CAPILLARY HEMANGIOMA CAUSING INTESTINAL INTUSSUSCEPTION IN AN ADULT - CASE REPORT

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ABSTRACT

Significance: Recurrent colicky abdominal pain is a common and necessitates in depth investigation. Intussusception in adults, although it may not be on top of our list, should be included in our differential diagnosis.The aim of this study was to evaluate present a case report of a patient who had intestinal intussusception due to a capillary hemangioma.

Clinical Manifestation: A case of a 33-year old, male presenting with recurrent colicky abdominal pain associated with episodes of vomiting. Abdominal His abdomen was non distended, hypoactive bowel sounds, soft, slight tenderness at the left hemiabdomen but without any obvious palpable mass.

Management: Plain abdominal xray was inconclusive. CT scan revealed an intussusception. Colonoscopy revealed a purplish, polypoid mass and a coil-spring appearance hanging from the lateral wall which appears to be the lead point with blood clots and signs of ischemia. There was note of transition of the mucosa from shiny mucosa with folds to notable peyers patches and villi without visualization of the ileo-cecal valves and appendiceal opening. Exploratory laparotomy was done with right hemicolectomy. Histopathology revealed an ileo-ileal intussuception due to a capillary hemangioma.

Recognition and appropriate approach to possible cases of intestinal obstruction is of utmost importance.

Keywords: intussusception, capillary hemangioma

INTRODUCTION

Intussusception is defined as a prolapse of a proximal bowel segment into the distal segment. Adult intussusception represents 5% of all cases of intussusception and only 1–5% of intestinal obstruction.[1] A causal lesion is identified in 90% of these cases [2] . Intussusception have been classified according to their locations into four categories: (1) entero-enteric, confied to the small bowel, (2) colo-colic, involving the large bowel, (3) ileo-colic, defined as the prolapse of the terminal ileum within the ascending colon and (4) ileo-cecal, where the ileo-cecal valve is the leading point of the intussusception [3].

The classical clinical presentation of intussusception in adults can be nonspecific, with the triad of abdominal pain, vomiting, and currant-jelly stools found in children rarely seen, leading to delays in diagnosis. Nevertheless, intussusception is an important differential to consider because most cases in adults are caused by obstructive lesions, commonly malignant neoplasms. In contrast to pediatric intussusceptions, which are managed nonoperatively with air contrast enemas, treatment in adults is exploratory laparotomy for surgical reduction or resection.[4]

CASE REPORT

A 33-year-old man presented with cramping peri-umbilical abdominal pain and vomiting. He denies any previous episodes. The patient was initially prescribed with acid suppressants but afforded no relief. He also reported one episode of dark tarry stools 4 months earlier. At that time, his primary care physician ordered contrast computed tomography (CT) of the abdomen and pelvis that showed loops of small bowel with diffuse wall thickening and mild dilatation, possibly indicative of an early inflammatory process. Review of systems was negative for changes in bowel habits, weight loss, fever or hematochezia. He had had no abdominal surgeries. He had no family history of any malignancies.

On physical examination the patient looks acutely, with occasional grimace coinciding colicky abdominal pain attacks. He had a temperature of 37.1o C, pulse of 84 beats/min, blood pressure of 130/80, respiration of 20 breaths/min, and oxygen saturation of 99% on room air. His heart had a regular rate and rhythm, and his lung sounds were clear. His abdomen was non distended, hypoactive bowel sounds, soft, slight tenderness at the left hemiabdomen but without any obvious palpable masses.

Laboratory tests were unremarkable Electrolytes, liver function test results, and pancreatic enzymes were all within normal limits. Given his persistent discomfort on serial exams unrelieved by antiemetics and narcotics, an abdominal CT was performed. An abdominal xray was done which only revealed segmental ileus. The CT scan done in another hospital was submitted for rereading

which was signed out non obstructive small-bowel intussusception within the proximal small bowel. Colonoscopy was done which revealed A 5 cm, purplish, polypoid mass and a coil-spring appearance hanging from the lateral wall which appears to be the lead point. Distal to the lead point was a very congested and edematous area covered with blood clots which seems to be the distal ascending colon. There was note of transition of the mucosa from shiny mucosa with folds to notable peyers patches and villi. The appendiceal opening and the ileo-cecal valve was not identified. The colonoscopy strongly suggest ileocolic intussusception.

Surgery service was consulted and the patient underwent exploratory laparotomy. Intraoperative findings as follows: 20cm of the terminal ileum intussuscepted into the colon, lead point is a 10cm polypoid mass in diameter. The intussusceptum was noted to have gangrenous mucosa. No mesenteric lymphadenopathy was noted. Right hemicolelectomy was performed. Post operative diagnosis was ileo-colonic intussuception secondary to an ileal mass.

Histopathology findings were a ilea-ileal intussusception, 14 cm in length with extensive hemorrhagic infarction. The ileal mass a capillary hemangioma. Other findings were non specific. There were no evidence of malignancy noted.

Patient's recovery was uneventful.

DISCUSSION

Intussusception develops due to a difference of motility between two intestinal parts. A segment (intussusceptum) enters a neighbouring one (intussusceptiens).Recent reviews showed that 90% of adult patients have anatomical or pathological cause underlying the intussusception 2,3

In general, the majority of lead points in the small intestine consist of benign lesions, such as benign neoplasms, inflammatory lesions, Meckel's diverticuli, appendix, adhesions, and intestinal tubes. Malignant lesions (either primary or metastatic) account for up to 30% of cases of intussusception in the small intestine(5). On the other hand, intussusception occurring in the large bowel is more likely to have a malignant etiology and represents up to 66% of the cases(4,5). In our case, an intestinal capillary hemangioma was seen. They may occur anywhere along the the intestinal system; small bowel is the most freqeuent site with hemangiomas and malformations accounting for 10% of all small bowel tumors 6. Colonic and anorectal hemangiomas and malformations are even rarer yet, with 200 cases documented from 1931 to 1974 (7) Hemangiomas of the GIT 0.05% of all intestinal neoplasm. It usually presents as bleeding but may also manifest as intussuception, small bowel obstruction or perforation (13)

This condition is rare in adults, remains a diagnostic challenge for most physicians especially for presenting wide range of symptoms, chronic symptoms often predominate (8). In all the reviews of symptomatology abdominal pain was the most

common symptom, followed by nonspecific symptoms with nausea, vomiting, constipation and fever. Intermittent, non-specific colicky periumbilical pain was the most prominent symptom in our patient.

Diagnostics

Plain abdominal xray

X-ray examinations of the abdomen is more requested and, although rarely, show signs suggestive of intussusception, can help define an obstruction and in some cases the location (8). In a study done by Yakan et al, plain abdominal X-rays were first obtained in patients with acute symptoms, which revealed air-fluid levels that suggested intestinal obstruction in five patients (25%). It was normal in the other 15 patients (75%).

Computed tomography

Computed tomography has been included in work ups in patients presenting with symptoms of intestinal obstruction after a plain abdominal xray is done. Intussusception is well diagnosed on multi-slice spiral computed tomography with a diagnostic accuracy near 100%. Abdominal CT is the most useful diagnostic tool not only for detecting an intussusception, but also helps in identifying the underlying cause (Huang & Warshauer, 2003). The CT appearance is complex, including the outer intussuscipiens, the inner intussusceptum and an eccentric fat density mass representing the intussuscepted mesenteric fat. According to the cut axis, the intussusception appears as a “sausage” or a “target” mass. CT also allows a close correlation with the pathological staging. Besides intussusception itself, CT can identify metastases, lymphadenopathy, free liquid or proximal bowel dilation. Detection of the causal lesion remains, however, difficult. (9)

Colonoscopy

Colonoscopic examination is valuable in the evaluation of cases of acute and chronic intussusception, especially when symptoms suggest obstruction of the colon 8. Can confirm the intussusception, the location and shows the underlying lesion when it exists. However, if a lesion was identified, polypectomy or endoscopic biopsy is not advisable to do because of high risk of perforation. (Erkan Et al 2005) In our case, a purplish polypoid mass was identified as the lead point of the intussuception of the ileum to the colon. Distal to the lead point, the mucosa was noted to be hyperemic and congested with signs of vascular compromise.

Management

In children conservative reduction of intussusception with contrast media, saline or air has success rates reaching up to 90% (10)

Hadidi AT, El Shal N. Childhood intussusception: a comparative study of nonsurgical management. J Pedia Surg 1999;34: 304–.

The optimal treatment for adult intussusception has not been established. Most surgeons consider that preoperative hydrostatic reduction is not mandatory. A laparotomy and resection of the segment of bowel with the intussusception are recommended (11) Some authors suggest that resection should be performed without prior reduction for the following reasons:1) possibility intraluminal spread of tumor or venous during the reduction; 2) risk of perforation and spread of microorganisms and tumor cells into the peritoneal cavity; 3) increased risk of complications after anastomosis made about manipulated intestinal tissue, friable and edematous (12). In our case, hydrostatic and manual reduction was not attempted due to finding of an obstructive lesion and signs of vascular compromise.

Conclusion

Intussusception, though a rare cause of intestinal obstruction, should be included in our differential diagnosis. It should be recognized and managed appropriately. An identiable lesion is usually the cause in our case that was managed surgically.

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