Non-traumatic Cecal Perforation in a Female Patient: Report of a Case

A case of closed cecal perforation in a 38-years-old patient was reported. In the case presented, no history of trauma, and no other etiological factors reported in literature was present. After debridement of cecum wall of 1-2 cm. diameter so as to contain the perforation hole, it was sutured primarily and appendectomy performed. In the histopathologic study; acute necrotizan inflammation in perforated area was reported.

The patient externalized from the hospital with full recovery without any complication and this case was one of the rare cecum perforation cases, who, unlike other cases, displayed none of the few probable etiological factors reported in literature.

Key Words: Cecal perforation.

Introduction

Cecal perforation is an uncommon condition that is clinically difficult to diagnose and differentiate from acute appendicitis. Physical examination failed to differentiate these two disease entities. Ultrasonography (US) and Computerized Tomography (CT) were reported to be useful in the early diagnosis of cecal diverticulitis. It is, however, difficult to determine which patient should require further image study.(1) In some cases of colonic pseudoobstruction, (Ogilvie’s syndrome) cecum distention results in cecum perforation. According to Laplace’s law, more severe progressive distention is observed in the cecum. This implies that tensile strength of the colonic wall will be exceeded in the cecum that has the greatest diameter (2).

We herein present a case of cecal perforation, which was incidentally encountered and in the management of this rare condition, primary repair of the cecum with appendectomy was performed.

Case Report

A 38-years-old female patient was referred to the hospital for an abdominal pain which had started in epigastric region twelve hours ago. The pain was progressive in nature and localized in the right abdomen by time. The patient stated that she first had a stab-like temporary abdominal pain a week ago which was regressed spontaneously. The patient mentioned that she sometimes had swelling on her abdomen and usually suffered from constipation. She had had an operation of bilateral subtotal thyroidectomy 7 years ago and she has been on 100 μg thyroksin daily. Physical examination of the patient revealed that, her general condition was good and there were a tenderness, local defence, and rebound tenderness in right lower abdomen.

The level of blood leucocyte was 16700/ mm3 and there was not any abnormal value in biochemical parameters. AP chest radiograph, abdominal radiograph and abdominal ultrasound were normal. On the basis of history and physical examination, she was operated with the preoperative diagnosis of acute appendicitis. The circulation of ceacum was well and there was local inflammation.

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Figure-1. Normal wall in appendix with severe inflammatory infiltration in serosa (periappendicitis). (Hematoxilen-eosine X 100)

There was not any pericecal absess. Also there was no inflammation in pelvic region. Ileum was observed to be normal up to 100 cm length. There was no Meckel diverticulum. After deprivation of ceacum wall of 1-2 cm diameter so as to contain the perforation hole, it was sutured primarily and appendectomy was performed. The operation was completed after placing a drain into paracolic gutter. There was no complication occured in the postoperative controls. Postoperative thyroid function analysis was normal. In postoperative interrogation of patient, it was revealed that there was no history of trauma. In the histopathological study; appendix was exhibiting lymphoid hyperplasia (Figure 1), acute inflammation infiltration was seen in the omentum. As a result, an acute necrotizing inflammation in perforated area were determined (Figure 2).

Discussion

Non-traumatic cecum perforation is a very rare condition. Non-traumatic clinical conditions developing cecum perforation reported in literature are pseudo-obstructions of colon (2, 3), mechanical intestinal obstruction in colon (4, 5), cecal diverticulitis (1), and salmonella infection (6).

In the case presented, there was no history of trauma, and no other etiological factors reported in literature was determined. It is difficult to estimate the presence of cecum perforation prior to surgery in cases with cecum wall tension with no pathology. More than 70% of the patients with cecal diverticulitis are operated with the diagnosis of preoperative acute appendicitis. Ultrasonography and Computer Tomography can be useful in the early diagnosis of cecal diverticulitis conditions.

Kaynaklar