Case Report

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Vanek's tumour: a rare cause of small bowel intussusception

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ABSTRACT

Adult intussusceptions which are most always caused by pathological lead points are rare and account for about 1% of all bowel obstructions and 5% of all intussusceptions. Most of them present with acute or chronic non-specific symptoms and due to which its initial diagnosis can sometimes be missed or delayed. We present the case of a 52-year-old lady who presented with intestinal obstruction caused by an ileo-ileal intussusception, caused by a peculiar tumour, inflammatory fibroid polyp (IFP).

Keywords: Intussusception, Inflammatory fibroid polyp, Intestinal obstruction

INTRODUCTION

Intussusception is an extraordinarily rare phenomenon in adults. It accounts for about 1% of all bowel obstructions. Most of these are due to a specific pathological lead point which is in contradiction to the paediatric population wherein 90% of them are idiopathic. In the small bowel, about 80% of these are attributed to benign causes whereas in the colon they are most often due to malignant aetiology. Inflammatory fibroid polyps (IFP) originate from the sub-mucosa, are rare and was first described by Vanek in 1949. They are most commonly found in the gastric antrum (70%) followed by the ileum. We herein present an extremely rare case of an ileo-ileal intussusception caused by an IFP.

CASE REPORT

A 52-year-old female, presented to our surgical out patient's department with complaints of diffuse abdominal pain for 7 days, associated with 7 episodes of vomiting containing food particles and non-bilious, constipation, obstipation and abdominal distension in the same period. She denied any history of fever and

gastrointestinal bleeding. She was a known case of bronchial asthma and

systemic hypertension for 30 years and 3 months respectively and on treatment for the same.

On examination, she was comfortable and well hydrated. Her pulse rate was 96 beats/minute with a blood pressure of 140/90mmHg. Her abdomen examination revealed abdominal distension. Abdomen was soft, with diffuse tenderness, there was hyperperistalsis and there was no palpable mass. Digital rectal examination did not reveal faeces or blood. Diagnostic investigations were performed with laboratory tests which showed no significant changes. A provisional diagnosis of intestinal obstruction was made and the patient was started on antibiotics, intravenous fluids and nasogastric tube was inserted. Erect x-ray abdomen revealed air filled dilated small bowel loops. A contrast enhanced computed tomography scan revealed ileo ileal intussusception (Figure 1-2).

The patient underwent a laparotomy under general anaesthesia with epidural block, which revealed an intussusception about 40 cm from the terminal ileum and a leading point was identified and suspected to be a lipoma (Figure 3-4). We performed a segmental bowel

resection with end-to-end anastomosis and the specimen was sent for histopathological analysis. Patient had a good post-operative course and the assessment of the operated wound site was done on post-operative day 2 following which patient was started on enteral diet subsequently. Patient was discharged after a week of hospitalisation. Histopathological examination of the tumour showed a polypoidal mass with homogenous firm glistening grey white areas of mucosa, polyp arising from the submucosal plane. Submucosa showed tumour composed of proliferative spindle cells in sheets. Stroma also showed inflammatory infiltrates composed of lymphocytes, eosinophils, plasma cells and a few macrophages (Figure 5).

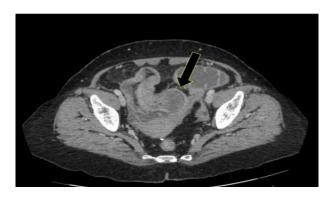


Figure 1: CECT abdomen showing ileo-ileal intussusception with proximal dilated jejunal loops.

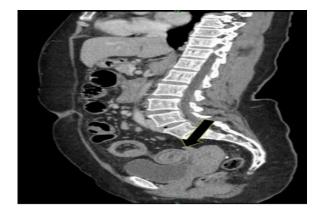


Figure 2: CECT showing target sign in proximal ileal loops.



Figure 3: Operative photograph showing dilatation of proximal segment.



Figure 4: Resected specimen showing lead point of intussusceptum.

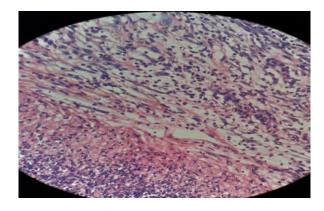


Figure 5: Histopathology of polyp showing proliferative spindle cells in sheets, inflammatory infiltrates, eosinophils.

DISCUSSION

Inflammatory fibroid polyps are rare, benign lesions without a capsule and are made of loose connective tissue and eosinophilic inflammatory cells and are vascular. The term inflammatory fibroid polyp was finally devised by Helwig and Ranier in 1953 and accepted as a general term.⁵ IFPs occurring in the small bowel commonly present with symptoms of colicky abdominal pain, lower gastrointestinal bleeding and rarely, intestinal obstruction caused by intussusception.⁶ IFPs of the small bowel, especially ileum is rare and accounts for only 18% of the cases.⁷

IFPs affect all age groups and both genders, and peak during the 5th and 6th years of life. These tumours mostly occur sporadically, but, a familial relationship has also been discovered. Our patient was also of the same age group. These lesions invariably tend to be vascular and contain inflammatory cells (mainly eosinophils and lymphocytes). IFPs are rarely malignant and most of the times, do not recur. Most of these lesions don't exceed more than 6 cm in size and the symptoms are presumed to be related to their size. Overall, about 15 cases of

jejunal IFPs have been described in the current literature and these rarely exceed 3-4 cm.⁹

The main-modality for the diagnosis of intussusception is Computed Tomography (CT) scan which shows characteristic "Target sign", The case discussed above also had the typical features on CT, an ileal mass was seen which was suspected to be the lead point which was further confirmed intra operatively on table. After a follow up of 12 months, the patient was in a good condition and no recurrence has been seen so far. IFPs mainly need to be differentiated from other spindle cell lesions like inflammatory fibrosarcomas, spindle cell carcinoids and gastrointestinal stromal tumours (GISTs) an dis mainly done on immunohistochemical studies. IFPs mainly stain positive for CD-34 and negative for S100 protein and CD-117.

It is essential to differentiate a chronic ileocolic intussusception caused by an IFP from that of caecal carcinoma since the line of management varies for both. ¹⁰ In most adults presenting with intussusceptions, the treatment of choice is resection.

In case of small bowel intussusception, a reduction, followed by an elective resection, can be done. This is however a topic of debate since the effectiveness of pneumatic reduction is low and there could be a chance of recurrence. It is also not a permanent modality of treatment.

CONCLUSION

Thus, IFP are rarely seen in adults, but should be considered as a probable cause of obstructive tumours occurring in the small bowel. CT is the gold standard in diagnosing intussusception, but the cause can be identified by histopathological confirmation only. Surgery is the mainstay of treatment which involves resection and anastomosis.

Identifying this cause from the rest of the reasons for intussusception is important since the line of management varies.

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