



A case of Appendicular Diverticulum

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Abstract :

Diverticular disease of the alimentary tract is not an uncommon entity, the commonest site being the colon. It can occur at other sites extending from the pharynx to the rectum. However, the vermiform appendix is a rare site for the occurrence of diverticular disease. The incidence is known to be in the range of 0.004 to 0.6.1, 3 We here present one such rare occurrence of a solitary appendicular diverticulum in a 24 yr lady.

Keyword :Appendix, diverticulum, appendicitis, diverticulitis, diverticulosis
Case report: A 24 yr old lady presented with a history of abdominal pain and vomiting of 2 days duration. The pain was sudden in onset, started around the umbilicus, now localized to the right iliac fossa, continuous in nature, with no radiation and no aggravating or relieving factors. There was a history of two episodes of non-bilious vomiting. On examination, the patient was afebrile and had tachycardia. Abdominal examination revealed tenderness in the right iliac fossa,

maximal at McBurney's point and localized guarding. A clinical diagnosis of acute appendicitis was made and the patient was taken up for emergency appendicectomy. Intraoperative findings: Inflamed pelvic appendix of about 5cm length with a solitary diverticulum of about 1.5x1cm arising from the mesenteric border (Fig. 1). The distal ileum and cecum were normal. Since the surgery was performed through a McBurney-McArthur incision, an examination of the rest of the colon was not possible. The cut section of the appendix showed the diverticular opening in the mid body of the appendix (Fig. 2). On cut section of the diverticulum, it was found filled with mucus material (Fig. 4). The post-operative period was uneventful. Histopathological report: Sections studied showed features of acute appendicitis. Post operative follow up: On reviewing literature, there was nothing to suggest that appendicular diverticuli coexist with diverticular disease of the sigmoid colon. Moreover, the patient didn't have any symptoms suggestive of a diverticular disease of the colon.

Diverticular diseases are rare in individuals younger than 30 years.⁹ Our patient was a 24 yr old lady. We discharged the patient with instructions to review immediately if she develops any symptoms.



Fig. 1 showing the appendix specimen with the diverticulum



Fig. 2 showing the diverticular opening in the mid body of the appendix Fig. 3 showing the opening being probed with an artery forceps



Fig. 4 showing the cut section of the diverticulum filled with mucus material

Discussion:

Diverticulosis of the appendix is a rare occurrence. The first case was described in 1893 by Kelynack.^{1,2} The incidence of diverticula found in appendicectomy specimens ranges from 0.004% to 0.6%.¹ They can be of two types: congenital diverticulum and acquired diverticulum or pseudo-diverticulum.⁵ The congenital type, rare, is composed of all bowel wall layers. The acquired variety, the more common type, lacks the muscularis layer.⁵ The pathogenesis of appendiceal diverticula is not completely understood. Several theories have been proposed. One of the more plausible ones suggests a mechanism of increased pressure against a focus of weakness in the wall of the appendix.⁵ Chronic appendicitis, cystic fibrosis, male gender, and age above 30 years are risk factors described in the literature.^{3, 4, 5, 7} They may get complicated in the form of diverticulitis with or without inflammation of the rest of the appendix or may only be an incidental finding in an uninfamed

a p p e n d i x .
Four subtypes, of appendicular diverticulosis have been described in the literature, based on the Appendicular diverticulosis, when inflamed, carries an earlier and higher rate of perforation, thus justifying an appendicectomy even when found incidentally.^{1, 5, 6}

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