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Cecal Volvulus-A Diagnostic Challenge

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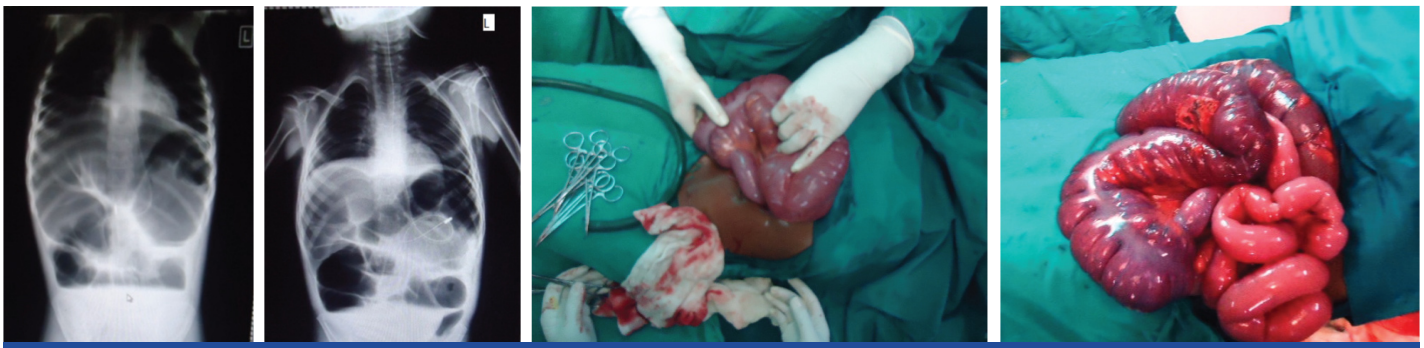
A 12-year-old male child with mental retardation and cerebral palsy since birth on treatment was admitted with pain and distension of abdomen since three days and vomiting since two days. He was not passing stools and flatus since three days. On examination, abdomen was distended and tense. There was tenderness on palpation and tympanic note all over abdomen on percussion. On per rectal examination, rectum was empty and no flatus was observed on passing the flatus tube.

Initial X-ray abdomen in erect position showed dilated bowel loops filling the upper abdomen occupying both the hypochondria [Table/Fig-1a]. We managed conservatively by doing continuous nasogastric aspiration and passing flatus tube for 24 h. X-ray abdomen was repeated after 24 h which showed no much difference compared to the previous film [Table/Fig-1b]. Abdominal ultrasonography showed gaseous distended bowel loops without any free fluid in abdomen. Routine laboratory investigations including serum electrolytes were within normal limits.

Based on the above findings, we suspected intestinal obstruction as the primary cause and planned for exploratory laparotomy. On exploration, it was found that, there was a gross dilatation of cecum, ascending colon and hepatic flexure and twisted around the mesocolon by two turns clock wise as the cecum and ascending colon was not fixed [Table/Fig-2a]. There was congestion of bowel which improved on oxygenation [Table/Fig-2b]. Hence, cecostomy was done after decompressing the colon by passing flatus tube per anus. Post operatively, patient improved and passed stools freely on third post operative day. Cecostomy drain was removed on ninth post operative day and he got discharged on 10th day. On follow up, he was doing well after three months.

We would like to give attention to this uncommon cause of intestinal obstruction, which might be overlooked during the first hours after its onset and lead to serious sequelae, including cecal necrosis. Preoperative diagnosis of cecal volvulus is rarely achieved in most cases because of its rarity and non specific presentation [1]. Plain X-ray abdomen is the initial diagnostic test of choice in case of obstruction due to cecal volvulus [2]. It shows coffee bean sign where an axial view of dilated cecum with air and fluid pointing to left upper quadrant. Radiographs, however, will clearly diagnose the condition in less than 20% of the cases [3]. As in our case, we made an early diagnosis of cecal volvulus by serial radiological findings and clinical monitoring. Thus on exploration, detorsion made cecum viable and cecopexy with tube was performed. Prompt recognition and urgent treatment may avoid gangrenous changes of the bowel, which is believed to be an important cause of high morbidity and mortality.



[Table/Fig-1a]: X-Ray abdomen erect on admission **[Table/Fig-1b]:** X-Ray abdomen erect after 24 h **[Table/Fig-2a]:** Showing dilated cecum, ascending colon, and transverse colon **[Table/Fig-2b]:** Showing congested bowel viable after detorsion of volvulus

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