APPENDICULAR DIVERTICULOSIS: A CASE REPORT

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Abstract
Diverticular disease of the appendix was first described by Kelynack in 1893. Diverticula are commonest in the descending and pelvic loops of the colon, but they not infrequently occur at other sites extending from the pharynx to the rectum. It is rare, however, to find diverticula in the vermiform appendix. Pathologists state the incidence varies from 0-2 to 2-23 per cent in postoperative and necropsy findings. Here we present one such rare case of appendicular diverticulosis with appendicitis.
Keywords: Appendix, Diverticula, Diverticulitis

1. Case report:

A 45-year-old male patient presented with a history of abdominal pain, vomiting and fever for two days. The pain was sudden in onset, in the right iliac fossa, of constricting type, continuous in nature, with no radiation of pain and no aggravating or relieving factors. There was a history of vomiting for two days, with 3-4 episodes, non-bilious in nature.

On examination, the patient was afebrile and had tachycardia. Abdominal examination revealed tenderness in the right iliac fossa, maximal at MCBurney's point, rebound tenderness was present, with no free fluid and normal bowel sounds. The other systems were normal. A Clinical diagnosis of acute appendicitis was made and the patient was taken up for emergency appendectomy.

Intraoperatively appendix was inflamed, retrocecal with multiple diverticuli, arising from the appendix along the anti mesenteric border, ranging from 0.5xO.6cm to 0.5xO.8cm from the base to the tip. **(Figure 1, 2)**

Figure 1

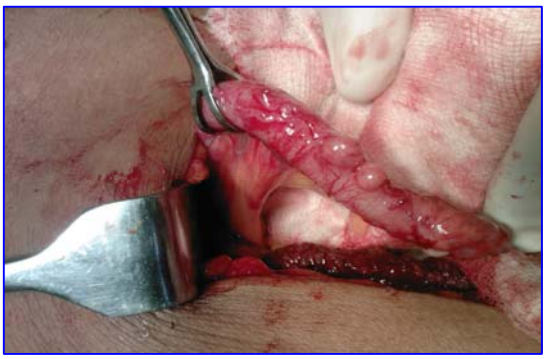
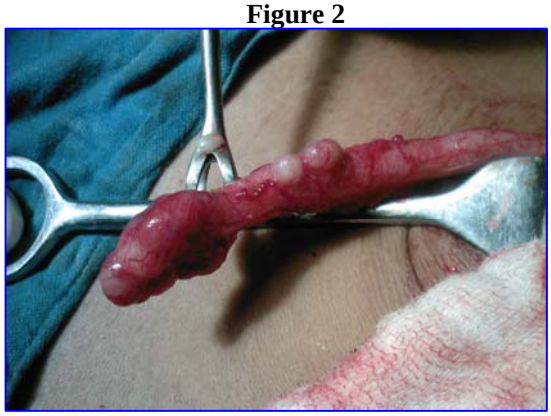


Figure 2



Postoperative period was uneventful.

Histopathological report: Sections studied showed features of acute appendicitis.

2. Discussion

Diverticula of the vermiform appendix can be of two types, congenital diverticulum and acquired diverticulum or pseudodiverticulum, can be single or multiple, and can occur along the entire length of the appendix. The congenital type is rare and composed of all bowel wall layers. The acquired variety, the more common type, lacks the muscularis layer. The muscularis mucosa is absent or attenuated in the acquired form, the diverticulum consisting of mucosa and submucosa only, similar to the more common colonic diverticula.

Although diverticular inflammation can present with signs and symptoms similar to acute appendicitis. Diverticulosis of the appendix and its complications are infrequent. The first case was described in 1893 by Kelynac[1]. The

incidence based on surgical series is between 0.2 and 2.6[2,3,4]. Studies have shown that clinical differences between the two conditions can exist and early intervention may reduce the increased incidence of perforation secondary to diverticulitis of the appendix.

The pathogenesis of appendiceal diverticula is not completely elucidated. Several theories have been proposed, some contradictory. One based on mechanical principles, seems more attractive. It suggests a mechanism of increased pressure against a focus of weakness. The widened vascular cleft in the muscular layer is the site of weakness. Herniation of mucosa through the cleft could be the result of increased intraluminal pressure secondary to obstruction or excessive contraction of a hypertrophied muscular layer.[5] Chronic appendicitis, cystic fibrosis, male gender, and age above 30 years are risks factors described in the literature.[6,7]

Diverticular pathology of the appendix has been classified by many into four morphological types:[8,9]

Type 1 is characterized by diverticulitis and normal appendix,

Type 2 by diverticulitis and appendicitis,

Type 3 by simple uncomplicated diverticulum and acute appendicitis, and

Type 4 by a normal appendix and an incidental simple uncomplicated diverticulum

There is an increased risk of perforation, a complication well described in the literature requiring appendectomy.[8,9,10]

Conclusion:

Appendicular diverticulosis and acute appendicitis are two different entities. But clinical presentation of appendicular diverticulitis overlaps that of acute appendicitis carrying higher chances of perforation. Appendectomy is the treatment of choice even if it is silent or diagnosed incidentally.

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