LETTER TO THE EDITOR

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Aseptic Abscess Syndrome: A Unique Case of Splenic Involvement and Systemic Inflammation

Aseptik Apse Sendromu: Dalak İnfiltrasyonu ve Sistemik Enflamasyon Birlikteliğinin Nadir Bir Sebebi

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To the Editor,

A 42-year-old female patient with no known history of chronic disease presented with complaints of fatigue, fever, weight loss, and night sweats for over 5 months. The patient's medical history and family history were unremarkable. On physical examination, her blood pressure was 128/73 mmHg, pulse rate was 75/min, and oxygen saturation was 98% in room air. Physical examination revealed pallor of the skin and conjunctiva but no cyanosis or jaundice. Percussion revealed dullness in Traube's space and no additional pathological findings were detected in other systemic examinations. A blood test showed leukocytosis with white blood cell count of $13.74x10^3/\mu L$ (reference range: 4.1-11.2) and monocyte count of $1.64x10^3/\mu L$ (reference range: 0-0.8), as well as increased C-reactive protein (CRP) of 263.61 mg/L (reference range: 0-5 mg/L), erythrocyte sedimentation rate of 75 mm/h (reference range: 0-20), and a two-fold increase in aminotransferase level. No pathological results were obtained from immunological tests or viral serology. The tuberculin skin test result was reported to be 0 mm (reference range: 0-15) and QuantiFERON testing returned negative results. Urine and blood cultures were sterile. The peripheral smear was consistent with iron deficiency anemia with toxic granulation, and basophilic stippling was observed. Pathological examination of the bone marrow revealed hypercellular bone marrow with granulocytic hyperplasia, with no findings suggestive of hematological malignancy. Magnetic resonance imaging (MRI) and contrast-enhanced computed tomography (CT) revealed multiple hypodense lesions in the spleen consistent with microabscesses (Figure 1A). Pathological examination of the biopsy specimen obtained from the splenic parenchyma revealed extensive necrosis and abundant polymorphonuclear neutrophils (Figures 1C and 1D). Ampicillin-sulbactam and doxycycline were initiated. Despite antibiotic therapy, the patient's fever and elevated CRP level persisted, leading to a diagnosis of aseptic abscess syndrome (AAS), and methylprednisolone was initiated at 20 mg/day. The patient's fever subsided, her CRP level significantly decreased, her general condition improved, and the methylprednisolone dose was increased to 40 mg/day. After 10 days of corticosteroid treatment, follow-up contrast-enhanced abdominal MRI revealed a marked decrease in spleen size and parenchymal heterogeneity (Figure 1B). One week later, the patient had no complaints and serum acute-phase reactants had returned to normal limits.

AAS is a rare inflammatory disorder of unknown etiology characterized by sterile encapsulated lesions rich in polymorphonuclear leukocytes. The most common initial symptoms are fever, abdominal pain, and weight loss while the most common laboratory finding is leukocytosis. A diagnosis of exclusion is considered in the presence of radiological evidence of deep tissue abscesses when no infectious source is found. ^{18}F-fluorodeoxyglucose positron emission tomography/CT may serve as a valuable diagnostic and management tool for recurrent AAS despite its nonspecific nature [1]. Antibiotic treatment is ineffective in treating AAS. However, the majority of patients (95%) respond to corticosteroids [2]. Cases in which disease-modifying antirheumatic drugs and biological agents were used as maintenance therapy have been reported [3,4,5,6]. The literature also describes cases of AAS associated with conditions such as pyoderma gangrenosum [7], SAPHO syndrome [8], and spondyloarthropathies. Our presented case underscores the need for clinicians to maintain a high index of suspicion for AAS when confronted with sterile abscesses, systemic inflammation, and antibiotic resistance.

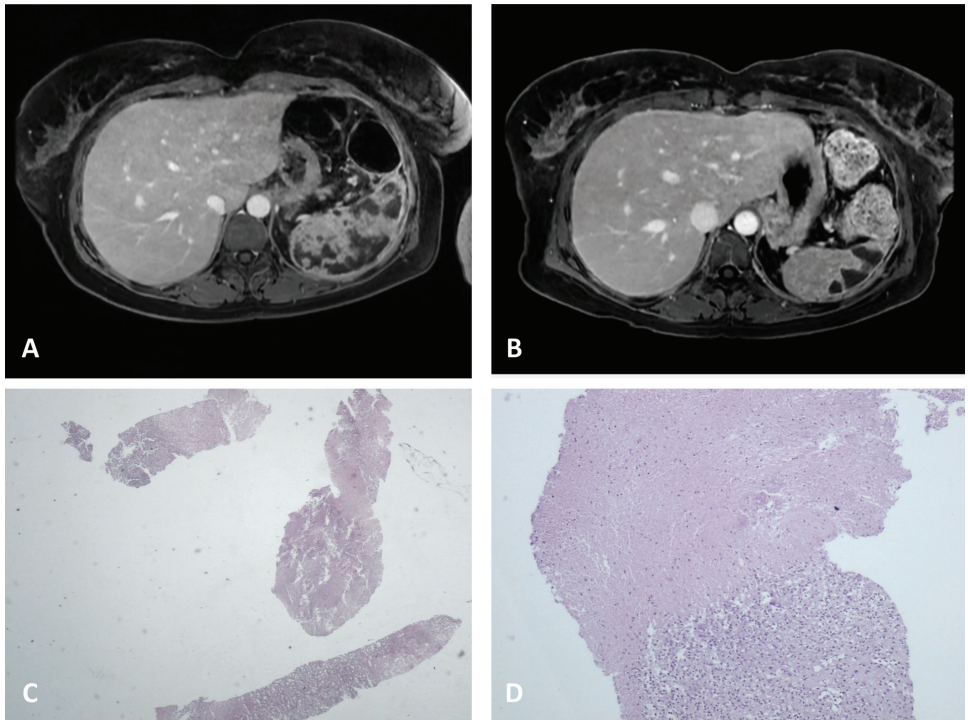

Figure 1. A) Magnetic resonance imaging (MRI) showing multiple hypodense lesions consistent with microabscesses. B) Follow-up MRI revealed a marked decrease in spleen size and parenchymal heterogeneity. C, D) Pathological examination of the splenic parenchyma revealed extensive necrosis and abundant polymorphonuclear neutrophils with hematoxylin and eosin staining.

Keywords: Aseptic abscess syndrome, Inflammation, Splenic involvement

Anahtar Sözcükler: Aseptik apse sendromu, Enflamasyon, Dalak infiltrasyonu

Ethics

Informed Consent: Written informed consent for publication of the case in an anonymized form was obtained from the patient.

Footnotes

Authorship Contributions

Surgical and Medical Practices: B.G., G.Y.; Concept: B.Y., M.G.D., N.Ş., A.M.; Design: B.Y., M.G.D.; Data Collection or Processing: B.G.; Analysis or Interpretation: N.Ş., A.M., G.Y., M.K., A.A.Ç.; Literature Search: B.Y., M.G.D., N.Ş., A.M., M.K., A.A.Ç.; Writing: B.Y., M.G.D., M.K., A.A.Ç.

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