the appendix (2,6). Appendicitis, appendiceal perforation and appendiceal abscess can occur days to years after FB ingestion (6). The metal pin was ingested unintentionally three years before presentation to our hospital. FBs in the appendiceal lumen may cause inflammation, perforation and peritonitis, and appendicitis can occur days to years after FB ingestion. Surgery seems to be the only effective therapeutic approach to treat FBs in the appendix.

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Polyarteritis nodosa with perforation of the cecum

Poliarteritis nodosaya bağlı çekum perforasyonu

To the Editor,

Polyarteritis nodosa (PAN) is a systemic vasculitis involving small- and medium-sized arteries, and it may present with various clinical features. We report herein a case of PAN presented with perforation of the cecum, which is seen very rarely.

A 12-year-old boy was referred to our hospital with a possible diagnosis of appendicitis. He had been operated for ventricular septal defect during infancy, and recurrent aphthous ulceration was noted in his medical history. In his physical examination, diffuse abdominal tenderness was noted; there was no significant abnormality in the rest of the physical examination. Laboratory investigations revealed pathologic leukocytosis (WBC: 24,500/mm^3) and highly elevated C-reactive protein (CRP) (162 mg/dl). Abdominal ultrasonography showed a marked edematous appendix and minimal pericholecystic fluid. During the operation, the appendix was seen as hyperemic. On the antimesenteric surface of the cecum and distal colon, ulcerated and ischemic lesions were seen, 3-4 mm in diameter. During exploration following the appendectomy, the perforated portion of the intestine (2-3 cm in length) was opened. When the intestinal mucosa from the perforated site was inspected, lesions 2-10 mm in length were seen on the internal surface of the cecum and colon over a 10 cm segment. The cecocolic segment including these lesions was resected, and side-to-side anastomosis was performed. The histopathological evaluation revealed mucosal erosions, particularly in the walls of the small- and medium-sized vessels, which were in the granulation tissue with inflam-

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mation, especially at the base of erosions, and remarkable in the submucosa, including the serosa. Fibrinoid necrosis and neutrophilic infiltration were noted in some areas, and PAN was diagnosed (Figure 1). Oral nutrition was started on postoperative day 5, and the patient was discharged on postoperative day 12.

Polyarteritis nodosa (PAN) was first described by Kausmall and Maier in 1866 (1). Its clinical features can vary from a mild limited condition to progressive-serious disease that can be fatal. Gastrointestinal hemorrhage and perforation, renal insufficiency, hypertension, and congestive heart failure play a major role in the mortality (2-4). In our case, PAN precipitated cecal perforation, mimicking acute abdomen clinically.

Necrotizing vasculitis affecting small- and medium-sized arteries shown with biopsy takes an important place in the diagnosis (5). Although angiographic investigations are invasive procedures, they can be diagnostic (2). Diagnosis of the disease is simpler when typical skin lesions are present, but absence of skin lesions can make the diagnosis more difficult (2). Lesions can be present in visceral organs, and the diagnoses are commonly made via microscopic examination of tissue. Although the predominant clinical feature of our patient was acute abdomen, the ulcerated aphthous lesions noted to occur for the past approximately eight years in our patient's history can be considered as gastrointestinal system involvement. In addition, it is strongly possible that the lesions on the cecum were chronic rather than having caused an acute ischemia.

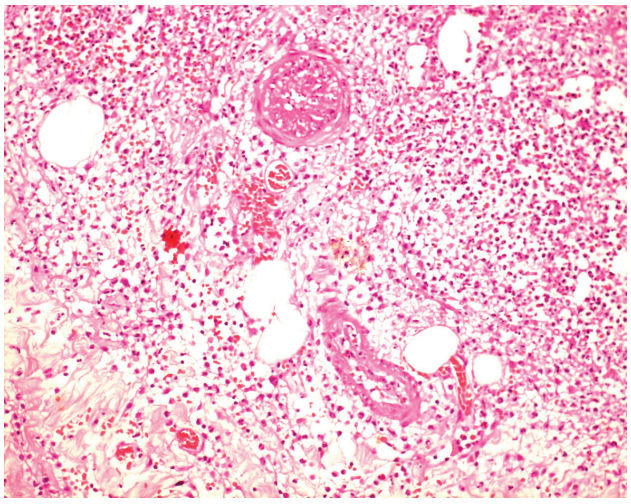

Figure 1. Fibrinoid necrosis in the submucosa of the walls of two vessels and neutrophilic infiltration in the wall of the posterior vessel can be seen (H-E X200).

In patients with suspicious lesions in the gastrointestinal tract, the most important step in the diagnosis is to consider PAN.

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