



Vitellointestinal Duct Causing Small Bowel Obstruction

Authors

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Abstract

Vitellointestinal duct connects developing midgut to the primitive yolk sac and it provides nutrition to the embryo and it remains patent and connected to the intestines until the fifth to ninth week of gestation

Here we report a case of a 17 year old male who presented with the complain of abdominal pain, not passing flatus and stool since 3 days

Although persistent omphalomesentric duct is an extremely infrequent cause of small bowel obstruction in adult patients, it should be taken into consideration in patients without any previous surgical history.

Introduction

Small bowel obstruction is a common surgical emergency and is a major cause of morbidity and mortality in hospitals around the world.

Although small bowel obstruction is common, persistent omphalomesentric duct with a meckel's diverticulum as a cause of this condition

Case Report

A 17 year old boy presented with the complains of abdominal pain,not passing flatus and stool since 3 days

O/e there was abdominal distention,there was no guarding and rigidity, hyperdynamic bowel sounds were present

DRE showed fecolith. Patient was initially kept on conservative management but the condition deteriorated further.

- Investigations showed hb-12 gm%, leukocytosis and neutrophilia
- X Ray erect showed multiple air fluid levels
- USG w/a showed dilated gut loops with minimal intergut fluids

Patient was taken for exploratory lapratomy after 24 hrs

Under g/a with full aseptic condition midline incision was given .after opening the abdomen ,a Vitellointestinal remanant was found to be attached to the anterior abdominal wall which was excised.

On further exploration, a duplication of bowel 2 feet from the ic junction was found. There was a perforation in the duplicate bowel. Resection and anastomosis of the bowel was done

- And 3 feet away from the ileocaecal junction bowel was taken out for ileostomy. hemostasis was achieved and

abdomen was closed in layers.

Postoperative events were uneventful.

- Patient was discharged after 11th day
- HPE confirmed the diagnosis of persistent vitellointestinal duct

Discussion

Acute mechanical small bowel obstruction is a common surgical emergency.

The most frequent symptoms and signs of patients with small bowel obstruction, although variable, are abdominal distention and tenderness. adhesions, incarcerated hernias and large bowel tumours constitute the most frequent causes of obstruction, while adhesions are the leading cause accounting for 45%-80% cases

Other less common causes are crohn disease, gallstones, bowel volvulus and intussusception accounting for 2%-14%

Omphalomesentric duct remains have been reported to be congenital anomalies associated with primitive yolk sac. it is the embryonic structure connecting the primary yolk sac to the embryonic midgut that normally become a thin fibrous band, which eventually disintegrates and is absorbed spontaneously at the 5th-10th week of gestation. The Omphalomesentric duct will continue to grow if it fails to completely atrophy and disintegrate

Conclusion

To conclude persistent Omphalomesentric duct with meckel's diverticulum constitutes an extremely infrequent cause of small bowel obstruction in adult patients.