

Intestinal Duplication with Meckel's Diverticulum – A rare case report in the Late Childhood.

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Abstract:

The small bowel is the commonest site of alimentary tract duplication and most patients present within the first year of life. Diagnosis of duplication usually made on laparotomy, preoperatively it is very difficult to make the correct diagnosis. Here we are presenting the case of ileal duplication with patent vitellointestinal duct presented very late, in which we found separate mesenteric blood supply which is uncommon.

Key words: Ileal Duplication, Meckel's diverticulum.

Ladd in the 1937 introduced term intestinal duplication for the malformations of these types. Alimentary tract duplications are uncommon anomalies that usually present in childhood. They are most common in the ileum but can occur anywhere along the alimentary tract.

Until recently only 15 cases reported in the literature, most of the cases reported are in early childhood with no separate blood supply. Here in our case the blood supply of Duplicated ileum was separate.

Case Report:

A 11 year old boy presented with complaints of pain in the abdomen around umbilicus, fever and vomiting since 15-20 days on and off. Per abdomen tenderness in the umbilical region with normal bowel sounds was there. X ray abdomen was inconclusive. Ultrasonography showed cystic lesion of 4.4×2.2×2.5 cm with collection (13 ml) just below umbilicus with debris within it. Above all clinical and imaging techniques suggesting a case of Appendicitis as provisional diagnosis. So decision of exploration was taken.

Intraoperatively there was mild appendicitis but patent vitellointestinal duct arising from terminal ileum and duplication of the ileum (approximately 15 cm long distended segment) with separate mesenteric blood supply.(Fig.1 and 2) Resection of the duplicated segment along with the patent vitellointestinal duct done and bowel continuity re-established. Appendicectomy was also done.

Post operative period was uneventful and patient was discharged on POD 10.

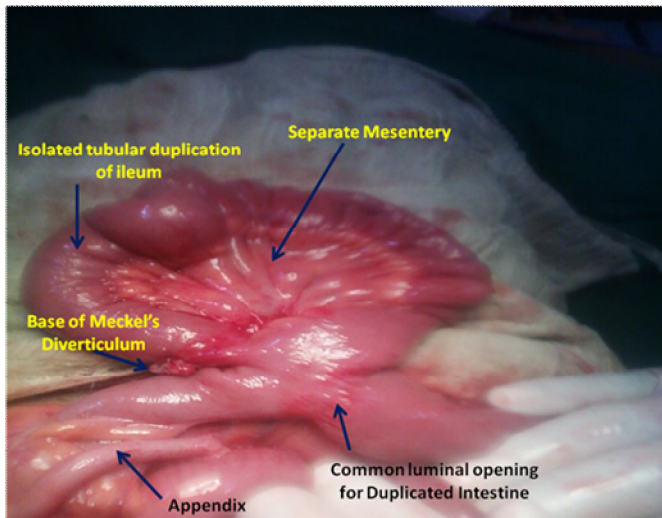


Fig. 1 Intra Operative Findings

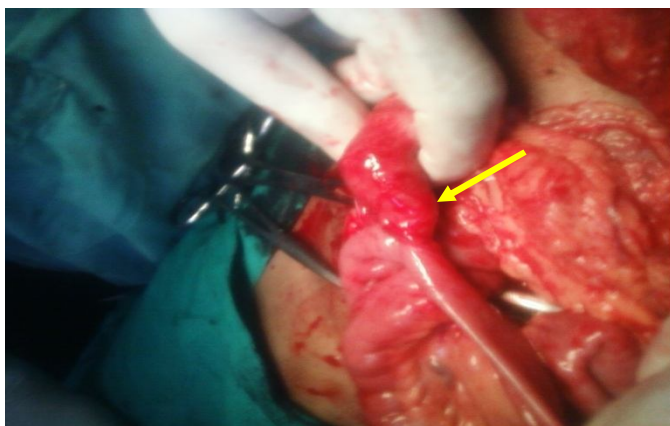


Fig. 2 Patent vitellointestinal duct

Histopathology report showed specimen lined with flattened intestinal epithelium with no villous projections with normal muscle coat with neurons in its wall.

Discussion:

The small bowel is the commonest site of alimentary tract duplication and most patients present within the first year of life.

Duplications are slightly commoner in males.

Duplications may be saccular or tubular, the latter being known to communicate with normal bowel. Histologically duplications have a welldeveloped smooth muscle wall and inner mucosal membrane. Any type of gastrointestinal mucosa including gastric mucosa may be found. Heterotopic gastric mucosa is found in 29%-60% of cases.

Children may present with abdominal mass, distension, pain, vomiting, melena, perforation or obstruction.

Diagnosis of duplication usually made on laparotomy, preoperatively it is very difficult to make the correct diagnosis. On investigating for the pain in abdomen on X ray abdomen will only show some dilated gas or fluid filled bowels. Bareum meal and follow through may outline the duplication in those cases where there are communications with intestines proper.

Usually blood supply of the duplicated part stays same but in our case there was different blood supply for the duplicated ileum, which avoided meticulous normal intestinal resection.

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