Case Report

SMALL BOWEL HAEMANGIOMA: A RARE CAUSE OF INTESTINAL OBSTRUCTION IN INFANT

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ABSTRACT

Haemangiomas of small bowel are rare benign tumors. They present diversely, with intestinal obstruction being rare. We describe a two years old female baby with intestinal obstruction. Exploration revealed a diffusely infiltrating haemangioma of middle one third of ileum. Resection of affected segment and end to end bowel anastomosis was made. Post- operative recovery was un- eventful. Histopathological report was consistent with capillary haemangioma of small intestine.

KEY WORDS: Small bowel haemangioma, Intestinal obstruction, Infant.

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INTRODUCTION

Infantile haemangiomas are benign vascular lesions, composed of proliferating plump endothelial cells.[1] Small bowel haemangiomas are uncommon benign tumour, which are rarely encountered in clinical practice and are rare cause of intestinal obstruction in children.[2] Clinical presentation varies and may be misleading due to lack of awareness of the clinical condition; occasionally the diagnosis is made during surgery. We report such a case that presented with acute intestinal obstruction along with brief review of literature.

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CASE REPORT

A two years old female child presented with three days history of acute abdomen. Clinical examination revealed distended and tender upper abdomen. There was a palpable tubular mass at central abdomen. Per rectal examination was insignificant. X-ray abdomen showed multiple air fluid levels while ultrasound was suggestive of intussusception. Laboratory investigations were within normal limits.

On exploration, we found haemangioma of ileum involving approximately 25cm of middle one third of ileum (Figure-1). Resection of involved segment and end to end anastomosis was done. Post operative recovery was

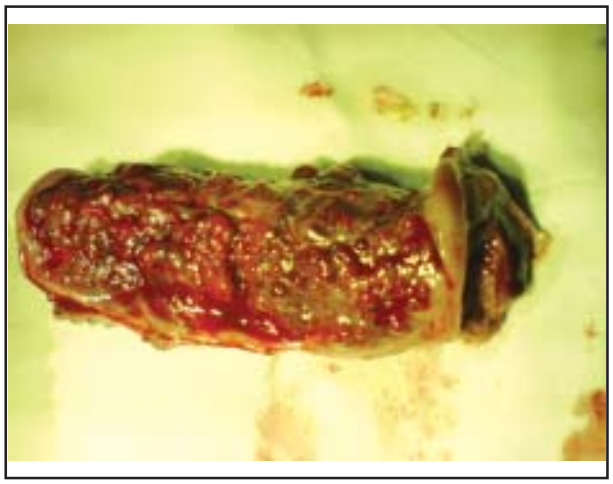

Figure-1: Haemangioma of small bowel.

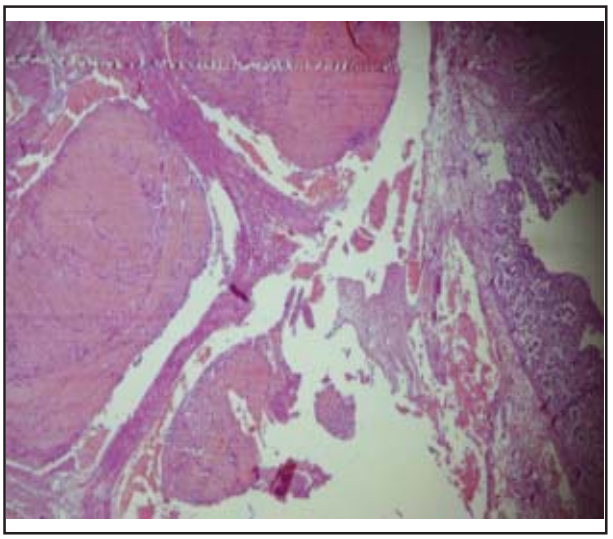

Figure-2: Histopathological view of small intestinal haemangioma.

symptom free. Histopathological examination revealed a capillary haemangioma of small intestine (Figure-2). Patient is on regular follow-up without any symptom.

DISCUSSION

Haemangiomas are defined as masses of capillaries, blood filled endothelial lined spaces or a combination of them. Haemangiomas of small bowel are uncommon and accounting for only 0.05% of intestinal neoplasia and 7-10% of all benign tumors of small intestine.[2,3] Haemangiomas of infancy occurs in 10-12% of white infants, 14% of black infants and 0.8% of Asian infants with male to female ratio 1:3 to 1:5. Favorable site in small bowel for haemangioma is jejunum, but in our case it was ileum. Haemangioma of intestine may be solitary or multiple and they may manifest as a segment of different syndromes; Blue rubber bleb syndrome, Maffucci syndrome and Klipple-Trenaunay-Weber syndrome.[4] Intestinal haemangioma has also been reported in Peutz-Jeghers syndrome.

Etiology of haemangiomas is still unknown, but it is believed that these tumors are angiogenesis dependent. This process is tightly controlled by inhibition of endothelial cell growth. Haemangioma could result from a localized diminution of normal angiogenesis inhibition or increased production of angiogenetic stimulator.[5]

Haemangiomas of small intestine present either as polypoid masses projecting into the lumen or as diffusely infiltrating lesions involving long segment of gut,[6] as in our case. Most common manifestation of intestinal haemangioma is acute or chronic bleeding, although some time they may present with volvulous, intussusception, and perforation and very rarely intestinal obstruction as in our case.[7]

Modern imaging studies can usually establish the diagnosis of intestinal haemangioma or at least can raise a strong suspicion. Abdominal radiography may reveal a phlebolith which is due to thrombus formation in tumor; its absence does not exclude the diagnosis of haemangioma. Ultrasound, double contrast barium enema, CT scan and MRI are helpful in diagnosis of haemangioma.[8] Laparoscopy is more suitable for diagnosis but is not so much helpful for resection and anastomosis. Laparotomy is final mode of diagnosis as well as resection and anastomosis which we have done in our case. Naked eye examination is also a reasonable diagnostic parameter of haemangioma but its types can be further assesed on histopathological examination.The majority of intestinal haemangioma are cavernous type, in our case it was capillary haemangioma.

Haemangioma of small intestine is rare though it may present as intestinal obstruction. It should be kept in mind while handling cases of acute abdomen in infants.

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