

Isolated cecal necrosis mimicking acute appendicitis

Akut apandisiti taklit eden izole çekum nekrozu

To the Editor

Ischemic colitis involving only the cecum is an infrequent occurrence. Because this variant of ischemic colitis occurs less often, it may not be considered in the differential diagnosis of right lower abdominal pain. We describe herein a patient with cecal necrosis who was treated successfully.

A 61-year-old female patient was admitted to the emergency department with right lower quadrant pain. Her past medical history was significant for type 2 diabetes mellitus, hypertension and coronary artery disease. Her medications included insulin, amlodipine, carvedilol, acetylsalicylic acid (300 mg) and isosorbide-5-mononitrate. Physical examination revealed tenderness in the right lower quadrant with rebound. White blood cell count was 13,300/ml. The other laboratory tests were normal. A transabdominal ultrasound examination showed a free fluid in the region of the cecum without signs of appendicitis. With the diagnosis of acute appendicitis, the patient underwent laparotomy, which revealed a necrotic cecum (Figure 1). A right hemicolectomy with anastomosis was performed and the patient was discharged in the third week due to her diabetes mellitus and coronary artery disease. Pathologic evaluation of the specimen revealed transmural necrosis in the cecum and submucosal edema with mild ischemia in the ileum. There was no evidence of malignancy, vasculitis or emboli.

Ischemic colitis is a well-recognized manifestation of nonocclusive mesenteric ischemia resulting from a reduction in colonic blood flow (1). Patients with this condition may be divided into two groups (1). Type I disease is the colitis that occurs spontaneously; that is, the precipitating factors responsible for the decreased mesenteric flow are not



Figure 1. Necrotic cecum at the time of laparotomy.

identifiable (1). Type II occurs secondarily, most often after an episode of systemic hypotension or decreased cardiac output or after aortic surgery (1). Cecal ischemia secondary to hypotension caused by dialysis or trauma has been well described (1-3). The mechanism for cecal necrosis in this patient appears primarily related to a low-flow state (2). Symptoms appear shortly after dialysis or trauma (2).

However, isolated ischemic necrosis of the cecum unrelated to hypotension, cecum distention, or arterial occlusion is unusual (1). As in our patient, the diagnosis is difficult because presentation with right-sided abdominal pain and tenderness suggests either appendicitis or cecal carcinoma.

Isolated ischemic cecal necrosis is an infrequent variant of ischemic colitis. The diagnosis should be considered when an elderly patient presents with right lower abdominal pain.

Address for correspondence: Gültén KİYAK

Genel Cerrahi Kliniği, Atatürk Eğitim ve Araştırma Hastanesi,
Bilkent, Ankara 06800, Turkey
Phone: +90 312 291 25 25 / 3763 • Fax No: +90 312 291 27 26
E-mail: gultenkuyak@yahoo.com

Manuscript received: 22.03.2007 **Accepted:** 14.06.2007

REFERENCES

1. Schuler JG, Hudlin MM. Cecal necrosis: infrequent variant of ischemic colitis. *Dis Colon Rectum* 2000; 43: 708-12.
2. Friedell ML. Cecal necrosis in the dialysis-dependent patient. *Am Surg* 1985; 51: 621-2.
3. Rodriguez-Sanjuan JC, Naranjo A. Letter to the editor: cecal ischemia mimicking carcinoma. *Dis Colon Rectum* 1997; 40: 867-8.

Gülten KIYAK, Yiğit ÖZGÜN,
Seyit Muhsin SARIKAYA, Birol KORUKLUOĞLU

Department of General Surgery, Atatürk Education and Research Hospital, Bilkent, Ankara