

Case Report

CECAL WEB A RARE CAUSE OF NEONATAL INTESTINAL OBSTRUCTION

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ABSTRACT

Cecal web is a rare entity. We find few cases of cecal web presenting in adult patient as a mass lesion (Gayner *et al.*, 1977) or radiologically space occupying lesion (Raymond *et al.*, 1983; Guttman *et al.*, 1975) but an extensive search of published reports failed to find a case of the cecal web or similar abnormality in neonatal group presenting as an acute intestinal obstruction. Cecal web cases are delayed manifestation as low intestinal obstruction mimicking total colonic aganglionosis, low ileal atresia, colonic atresia, and dealing with such newborn one should palpate the cecum to rule out any web or diaphragm and confirmed by cecotomy if needed.

Key Words: Neonatal Intestinal Obstruction, Cecal Web

INTRODUCTION

Intestinal obstruction in the neonatal period is an alarming situation in a neonatal surgical intensive care unit. Most of the neonates admitted in NICU with a provisional diagnosis of intestinal obstruction, have intestinal atresia, as a commonest cause (Bill and Pope, 1954; Weitzman and Brennan, 1974; Raffensperger *et al.*, 1961). Neonates with duodenal web, diaphragm, intestinal stenosis, have late presentation. However, obstruction due to cecal web cause early symptoms, and is a rare entity also. Here we present a case of neonate who presented at day 3 of life with clinical features of intestinal obstruction and explored with a provisional diagnosis of ileal atresia turned out to be cecal web. Excision of cecum and ileo-colic anastomosis saved the life.

CASES

A three day old female full term normal delivery who was prevented in neonatal surgical unit with bilious, vomiting fail to pass meconium and abdominal distension. Nasogastric aspiration revealed 20ml bilious aspirate. X-ray abdomen erect position show multiple fluid levels suggestive of low intestinal obstruction, with a provisional diagnosis of ileal atresia. After resuscitation and correction of dyselectrolytemia and dehydration neonate was subjected for exploratory laparotomy through supra umbilical right transverse incision. On exploration terminal ileum was markedly distended and oedematous Cecum. Ascending and transverse color were unused, looking normal except its diameter. Terminal ileum was opened and a feeding tube passed into the cecum, it was unable to negotiate beyond 1cm of cecum it was felt in cecum, hence cecum was opened, there was complete diaphragm, cecum was edematous. Ileum was decompressed through ileotomy, cecum and part of ascending colon was excised and ileo-colostomy was performed. Child recovered well, started feeding on 7th day, and discharged on 10th day.

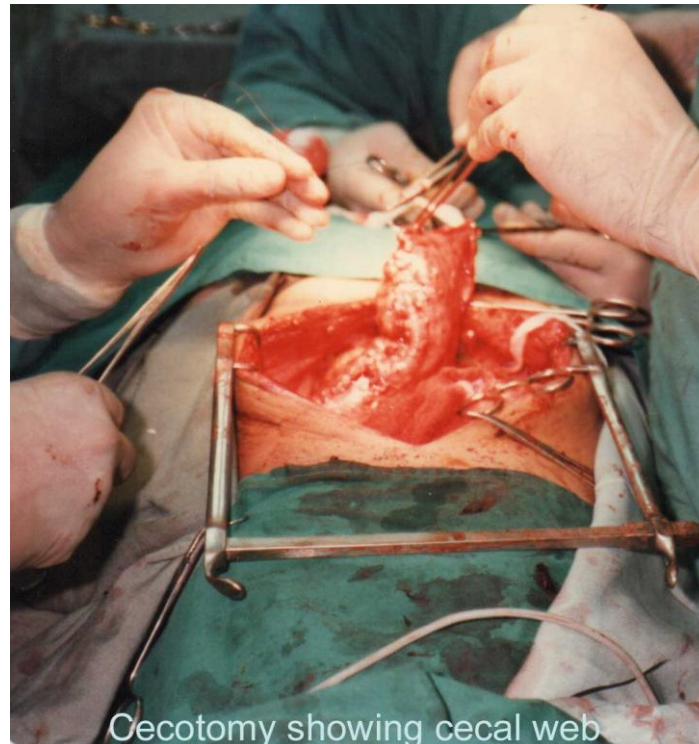
DISCUSSION

Duodenum being the commonest site for diaphragms and causes intestinal obstruction early if complete and if partial the symptoms may be delayed. Other common causes of neonatal intestinal obstruction are intestinal atresias, malrotation, Hirschprung's disease, anorectal malformations, total colonic aganglionosis, colonic atresia etc. Similar such case has been presented from SMS Medical College,

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Jaipur (Tripathi *et al.*, 2006), in which they have suggested of unknown mechanism, however, we also feel the same etiological factor. No genetic or familial or regional incidence has been found.

The clinical entity of cecal web has been poorly defined. We believe this anomaly is part of the colonic atresia spectrum although rare but has got enumeration in various paediatric surgical literature (Felson *et al.*, 1969). Regarding its pathophysiology two main hypothesis are still debated. (i) failure of recanalization theory and (ii) vascular accident theory (Wolff, 1971). Circulatory theory failed to explain septal type of atresia, failure of recanalization is favoured explanation for the antral diaphragm, an entity with similar pathological characteristic (Tripathi *et al.*, 2006).



Cecotomy showing cecal web

Wolffe concluded that, gastric mucosa occurring at heterotopic location in intestinal tract is mainly two varieties (Wolff, 1971). If the tissue is exclusively pyloric glandular epithelium or if only scattered chief and parietal cells are present, the mucosal change is most likely an acquired process. On the other hand, if tissue consists of full thickness completely structured gastric fundic mucosa with abundant chief and parietal cells, abnormality is considered developmental or congenital in origin as seen in our biopsy specimen, which further guides towards congenital origin.

Though cecal web is a rare cause of neonatal obstruction, should be kept in mind when dealing with a case of neonatal obstruction along with other commonly encountered possibilities.

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