III IMAGES IN HEMATOLOGY

DOI: 10.4274/tjh.2015.0046 Turk J Hematol 2016;33:84-85

Radiologic Image of a Child with Leukemia Who Developed Sepsis and Fulminant Thrombosis during Induction Therapy

İndüksiyon Tedavisi Sırasında Sepsis ve Fulminan Tromboz Gelişen Lösemili Bir Çocuğun Radyolojik Görüntüsü

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Figure 1. Thorax and abdominal computed tomography of the patient demonstrating bilateral areas of consolidation in the lung parenchyma and multiple infarcts in the left lower lobe of the lungs, in the liver, in the spleen, in the left upper lobe of the left and middle zone of the right kidney, and in some parts of the intestines (arrows).



Received/Geliş tarihi: January 23, 2015 Accepted/Kabul tarihi: February 02, 2015 In a 5-year-old girl with acute lymphoblastic leukemia (ALL), febrile neutropenia occurred in the induction phase of chemotherapy. She was not using a central venous catheter. Despite empiric antibiotics, she developed tachypnea, bilateral rales, and disseminated intravascular coagulation (DIC). Viral, bacterial, and fungal investigations were unremarkable. Thorax and abdominal computed tomography showed bilateral consolidation areas in the lungs and multiple infarcts in the left lower lobe of the lungs, the liver, the spleen, the kidneys, and the intestines (Figure 1). Heparin infusion was started. No inherited prothrombotic defect could be shown; antiphospholipid antibodies were negative. She died of pulmonary failure.

Sepsis secondary to an unknown pathogen is the most common cause of mortality and the overall risk of symptomatic thrombosis is 5.2% in ALL [1,2,3]. Despite a high incidence of central nervous system and upper venous system events, widespread thromboembolism seems to be rare [3,4]. Our patient had multiple acquired risk factors, such as leukemia, concurrent administration of *Escherichia coli* asparaginase and prednisone, infection, and DIC. After administration of anticoagulant therapy, patients usually show improvement, but in our patient we could not reduce the occlusive events. This case is a good reminder for hematologists that the onset of neutropenic fever may be very aggressive and thrombotic events may occur rapidly and may be fulminant in children with ALL. Keywords: Acute leukemia, Sepsis, Thrombosis

Anahtar Sözcükler: Akut lösemi, Sepsis, Tromboz

Authorship Contributions

Concept: Eda Ataseven, Hale Ören, Design: Hale Ören, Data Collection or Processing: Eda Ataseven, Handan Güleryüz, Murat Duman, Ömer Özden, Analysis or Interpretation: Hale Ören, Şebnem Yılmaz Bengoa, Literature Search: Eda Ataseven, Hale Ören, Writing: Eda Ataseven.

Conflict of Interest: The authors of this paper have no conflicts of interest, including specific financial interests, relationships, and/ or affiliations relevant to the subject matter or materials included.

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