Delayed Presentation of Colonic Atresia Masquerading Constipation

Pradyumna Pan*

* Consultant Pediatric Surgeon Department of Pediatric Surgery, Ashish Hospital & Research Centre, Jabalpur Madhya Pradesh - 482001, India

Abstract: Colonic atresia are rare malformations of the colon and constitute about 1.7 to 15% of all gastrointestinal atresias. We describe a case of a 5-month-old baby coming to our attention with recurrent episodes of sub-acute intestinal obstruction and constipation since birth. The patient was operated and type I (perforated mucosal web variety) Colonic atresia found. The resection of the involved part of the colon and a primary end to oblique colo-colic anastomosis was performed with good outcome. [Pradyumna P SEAJCRR 2017; 6(1):28-29]

Key Words: Colonic atresia, Colonic stenosis, Perforated colonic web, Intestinal obstruction

Author for correspondence: Pradyumna Pan, Ashish Hospital, Home Science College Road, Wright Town, Jabalpur Madhya Pradesh - 482001 E- Mail: dr_pan@rediffmail.com M:9893322160

Introduction: Atresia of the colon is a relatively rare form of intestinal atresia with an incidence of 1:40,000–60,000 live births, comprising less than 5% of the total number of gastrointestinal tract atresias. There is an association with gastroschisis, malrotation of the bowel, a more proximal atresia of the small bowel, hirschsprung disease and cloacal exstrophy. Infants present with abdominal distention, vomiting and often fail to pass meconium. Associated anomalies are common, and their severity directly affects outcome.

Delayed presentation is extremely rare[1].Hereby, we report a 5-month-old infant with Colonic atresia type I, successfully managed by segmental resection of the colon with obstructing web and anastomosis.

Case Report: A 5-month-old male infant came to our attention with complaints of frequent abdominal distension which gets relieved off and on. The infant had a history of constipation, frequent illness and failure to thrive. On examination, the infant was weighing 3.15 kg and had abdominal distension. On per rectal digital examination, the rectum was found empty. An X-ray of the abdomen showed dilated bowel loops, and an ultrasonography of the abdomen reported gaseous distension of bowel loops. A water soluble contrast study done showed proximal dilated ascending colon, the barium stopping at the hepatic flexure and narrow distal colon. (Fig1&2) On exploration, the distal ileum, cecum, ascending colon, were found dilated, and the distal transverse colon, descending colon, and sigmoid colon were found narrow. There was an abrupt change in the size at hepatic flexure. (Fig 3). Operative correction by resection of the involved segment and primary anastomosis between the two parts was done. The infant was treated with usual postoperative care, and he made an uneventful recovery. The histopathology of the excised specimen confirmed the presence of ganglion cells, along with nonspecific inflammation of the colonic mucosa. The infant is on follow-up for the past 6 months, without any specific complaints.

Discussion: Colonic atresia is a rare congenital anomaly occurring 1 in 40,000 live births. Only 1.7–15% of the intestinal atresias occur in the colon[2]. Type I atresia are characterized by a diaphragm inside the lumen and the serosal surfaces of intestine, proximal and distal to atresia, are uninterrupted. Colonic stenosis can be of congenital or acquired, usually after a bout of necrotizing enterocolitis. The most commonly accepted theory of development of intestinal atresia is based on vascular accidents occurring during the course of fetal development [3].Erskine proposed the possibility of emboli originating from the placenta and reaching the mesenteric circulation by bypassing the pulmonary circulation[4]. Fetal infection with varicella has also been described as one of the causes of colonic atresia[5].The preoperative diagnosis of colonic atresia and stenosis can be made with the help of a contrast enema. Surgical management varies from resection and primary anastomosis[6] to diverting colostomy, followed by delayed anastomosis[7]. Usually, atresia proximal to the splenic flexure is primarily anastomosed and those that are distal to the splenic flexure are diverted for delayed closure. In our case, the segment of colon with obstructing membrane was resected and end to oblique anastomosis done, with a satisfactory outcome. The outcome remained good in our patients having isolated colonic atresias and stenosis. Associated anomalies are common, and their severity directly affects outcome. Delayed recognition of symptoms increases the likelihood of complications like perforation and sepsis[8]. Due to its association with Hirschsprung's disease a biopsy of the distal colon and rectum has been advised in all cases[9].

Conclusion: Colonic atresia and stenosis are uncommon entities. It is wise to reckon the congenital colonic stenosis as a rare but possible cause of complete or partial intestinal obstruction not only in the newborn but also throughout the first year of life. Associated alimentary tract malformations may result poor prognosis.

Figure 1: Dye study showing dilated proximal colon with abrupt cutoff at hepatic flexure.

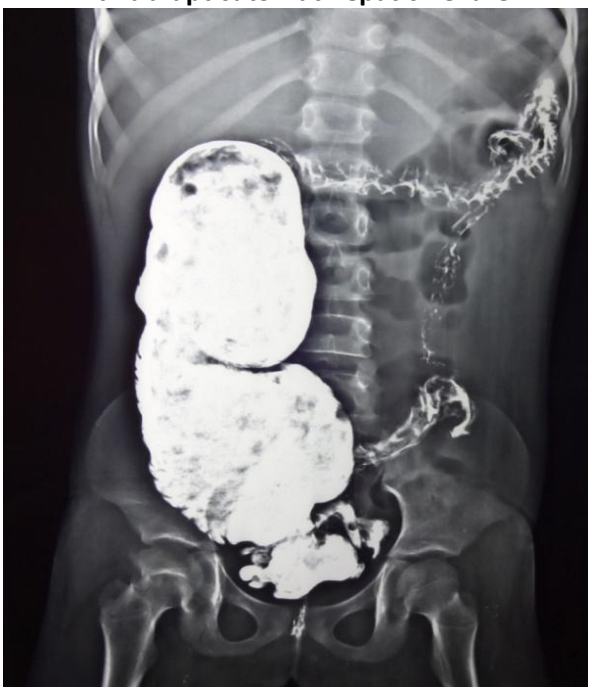


Figure 2: Clinical photo

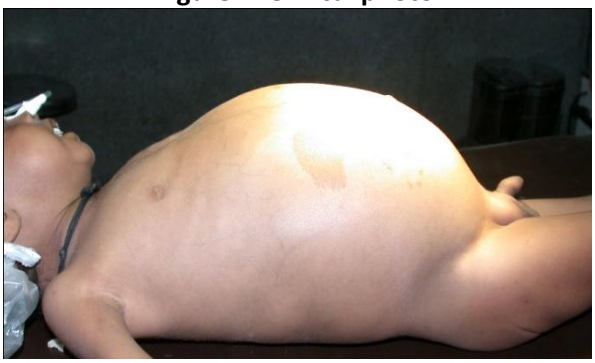
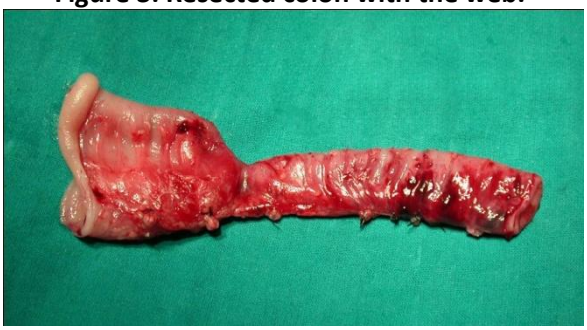


Figure 3: Resected colon with the web.



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