Aspergillosis in Acute Myelogenous Leukemia

R.	Rudolf	Knapp ^a
I.	Isolde	Bangerl ^a
D.	Dieter	zur Nedden ^a
D.	David	Nachbaur ^b
D.	Dietger	Niederwieser ^b

^aDepartment of Radiodiagnosis, Radiology II, and ^bDivision of Clinical Immunobiology and Bone Marrow Transplantation, Department of Internal Medicine, University Hospital, Innsbruck, Austria

Correspondence to: Dr. Rudolf Knapp, Department of Radiodiagnosis, Radiology II, University Hospital, Anichstr. 35, A-6020 Innsbruck (Austria)

Transverse scan of the lower thorax of a 48-year-old female patient suffering from acute myelogenous leukemia. The anterior segment of the lower lobe shows a cavity with a diameter of approximately 1.5 cm containing an amorphous mass.

During aplasia after induction chemotherapy, the patient developed a pulmonary infiltrate which was treated successfully with antibiotics and amphotericin B. After hematological reconstitution, a CT scan was performed and pulmonary aspergillosis was diagnosed.

Bronchopulmonary aspergillosis manifests in three different radiological and clinical patterns: (1) as a saprophytic infestation in preformed cavities; (2) in immunocompromised hosts as an intravascular-growing fungus called invasive aspergillosis with a radiological pattern mimicking pulmonary infarction caused by bronchopulmonary embolism, and (3) as an allergen that initiates asthma or allergic alveolitis [1].

In our case, pattern 2 changed into pattern 1 during the hematological restitution. This could be confirmed by the superior spatial resolution of the CT image. After clinical reconstitution, the cavity containing the fungus ball was resected.

Reference

1 Genereux FP: Diagnosis of Diseases of the Chest. Philadelphia, Saunders, 1989, p 991.