



## Massive hemoptysis caused by pseudoaneurysm in a patient with pulmonary tuberculosis

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### Background:

Hemoptysis represents an alarming symptom that can potentially be a first sign of pulmonary tuberculosis. In the presence of tuberculosis, hemoptysis might be caused by various etiopathologies. Pseudoaneurysm, even though a rare one, can be a cause of this life-threatening emergency. This case describes a pseudoaneurysm causing massive hemoptysis in a patient with pulmonary tuberculosis.

### Case presentation:

We present a 51-year-old male patient experiencing chronic productive cough lasting for months, with severe hemoptysis that had occurred 7 days before hospitalization, as well as shortness of breath, recent night sweats and weight loss. Laboratory workup showed microcytic anemia, leukocytosis, elevated C-reactive protein, hypokalemia, hyponatremia and hypoalbuminemia. The classic chest X-ray showed inhomogeneous shading of the upper lung lobe on the right, with a large round soft tissue shadow located in the middle lobe, with bilateral spotted infiltrates. Flexible bronchoscopy was interrupted before bronchoscopic sampling was done, due to the patient's intolerance. A CT scan showed a completely morphologically altered upper lung lobe on the right and a large consolidation in the anterior segment of the lower lung lobe with foci of destruction containing a pseudoaneurysm. A positive culture for *Mycobacterium tuberculosis* confirmed a finding, given by direct microscopy, and a diagnosis of extensive pulmonary tuberculosis, with pseudoaneurysm within the inflammatory consolidation of the right lower lobe, was established. The patient was treated with conservative therapy that included rest, cough suppressant, tranexamic acid, blood transfusion and the first line of antituberculous therapy. His clinical condition was gradually improved and there was no need for bronchial artery embolisation (BAE) or urgent surgical procedures.

### Conclusion:

Pseudoaneurysm is an extremely rare complication of tuberculosis, but it might cause a life-threatening condition. This case emphasizes the importance of comprehensive knowledge of atypical tuberculosis manifestations and complications since prompt diagnosis and early interventions are essential.

### Keywords:

hemoptysis, pseudoaneurysm, tuberculosis