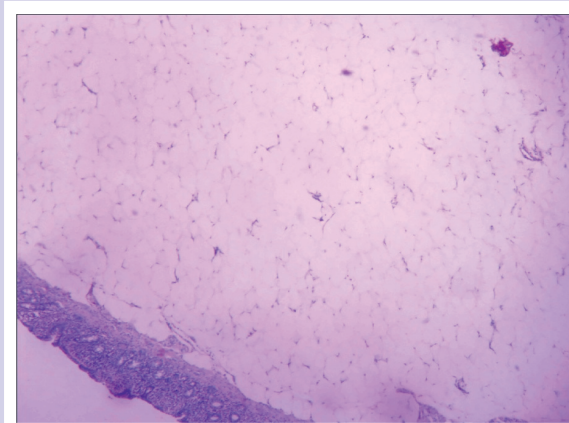
In children intussusceptions is either idiopathic or may be secondary to viral illness. In the ileocecal intussusception, ileocecal valve may be acting as lead point for ileocecal intussusceptions.<sup>[5]</sup>

In adults 8-20% of cases are idiopathic and remaining cases are associated with pathological lesions which can be lead point like benign polyp, lipoma, appendix enlarged mesenteric lymph node, meckle diverticulum, gastrointestinal stromal tumours or malignant tumours.

Lipomas are second common benign tumors of mesenchymal origin in small intestine and constitute 10% of benign gastrointestinal neoplasms and 5% of all gastrointestinal neoplasms.<sup>[6]</sup> Gastrointestinal lipomas are



**Figure 1: Intestinal segment showing giant ileal lipoma**



**Figure 2: Section showing lobules of mature adipocytes covered by intestinal mucosa containing benign mucosal glands (H&E,X50)**

more common in the colon when compared to the small bowel and are occasionally found in foregut.<sup>[7]</sup> Peak age of occurrence in the 6<sup>th</sup> and 7<sup>th</sup> decades of life. These tumours are more common in females. Malignant change has never been documented.

Intussusception is divided into 4 categories depending on the location a) Entero enteric involving small intestine b) Ileocecal involving ileocecal valve as lead point c) Ileocolic involving terminal ileum and ascending colon d) Colocolic involving large intestine.<sup>[8]</sup>

In adults intussusception presents with non specific sign and symptoms like nausea, vomiting, abdominal distension, changes in bowel habits and gastrointestinal bleeding. Hence the early diagnosis in adults is difficult where as in children, intussusception presents with classic triad of intermittent abdominal pain, palpable tender mass and currant jelly stools.

Among all the imaging modalities available an abdominal computerised tomography (CT) scan is more accurate in diagnosis of condition. CT scan shows "Sausage shaped" or "target" lesion while also defining the location and relationship of lesion to adjacent tissues.<sup>[9]</sup>

In CT scan, submucosal lipoma appears as well circumscribed mass of fat density units within the lumen of intussusciens having round -50 to -100 Hounsfield Units. In diagnosing intussusception specificity of CT scan is reported as 100% where as sensitivity is 71.4%-87.5%. Intussusception usually associated with pathological lesions like benign tumours, malignancies or structural anomalies, surgical intervention is required.

Early diagnosis of intussusception may prevent the complications like undetected peritonitis leading to

sepsis, necrosis of bowel and perforation. Mortality in cases of adult intussusception may range from 8.7% cases with benign lesions to 52.4% cases with malignant lesions.

## CONCLUSION

Early diagnosis of intussusception in adults is difficult to diagnosis due to non-specific signs and symptoms. Lipoma is benign mesenchymal tumour which occurs rarely in gastrointestinal tract and can act as lead point for intussusception. Abdominal CT scan helps in diagnosis. Treatment is surgical resection and has an excellent prognosis.

## CONFLICT OF INTEREST :

The authors declared no conflict of interest.

**FUNDING :** None

## REFERENCES

1. Ghaderi H, Jafarian A, Aminian A, Mirjafari Daryasari SA. Clinical presentations, diagnosis and treatment of adult intussusception a 20 years survey. *Int J Surg*. 2010; 8:318-320.
2. Haas EM, Etter EL, Ellis S, Taylor TV. Adult intussusception. *Am J Surg*. 2003; 186:75-76.
3. Stringer MD, Pablot SM, Brereton RJ. Padiatric intussusception. *Br J Surg*. 1992; 79:867-876.
4. Marinis A, Yiallourou A, Samanides L, Dafnios N, Anastasopoulos G, Vassiliou I, Theodosopoulos T. Intussusception of the bowel in adults: a review. *World J Gastroenterol*. 2009; 15:407-411.
5. Rogers SO, Jr, Lee MC, Ashley SW. Giant colonic lipoma as lead point for intermittent colo-colonic intussusception. *Surg*. 2002; 131:687-688.
6. Balamoun H, Doughan S. Ileal lipoma- A rare cause of ileocolic intussusceptions in adults: case report and literature review. *World J Gastrointestinal Surg*. 2011; 3(1):13-15.
7. Chow JW, Feng CL, Lai HC, Tsai CC, Chen SH, Hsu CH. Obscure gastrointestinal bleeding caused by small bowel lipoma. *Int Med*. 2008; 47:1601-1603.
8. Dong Eun Lee, Jae Young Choe. Ileocolic intussusception caused by a lipoma in an adult. *World J Clin Cases*. 2017; 5(6):254-257.
9. Yaken S, Caliskan C, Makay O, Denecli AG, Korkut MA. Intussusception in adults: Clinical characteristics, diagnosis and operative strategies. *World J Gastroenterol*. 2009; 15:1985-1989.
10. Kuzmich S, Connelly JP, Howlwt DC, Kuzmich T, Basit R., Ileocolocolic intussusception secondary to a submucosal lipoma: an unusual cause of intermittent abdominal pain in a 62 year old woman. *J Clin Ultrasound*. 2010; 38(1):48-51.