Mesenteric inflammatory veno-occlusive disease: An unusual cause of colonic ischemia

Kolon iskemisinin nadir bir nedeni: Mezenterik inflamatuvar venooklüzif hastalık

To the Editor,

Mesenteric inflammatory veno-occlusive disease (MIVOD) is a rare mesenteric vasculitis. This etiologically unknown table causes intestinal ischemia related to thrombotic occlusions in mesenteric veins (1). A 65-year-old male presented to our institution with complaints of progressive proctalgia and rectal bleeding. The patient's complaints began 15 days ago, due to left nephrectomy one month ago as a result of chronic pyelonephritis. The physical examination revealed fever of 38°C, significant sensitivity at the left lower abdomen, pain at rectal touch, and fresh blood in the rectum. In the laboratory examination, neutrophils were 10,400/µL, sedimentation 57 mm/hour and C-reactive protein 10 mg/dl. On abdomen computed tomography (CT), diffuse wall thickening, significant edema and lymphadenopathies in the rectosigmoid colon and blanking in the perirectal region in lipoid plans were observed. In colonoscopic examination, mucosal hyperemia extending from the middle of the sigmoid colon to the middle of the rectum, spontaneous bleeding and fragility were observed. Nonspecific inflammatory changes were identified in the biopsy. Mesalazine treatment was initiated with an ulcerative colitis prediagnosis; upon increasing complaints of rectal bleeding and abdominal pain, 40 mg/day intravenous (IV) methylprednisolone was added to the treatment. However, in the second colonoscopy, performed due to persistence of the complaints on the 15th day, deterioration in lesions, when compared to the prior condition, diffuse necrosis areas in the rectosigmoid region and pus in the lumen were demonstrated. During the operation, which was planned for surgical resection, it was observed that the distal rectum was partly preserved, while the rectosigmoid junction and sigmoid colon were necrosed. The necrotic colon segments were resected and a colostomy was opened. In the macroscopic examination of the extracted colon segment, significant increases in colonic wall thickness and necrotic areas and significant inflammation were seen (Figure 1). In the histopathologic examination of the surgical specimen, diffuse necrosis in the colon wall and mesentery, thrombotic occlusions and vasculitis findings in the mesenteric veins were identified. Arterial structures were observed to be normal. No granuloma structure was observed (Figure 2). MIVOD (venulitis, myointimal hyperplasia, thrombotic occlusions and protected arteries) was diagnosed based on these histopathologic findings (2). The colostomy of the patient was closed, since there were no complications during the one-year follow-up period.

Today, the MIVOD etiology is not widely known. In the literature, one case, who was postoperatively (post-appendectomy) diagnosed with MIVOD, was identified (3). However, besides our case, no other post-nephrectomy MIVOD case was reported in the literature. MIVOD is difficult to diagno-

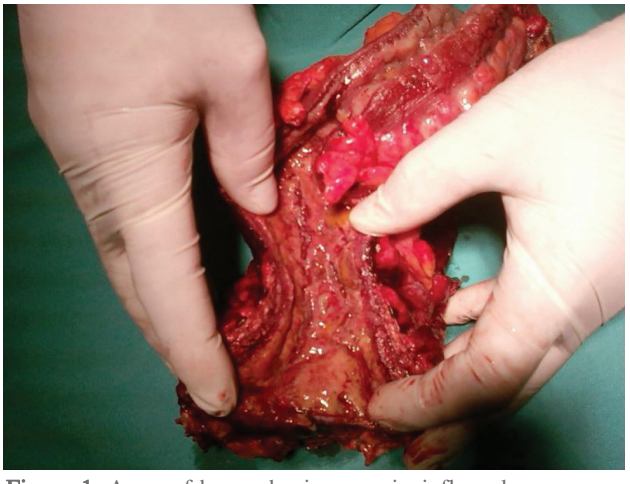

Figure 1. Areas of hemorrhagic necrosis, inflamed appearance and thickening on the colonic wall on the macroscopic image of the resected colon segment.

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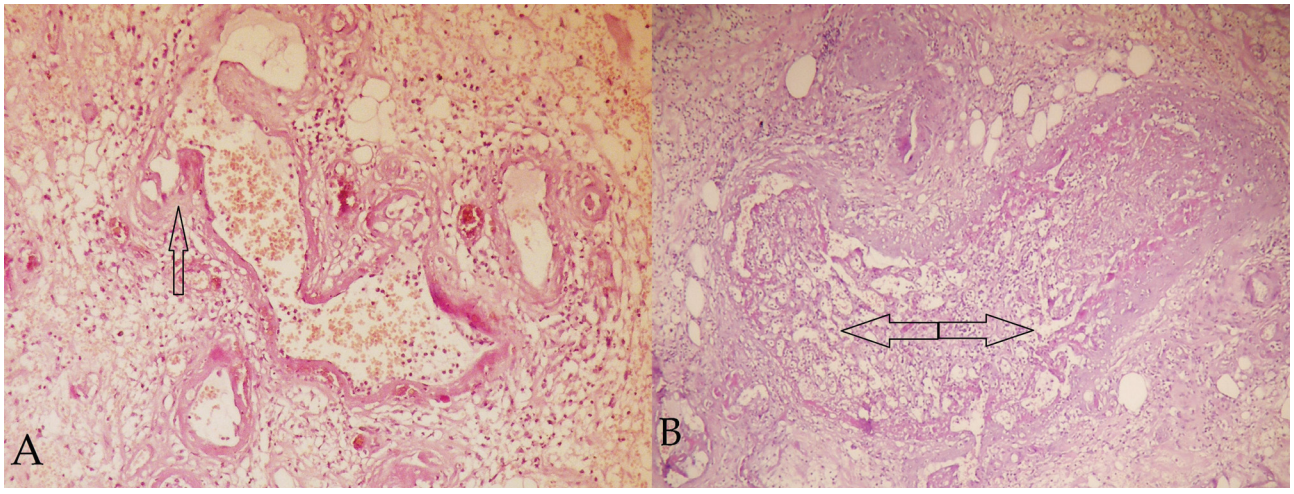

Figure 2. Histological image taken from the resected colon (hematoxylin and eosin stain, original magnification x 100): perivascular fibrin accumulation in mesenteric vein **(A)** and necrotizing venulitis characterized by polymorphonuclear leukocyte infiltration; **(B)** mesenteric vein indicating thrombotic occlusion.

se because of its rarity, nonspecific clinical findings and frequent confusion with other diseases, and requires histopathologic verification (4).

In conclusion, MIVOD is a rare mesenteric vasculitis. Quick diagnosis and surgical resection for this etiologically unknown disease are life-saving.

REFERENCES

1. Stevens SM, Gue S, Finckh ES. Necrotizing and giant cell granulomatous phlebitis of caecum and ascending colon. Pathology 1976; 8: 259–64.
2. Eryigit E, Hoentjen F, Barbe E, van Meyel JJ. Intestinal ischaemia caused by mesenteric inflammatory veno-occlusive disease. Neth J Med 2008; 66: 486-8.
3. Charron P, Smith J. Mesenteric venulitis in a 71-year-old man after acute appendicitis. Am Surg 2005; 71: 574-7.
4. Lie JT. Mesenteric inflammatory veno-occlusive disease (MIVOD): an emerging cause and unsuspected cause of digestive tract ischemia. Vasa 1997; 26: 91-6.

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An unexpected cause of occult bleeding

Okkült kanamanın tahmin edilmeyen bir nedeni

To the Editor,

A previously healthy 38-year-old female presented with melena and weight loss of 6 kg over two months. There was no associated abdominal pain, vomiting or anorexia. She had no family history of

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