Congenital isolated transverse colon dilatation

Mehran Hiradfar,[1] Reza Shojaeian,[1] Ali Alamdaran[2]

[1]Department of Pediatric Surgery, Mashhad University of Medical Sciences, Mashhad, Islamic Republic of Iran
[2]Department of Pediatric Radiology, Mashhad University of Medical Sciences, Mashhad, Islamic Republic of Iran

Correspondence to
Dr Reza Shojaeian,
drshojaeian@ymail.com

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DESCRIPTION

Gastrointestinal obstructive symptoms are common in the neonatal period and a contrast enema is considered an early paraclinical assessment with diagnostic and sometimes therapeutic value. Colonic dilation may be seen in Hirschsprung disease or other neurointestinal dysplasia, small left colon syndrome, meconial diseases, congenital rectal stenosis, incomplete rectal atresia, congenital pouch colon (CPC), splenic flexure stenosis and necrotising enterocolitis, etc.[1] However, imaging findings may be confusing due to rare anatomical abnormalities especially in the neonatal period.[2] Our case was a 2-month-old infant with a lifetime history of abdominal distention and severe constipation, who was referred to the paediatric surgery ward, suspected of having gastrointestinal perforation during a diagnostic contrast enema (figure 1). A football colon, which is a huge dilated segment of colon, may be encountered in infancy, classically in such rare diseases as CPC or segmental colon dilation.[3] Radiological imaging may reveal contrast material throughout the abdominal cavity, with sounds of free hollow viscous perforation, but looking carefully, a huge colon and scattered intraluminal contrast materials that occupy the entire abdominal cavity will be distinguished. An unused distal colon and shoulder sign indicate local involvement of the gastrointestinal tract. Our patient underwent laparotomy and resection of the involved segment of the colon and double barrel colostomy, and multiple intestinal biopsies were carried out. Histological examination of the resected bowel showed normal colonic tissue and normal ganglion cells among all the tissue specimens, which suggested congenital megacolon (figure 2). Delayed colostomy closure was performed after 2 months with the final diagnosis of

Figure 1 Scattered image of barium enema in the abdominal cavity mimicking free spillage of barium in the abdominal cavity (left). Ectasia of the transverse colon (middle and right).

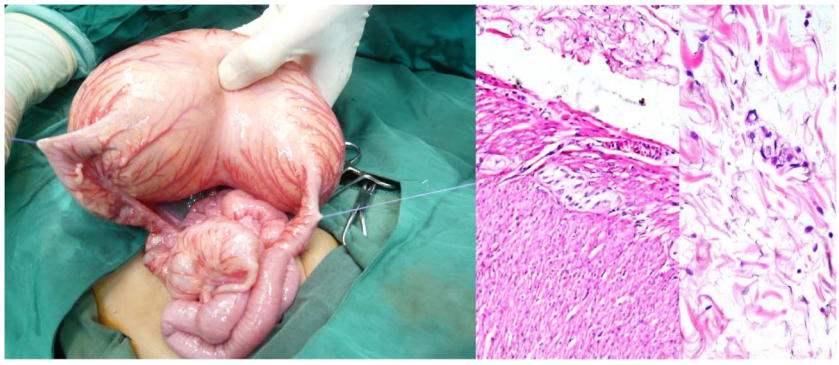

Figure 2 Intraoperative findings: A huge transverse colon ectasia (transverse football colon). Microscopic findings: Presence of ganglion cells in the submucous (Meissner) and myenteric (Auerbach) plexuses (right).

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congenital segmental megacolon. The postoperative period was uneventful and the patient did well during 4 years of follow-up.

Learning points

- A huge football colon may show a confusing image in contrast study.
- A proximal shoulder sign is a useful image characteristic of congenital pouch colon or segmental colon ectasia.
- Segmental colon dilation may be seen as a congenital anatomic abnormality even in the absence of a neurointestinal disorder.

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