Aspergillosis in Acute Myelogenous Leukemia

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Transverse scan of the lower thorax of a 48-year-old female patient suffering from acute myelogeneous 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 spacial resolution of the CT image. After clinical reconstitution, the cavity containing the fungus ball was resected.

Reference