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ILEO-ILEAL INTUSSUSCEPTION CAUSED BY METASTATIC MELANOMA OF SMALL BOWEL- A RARE ENTITY IN RARE LOCATION

General Surgery

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ABSTRACT

Adult intussusception occurs infrequently and differs from childhood intussusception in its presentation, etiology, and treatment. Diagnosis can be delayed because of its longstanding, intermittent, and non-specific symptoms and most cases are diagnosed at emergency laparotomy. With more frequent use of cmputed tomography in the evaluation of patients with abdominal pain, the condition can be diagnosed more reliably. Treatment entails simple bowel resection in most cases. Herein we report a case of metastatic melanoma ileum presented as ileo-ileal intussusception.

KEYWORDS

intestinal obstruction, intussusception, adult, intestinal invagination, , malignant melanoma, small bowel.

Introduction :

Melanoma is a malignant tumor of melanocytes and predominantly occurs in the skin. Due to its aggressive behavior and high rate of metastases, the overall prognosis is poor. Two thirds of all primary metastases are confined to the regional lymphatic system. The American Joint Committee on Cancer (AJCC) classifies the melanoma staging system into three groups(1). The overall 10-year survival rate is 75-80%. In the presence of distant metastases, the median survival rate is 6-9 months. Prolonged survival time reported in a few patients with gastrointestinal metastases is associated with aggressive surgical treatment in combination with chemotherapy. Metastases to the gastrointestinal tract are common and sites include the small bowel, large bowel, and ano-rectum.

Herein we report a case of metastatic melanoma ileum presented as ileo-ileal intussusception.

Case presentation :

A 43 year old male presented to the hospital with constipation, central pain abdomen and vomiting of 2 days duration. Patient also gave history of recurrent episodes of non-specific abdominal pain and distension, which were short lasting for last 5 months.

Patient is a diagnosed case of malignant melanoma with axillary and pulmonary metastasis and was under care at T M H Mumbai. Left thumb amputation was done in February 2016 (photo 1), left axillary lymph node dissection in July 2017 and PET scan revealed multiple FDG avid bilateral lung nodules in September 2017.

At presentation abdominal examination revealed slight distension with minimal tenderness, no masses were palpable. On work up; USG abdomen shows dilated bowel loops and to and fro movement of content suspicious of obstruction, area of bowel wall thickening with bowel within bowel.

A computed tomogram of abdomen was then obtained, which showed thickening ileal mucosa and a soft tissue mass with a doughnut- like appearance in the left iliac fossa. The appearance were suggestive of small bowel intussusception.

At laparotomy ileo-ileal intussusception was found, a small bowel resection without reduction was performed (Photo 2). Patient made an uneventful post-operative recovery. Histopathology, showed the lead point as polypoid mass of 4.5x3.3x3 cm along anti-mesenteric border of ileum, and reported as malignant melanoma with metastatic regional nodes(2/2).

Discussion :

Approximately 5% of all intussusceptions occur in adults, accounting for 1% of all bowel obstructions(2). It has often been stated that intestinal intussusception in adults is frequently caused by serious underlying disease, may be metastatic tumors, adenocarcinoma, gastro-intestinal stromal tumors, lymphoma, and carcinoid tumors(3,4).

Melanoma is a malignant tumor of melanocytes and predominantly occurs in the skin. It is highly aggressive with an early tendency to metastasize. Metastases to the gastrointestinal tract are common, with common sites including the small bowel (50%), large bowel (31%), and anorectum (25%)(5).

The presenting symptoms in adult patients with intussusception are non-specific and often long standing. Most series report pain as the commonest symptom, being present in 71% to 90% of patients, with vomiting . The important characteristic of pain is its periodic, intermittent nature, which makes the diagnosis elusive and accounts for the delay in making the diagnosis, with only half the cases being diagnosed before operation.(6)

Symptomatic diagnosis of intussusception with a lead point is difficult owing to the variety of clinical manifestations. The presence of a lead point, the configuration of the lead mass, the degree of bowel wall edema, and the amount of invaginated mesenteric fat all affect the appearance of an intussusception. An intussusception with a lead point appears as an abnormal target like mass with a cross-sectional diameter greater than that of the normal bowel and may be associated with proximal bowel obstruction(7).

Recently, growing use of computed tomography (CT) for abdominal imaging has led to increased detection of intussusception. However, the clinical significance of intussusception detected with CT poses a fresh diagnostic challenge(7). Kulkarni & Thakur(7) reviewed the pathophysiologic features, classification and also discussed the clinical and CT manifestations of lead point versus non–lead point intussusceptions and of small bowel versus large bowel intussusceptions in detail.

Computed tomography seems to be the most reliable investigation in making a preoperative diagnosis, especially in those patients with non-specific abdominal pain in whom the diagnosis can be elusive. In our case also clinical scenario was elusive but computed tomography established diagnosis.

Other investigations like ultrasonography, barium enema, colonoscopy or flexible sigmoidoscopy, upper GI series, can be used according to the clinical situation. In our patient ultrasonography was helpful in suspecting the diagnosis.

Adult intussusception warrants laparotomy rather than attempts at hydrostatic reduction in view of the high incidence of underlying abnormality. Controversy remains as to whether reduction of the intussusception should be attempted at operation. Early reports advocated reducing the intussusception before resection. The perceived disadvantage of this is that malignant cells may be disseminated during the process despite no clear evidence on this issue. On the other hand, the advantages of reducing the intussusception especially when the small bowel is affected are that it may be possible to preserve considerable length of bowel and thereby prevent development of short bowel syndrome(8). However other authors(2) suggested that surgical resection without reduction is the

preferred treatment in adults, as almost 50% of both colonic and enteric intussusceptions are associated with malignancy.

Conclusion :

Intussusception in adults is an infrequent problem. The diagnosis of this condition can be difficult as symptoms are often non-specific and episodic. It is important to have a high index of suspicion. The most useful investigation is abdominal computed tomography. Clinicians must be vigilant not only for correct diagnosis, but also for early management (resection of the involved bowel without attempted reduction), in order to achieve a good outcome in patients suffering from this rare and aggressive malignancy.

Photo 1 : showing amputated right thumb

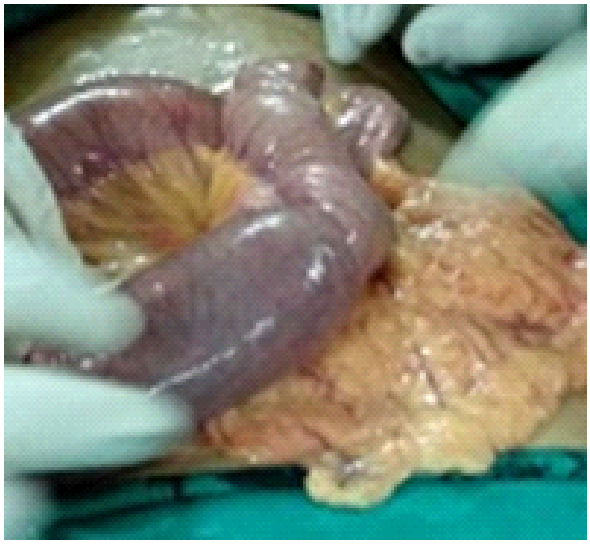

Photo 2 : showing ileo-ileal intussusception

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