Small Intestinal Diverticulosis (SID)

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Citation

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Abstract

Small intestinal diverticulosis (SID) refers to the clinical entity characterized by the presence of multiple saclike mucosal herniations through weak points in the intestinal wall. Small intestinal diverticula are far less common than colonic diverticula. The cause of this condition is not known. It is believed to develop as the result of abnormalities in peristalsis, intestinal dyskinesis, and high segmental intraluminal pressures.

CASE REPORT

A 82-year-old women presented with a history of chronic abdominal discomfort and dyspepsia. She was diagnosed as having malabsorption syndrome and was treated with broadspectrum enteral antibiotics. She had a symptom free period. Contrast examination was carried out (Figures 1 and 2).

Figure 1

Figure 1: Barium meal follow through shows out pouching of the bowel wall – diverticuli in the jejunal loops (supine film).

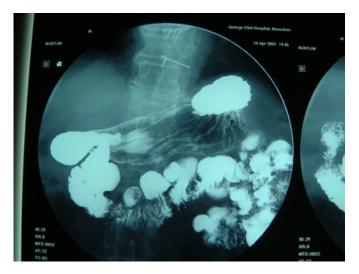
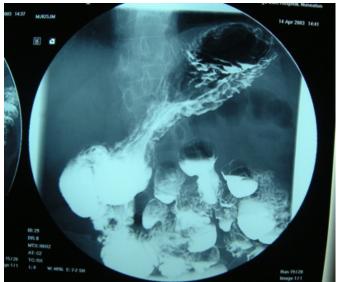


Figure 2

Figure 2: Another film from the series (erect film) clearly demonstrates the diverticuli.



QUESTIONS

- 1. What is this examination and how is it done?
- 2. What is the diagnosis?
- 3. What are the complications?
- 4. How do you treat this condition?

ANSWERS

 This is a barium meal follow through examination where diluted barium contrast is given to the patient to drink (300 ml) and as it passess through the stomach and duodenum in to the small bowel (jejunum and Ileum) series of films are taken. This examination is mainly intended for the visualisation of small bowel.

- 2. The diagnosis is jejunal diverticulosis.
- 3. Complications see below in discussion.
- 4. Treatment see below in discussion.

DISCUSSION

The incidence of small bowel diverticulosis is difficult to ascertain for several reasons. It is likely that many clinicians do not document the presence of these lesions simply because little clinical significance has been attributed to them. Their importance is based on the fact that they carry the risk of serious complications

such as infection, hemorrhage or intestinal obstruction The predominance of small bowel diverticula in the jejunum is attributed to the greater diameter of the penetrating jejunal arteries [$_{8}$].

The jejunal diverticula emerge on the mesenteric border, i.e., sites where mesenteric vessels penetrate the small bowel. Diverticula are classified as true and false. True diverticula are composed of all layers of the intestinal wall, whereas false diverticula are formed from the herniation of the mucosal and submucosal layers. Meckel's diverticulum is a true diverticulum.

Diverticula can also be classified as intraluminal or extraluminal. Intraluminal diverticula and Meckel's diverticulum are congenital. Extraluminal diverticula may be found in various anatomic locations and are referred to as duodenal, jejunal, ileal, or jejunoileal diverticula.

With the exception of Meckel diverticulum, small bowel diverticula are generally benign, seldom creating serious complications. Major complications include diverticulitis, GI hemorrhage, intestinal obstruction, acute perforation, and pancreatic and/or biliary disease in duodenal diverticula. Mortality is influenced by patients' age, nature of complications, and timeliness of intervention. No racial predilection exists. A slight male preponderance exists in jejunoileal diverticula. Jejunoileal diverticula are commonly observed in patients aged 60-70 years. Reports of this condition in young adults exist as well. Their importance is based on the fact that they carry the risk of serious complications. Complications occur in 15% of SBD cases. The specific diagnosis of SID is possible by radiologic contrast studies using various forms of barium. The radiologic technique of enteroclysis is specific for the jejunum and the ileum. Lesions bleeding at the time of investigation can be identified either by a 99m Tc-bleeding scan, or by arteriography if blood loss is greater than 1±2 l/minute.

TREATMENT

Asymptomatic - no treatment

Small bowel diverticula do not require surgical treatment unless refractory symp-

toms or complications occur. Surgical management is recommended for complications of SBD. When complications of jejunal diverticula occur, partial enterectomy and primary anastomosis should be performed . It is reasonable to conclude that asymptomatic diverticula incidentally discovered on routine contrast studies or at laparotomy do not need resection.

References

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