LETTER TO THE EDITOR

Congenital Pouch Colon without Fistula: A Rare Variant

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DEAR SIR

Congenital pouch colon (CPC) is a rarely occurring anorectal malformation (ARM).[1] Distal fistula of the pouch colon with the genitourinary system is one of the key features of CPC.[1] In males, CPC usually terminates in a colovesical fistula just proximal to the bladder neck.[1] We describe a male neonate with type 4 CPC without a colovesical fistula.

A 1-day-old preterm (35 weeks), low birth weight (1700g), male neonate presented with complaints of absent anal opening. There was no history of meconuria. On examination, the general condition of the child was stable; there was mild abdominal distention. The perineum was flat with poorly developed gluteal folds and an absent anal opening; there was no musculoskeletal deformity. Abdominal radiograph (antero-posterior erect view) was suggestive of CPC. At exploratory laparotomy (left hockey stick incision), Saxena-Mathur classification CPC type 4 was found (Fig.1).

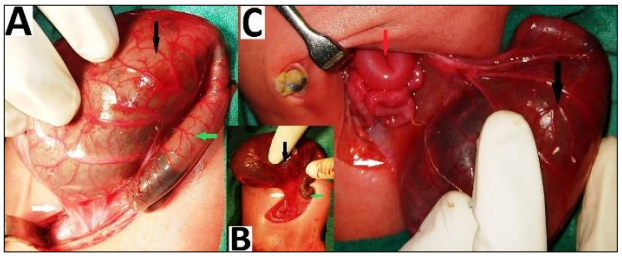

Figure 1: Intraoperative photographs (A, B and C) showing descending colon (green arrow) abruptly opening into colonic pouch (black arrow) and there is absence of distal fistula (white arrow). The pouch bears all other characteristic features along with abnormal vascular pattern; ileum (red arrow) is normal.

The descending colon was opening into a rectosigmoid pouch of colon, but the pouch was ending blindly and there was no distal communication with the urogenital tract. The pouch was divided and excised and end colostomy (descending colon) was performed. The histopathological examination of the specimen confirmed CPC. We are planning for abdomino-perineal postero-sagittal anorectoplasty (AP-PSARP) at 3 months of age.

CPC is a rare form of ARM in which part of or the entire colon is replaced by a pouch like dilatation with a fistula to the genitourinary tract. The presence of distal fistula to the genitourinary tract is one of the diagnostic criteria of CPC.[1] All the features described in diagnostic criteria of CPC [1] were present in the index case, except presence of a colovesical fistula. CPC without fistula is rare and have been described only rarely.[2-5] In In a series of 32 cases of CPC in male babies, only 1 patient had CPC without a fistula vindicating its extreme rarity.[2]

In a recent series of four case of CPC without fistula, Down's syndrome (1), cardiac lesion (2), pneumoperitoneum at time of presentation (2) and all were high type of ARM.[3] CPC without fistula was seen in only 3 out of 68 cases in one study and 3 cases (all CPC type 1) in another study.[4,5] CPC without colovesical fistula is usually reported in type1 (25%) and type 2 CPC (75%), however, in the present case, it was encountered in type 4 CPC.[3] In conclusion, CPC without distal fistula should be considered an extremely rare variant of CPC. All types of CPC (type 1 to 4) can present without a colovesical fistula. Authors suggest modifying diagnostic criteria of CPC with reference to colovesical fistula.

Consent: Authors declared that they have taken informed written consent, for publication of this report along with clinical photographs/material, from the legal guardian of the patient with an under-standing that every effort will be made to conceal the identity of the patient however it cannot be guaranteed.

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REFERENCES

1. Saxena AK, Mathur P. Classification of congenital pouch colon based on anatomic morphology. Int J Colorectal Dis. 2008; 23:635-9.
2. Chadha R, Bagga D, Malhotra CJ, Mohta A, Dhar A, Kumar A. The embryology and management of congenital pouch colon associated with anorectal agenesis. J Pediatr Surg. 1994; 29:439-46.
3. Pandey V, Panigrahi P, Kumar R. Congenital pouch colon without fistula: our experiences and lessons learned. AJHMR. 2017; 3:1-2.
4. Sharma S, Gupta DK. Management options of congenital pouch colon—a rare variant of anorectal malformation. Pediatr Surg Int. 2015; 31:753-8.
5. Renz O, Hechenleitner P, Häussler B, Härter B, Sanal M. Outcome after surgical treatment of a rare congenital pouch colon variant with tubularized coloplasty. Int J Surg Surgical Porced. 2016; 1:109.