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Case Report

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SEGMENTAL CAECAL DILATATION: PRESENTING AS NEONATAL INTESTINAL OBSTRUCTION

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ABSTRACT

In neonates congenital segmental dilatation of a portion of small intestine causing intestinal obstruction although described in literature, is uncommon. We hereby report a case of neonatal intestinal obstruction due to segmental caecal and ascending colon dilatation causing functional intestinal obstruction.

KEYWORDS: Intestinal Obstruction, Neonatal, Congenital Caecal dilatation, Segmental dilatation.

INTRODUCTION

Segmental dilatation of the intestine causing intestinal obstructionis a rare entity in neonates and segmental caecal dilatation causing intestinal obstruction is rarest. Although segmental dilatation can involve anywhere from duodenum to distal colon in the gastrointestinal tract, most commonly affected site is the ileum followed by the colon and the jejunum.[1] We report a case of segmental dilatation of caecum in a neonate.

CASE REPORT

We report here a case of full termnewborn male child born to a primigravida mother, weighing 2.3 kg. The baby cried immediately after birth and was started on breastfeed. The child started vomiting after two days and did not pass meconium. After fifteen days of birth the baby started developing abdominal distension, bilious vomiting and poor oral intake. On examination, tone, color, cry, reflexes were normal and vitals were stable. Conservative management was started with intravenous fluids and antibiotics. Rectal wash was given but child did not pass meconium. Plain radiograph abdomen showed distended bowel loop(Fig.1). Barium enema was done to rule out hirschprung disease (Fig.2). Gastrograffin study of GIT outlined stomach, duodenum, jejunum and proximal ileum with dilated gut loops and obstruction at level of distalileum. After adequate resuscitation child was taken for surgery. Right supraumblical transverse muscle incision was givenand abdomen was opened. Caecum and part of ascending colon was showing enormous dilatation and gut distal to the dilatation was normal (Fig.3). The dilated segment of the gut was resected and an ileocolic anastomosis was done. The postoperative period was uneventfuland childpassed stools on 3rd day. Patient was started orally on 4th day and discharged on seventh day. The histopathology of the resected specimen showed presence of normal ganglion cells with no abnormality in the dilated segment (Fig.4).

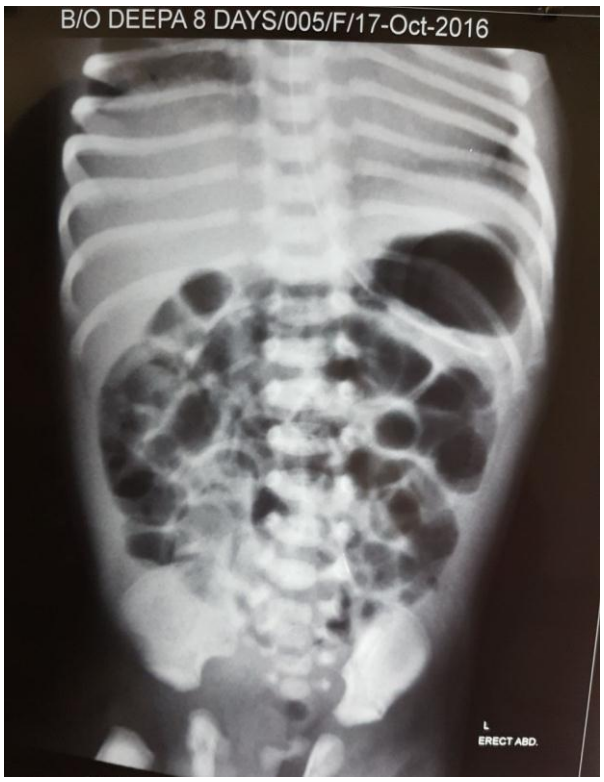

Figure 1: Plain radiograph abdomen showed distended bowel loop.

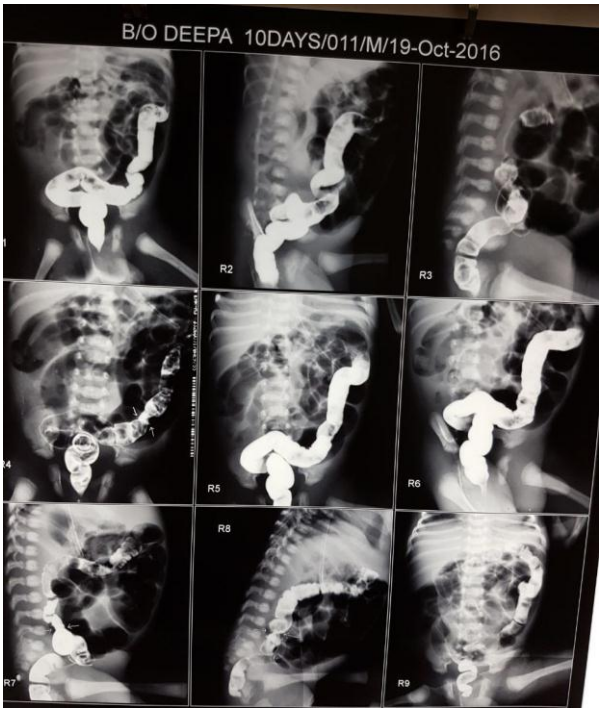

Figure 2: Barium enema.

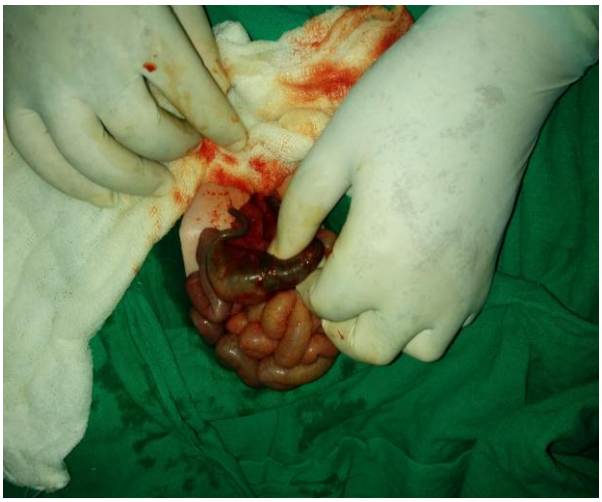

Figure 3: Caecum and part of ascending colon showing enormous dilatation with normal distal gut.

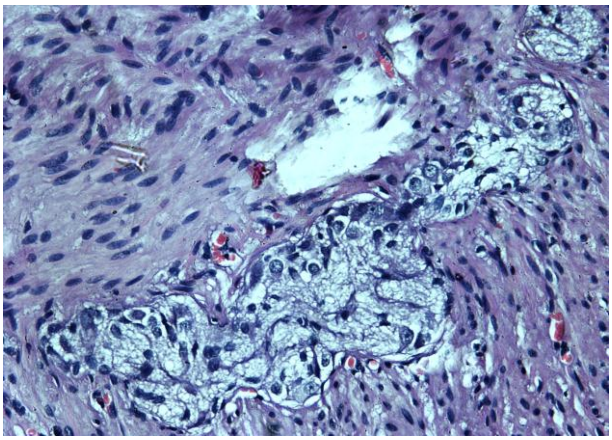

Figure 4: Histopathology of the resected specimen showing presence of normal ganglion cells.

DISCUSSION

Segmental dilatation of the intestine was described for the first time in the colon by Swenson and Rathauser in 1959 and they proposed the criteria for the diagnosis of this rare entity as[2]: limited bowel dilatation with a 3- to 4-fold increase in size, abrupt transition between the dilated segment and normal bowel, no intrinsic or extrinsic barrier distal to the dilatation, a clinical picture of intestinal occlusion or sub-occlusion, normal neuronal plexus and, complete recovery after resection of the affected segment. Most commonly seen in the ileum, followed by the colon and the jejunum. Rovira et alfirst reported segmental dilatation of duodenum.[3] First case of segmental jejunal dilatation was reported by Rossi and Giacomoni.[4] Brawner and Shafer and Swenson and Rothauser have reported few cases of segmental dilatation in colon.[2,5] Segmentalcaecal dilatation and of ascending colonassociated with colovesicalfistula and high anorectal malformation has also been reported byMathur et al.[6] But the etiology of this entity remains unknownin all these aforementioned cases with normal presence ofganglion cells. Some authors suggest probable pathogenesis may be related to intrauterine vascular accidents, any external compression on the foetal bowel, localized vacuolization ofthe intestinal smooth muscle causing myopathy, during gestation entrapment of the bowel within the omphalocoele and various other theories have been proposed.[7-8] In the neonatal period it can mimic Hirschsprung's disease or can present with acute intestinal obstruction while in older infants it presents with features of intermittent intestinal obstruction, chronic constipation, anemia, malabsorption. Some authors have alsoobserved heterotopic tissue in the wall of the involved gut such as gastric and esophageal tissue, lungand pancreatic tissue.[3] No such tissue was observed in our case. It often manifests as anlocalized dilation of a segment of bowel without any evidence of abnormal neural innervation or intrinsic or extrinsic obstruction as was observedin our case. On laparotomy, there was adilated caecum with apparentlynormal gut proximal and distal to this segment. Theobstruction was functional and non-mechanical because the lumen of the dilated segment was continuous withrest of the gut and microscopic examinationof the dilated segment also showed normal histology with normal distribution of ganglion cells. Although resection of theaffected segment and end-to-end anastomosis of the normalintestine is the definitive treatment, the cause remains unexplained.

CONCLUSION

segmental dilatation of caecum should be kept in mind among the differential diagnoses while dealing with cases of neonatal intestinal obstruction or perforationand extensive resections can be avoided. Also the resected portion of the intestine should always be sent for a thorough histopathological evaluationto rule out aganglionosis.

REFERENCES

1. Ratan SK, Kulshrestha R, Ratan J. Cystic duplication of the cecum with segmental dilatation of the ileum: report of a case. Surg Today, 2001; 31: 72-5.
2. Swenson O, Rathauser F. Segmental dilatation of the colon: A new entity. Am J Surg, 1959; 97: 734-8.
3. Rovira J, Morales L, Parri FJ, et al. Segmental dilatation of the duodenum. J Pediatr Surg, 1989; 24: 1155-7.
4. Rossi R, Giacomoni MA. Segmental dilatation of the jejunum. J Pediatr Surg, 1973; 8: 335-6.
5. Brawner J, Shafer AD. Segmental dilatation of the colon. J Pediatr Surg, 1973; 8: 335-6.
6. Mathur P, Mogra N, Surana SS, et al. Congenital segmental dilatation of the colon with anorectal malformation. J Pediatr Surg, 2004; 39: e18-e20.
7. Thambidorai CR, Arief H, Noor Afidah MS. Ileal perforation in segmental intestinal dilatation associated with omphalocoele. Singapore Med J., 2009; 50: e412–4.
8. Cheng W, Lui VCH, Chen QM, Tam PK. Enteric Nervous System, interstitial Cells of Cajal, and smooth muscle vacuolization in segmental dilatation of jejunum. J. Pediatr Surg., 2001; 36: 930–5.