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Cavitary Pulmonary Opacity in a Diabetic Patient

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Cavitary Pulmonary Opacity in a Diabetic Patient

— Pictures in Clinical Medicine —

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Case Report

A 50-year-old man with a history of type 2 diabetes mellitus presented with a 40-day history of right chest tightness. He was afebrile. Physical examination revealed dullness to percussion and a decrease in breath sound. Chest radiography was consistent with air space consolidation (Picture 1) and computed tomography scan of chest revealed a large thick wall cavity abutting the chest wall in the right upper lung (Picture 2). Hemoglobin A1c was 13.8%. Direct examination of bronchial biopsy (Picture 3) led to the diagnosis of pulmonary mucormycosis.

Mucormycosis is a life-threatening fungal infection that occurs primarily in patients with various immunocompromised states.[1] In the present case, there was a predilection for involvement of the upper lobes, but none of the radiological findings were characteristic.[2] Fiberoptic bronchoscopy was a useful diagnostic method, and histopathologic examination was more sensitive than fungal cultures.[2] The clinical disease of mucormycosis is very similar to invasive pulmonary aspergillosis. The fungus is nonseptate with short stubby side branches at a 90-degree angle and this is a diagnostic feature. The fungus invades the blood vessels and causes distal ischemic necrosis. Successful management continues to be early diagnosis, followed by systemic antifungal therapy and surgical resection combined with control of the underlying disease.

References

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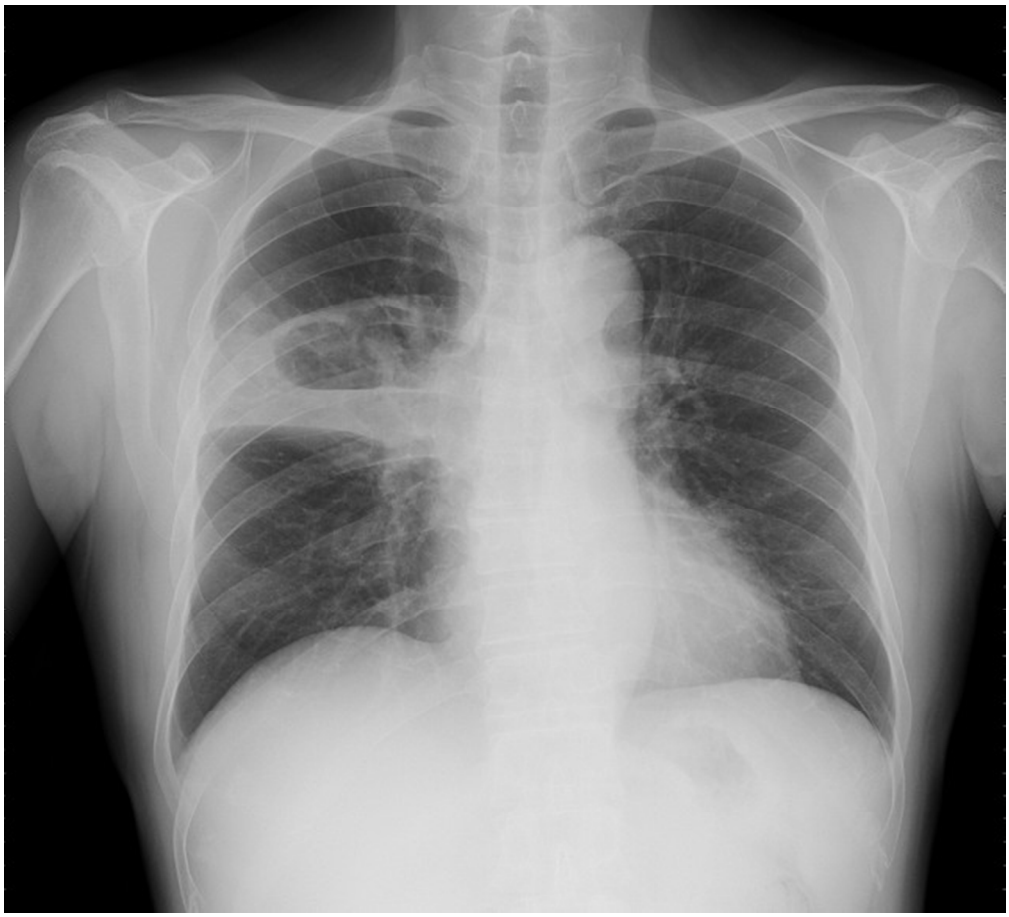

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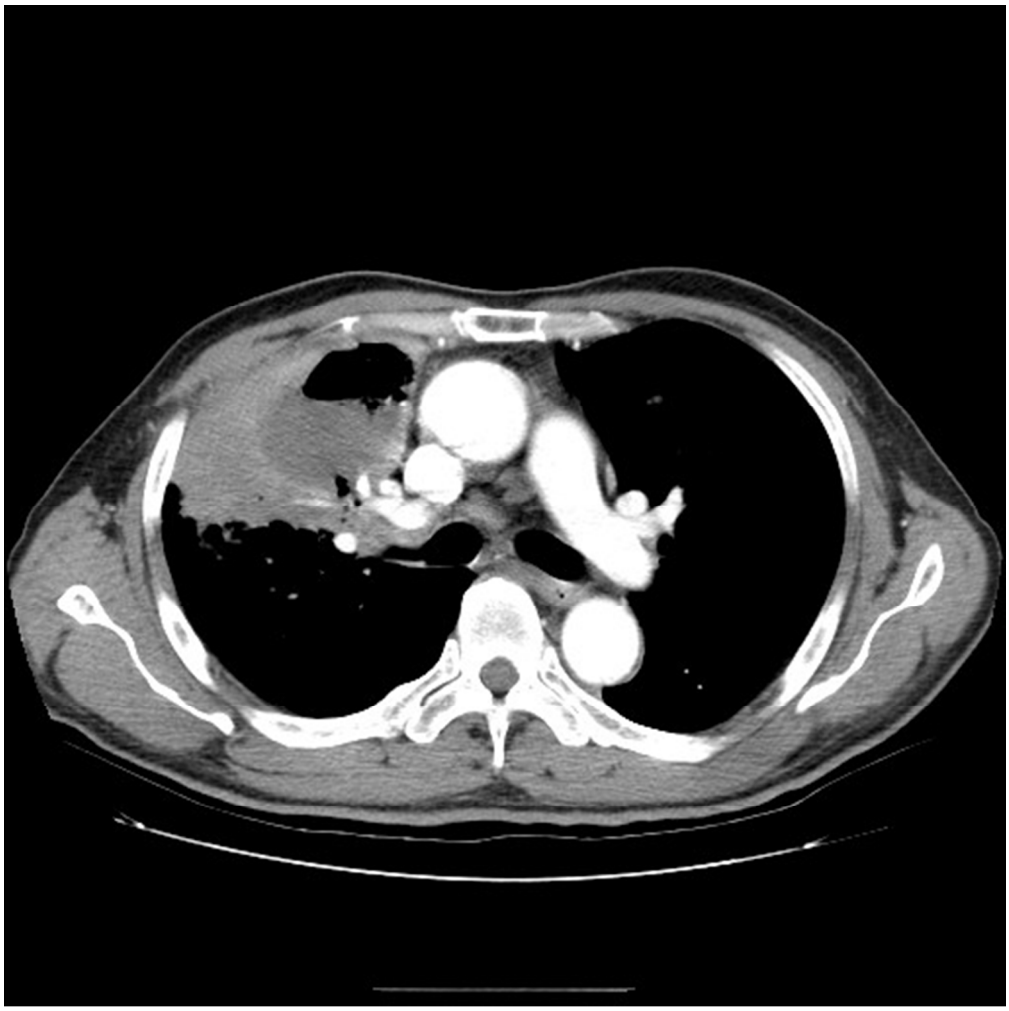

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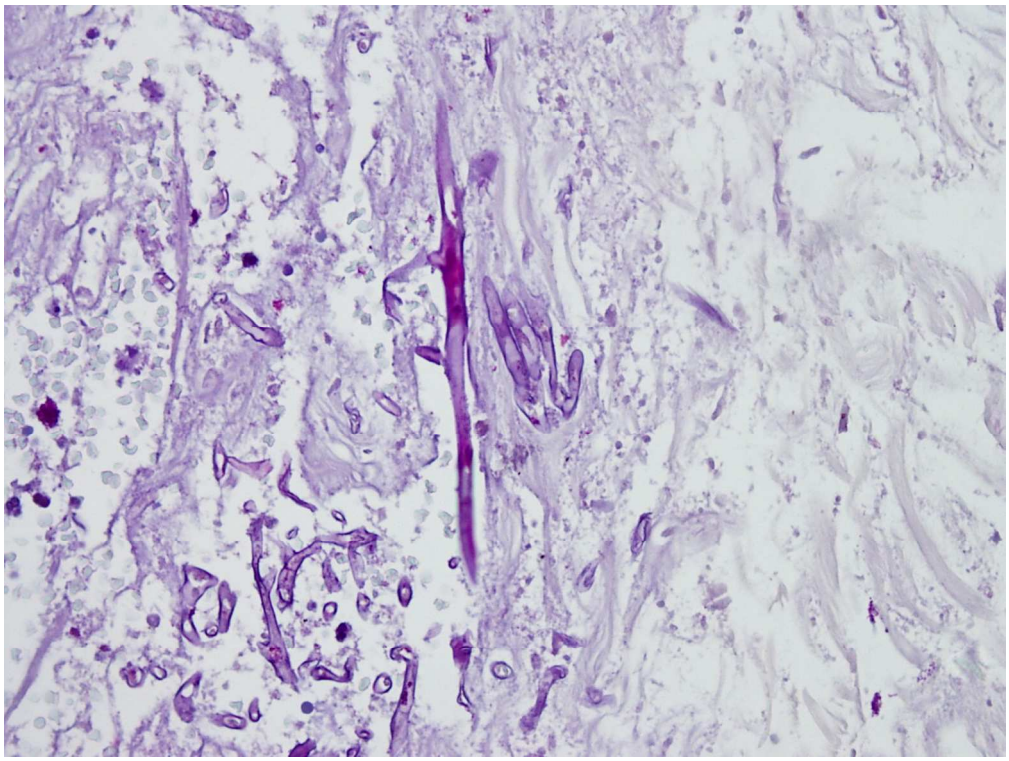

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