Surgical Decision Making – A Dynamic Process

Muhammad Mustafa Kamal Bhutta,[1] Bilal Mirza[1*]

Dear Editor

A 6-year-old girl presented with abdominal distension, bilious vomiting, and constipation for three days. She had a similar episode at the age of 6-month and surgery was planned, but it settled spontaneously. On examination, patient was febrile and pale looking. Abdomen was distended and tenderness was present. Bowel sounds were not audible. Digital rectal examination revealed mucus in the rectum. Abdominal radiograph revealed air fluid levels and ultrasound of abdomen showed dilated aperistaltic bowel loops with presence of free fluid. Laboratory investigations revealed anemia (Hb: 8g/dl). At surgery, about two feet of distal small bowel was internally herniated through a huge mesenteric defect of 8cm x 10cm size (Fig. I). The herniated bowel was necrotic so resection and anastomosis was started. During anastomosis, significant edema of entire small and large bowel was noted. Anastomosis in this condition was thought to be detrimental thus divided ileostomy was made in proximal ileum. Postoperative course remained uneventful. Patient was allowed orally on 5th postoperative day. It was difficult to manage stoma output and patient experienced multiple episodes of dehydration and electrolyte imbalance. The decision of reversing ileostomy was made on 10th postoperative day during the same admission. No complication occurred following stoma reversal.

Mesenteric defect of bowel mesentery is rare congenital anomaly which may present as acute abdomen due to internal herniation of bowel leading to bowel necrosis.[1,2] The treatment is quite straightforward, following standard principles of surgery. Significant bowel loss in such patients due to gangrene, leads to significant morbidity.[1-3] In our patient the initial planning changed during surgery because of an unusual appearance of bowel edema. A transfusion related allergic event or toxins released after reduction of herniated bowel could play a role in development of bowel edema. The take home message is that surgeons must be vigilant of any unusual findings during surgery and in postoperative period that might indicate change in planning for optimal outcome as experienced in this patient.

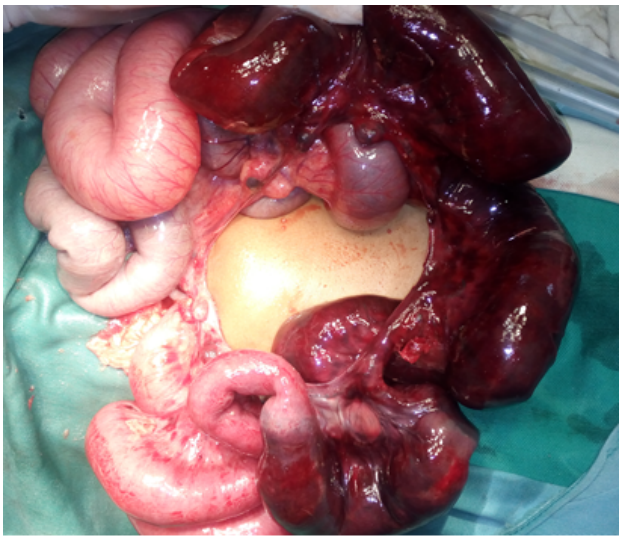

Fig I: Showing a huge mesenteric defect and gangrenous bowel due to internal herniation after reduction.

REFERENCES:

1. Bhatti A, Azim A, Khushbakht S, Saddal NS. Transmesenteric herniation through congenital mesenteric defect leading to bowel gangrene. APSP J Case Rep. 2015;6:23.

2. Lee N, Kim SG, Lee YJ, Park JH, Son SK, Kim SH, et al. Congenital internal hernia presented with life threatening extensive small bowel strangulation. Pediatr Gastroenterol Hepatol Nutr. 2013;16:90-4.

3. Nouira F, Dhaou BM, Charieg A, Ghorbel S, Jlidi S, Chaouachi B. Small bowel obstruction caused by congenital transmesenteric defect. Afr J Paediatr Surg. 2011;8:75-8.

[1] Department of Pediatric Surgery, Children Hospital Faisalabad

Correspondence:
Dr. M. Bilal Mirza [1*]
Department of Pediatric Surgery
Children Hospital Faisalabad
Email: bl_mirza@yahoo.com

Received for publication: 24-03-2017

Accepted after revision: 20-05-2017

How to cite this article:
Bhutta MMK, Mirza B. Surgical decision making – A dynamic process. J Surg Pakistan. 2017;22(2):73. doi:http://-dx.doi.org/10.21699/jsp.22.2.11.