Pseudoaneurysm of the pulmonary artery with massive haemoptysis due to an invasive pulmonary mucormycosis

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A 62-year-old man diagnosed with glioblastoma multiforme and currently under chemoradiation therapy presented with massive haemoptysis. Chest computed tomographic scan disclosed a round-shaped formation in the right upper lobe with contrast agent leakage indicating active bleeding (figure 1). Pathological examination after right upper lobectomy revealed a pseudoaneurysm of the pulmonary artery caused by invasive mucormycosis (figure 2).

After candidiasis and aspergillosis, mucormycosis is the third most frequent invasive mycosis in immunocompromised patients. In 25% the lungs are the main site of manifestation and in these cases a high mortality is reported. An interesting characteristic of Mucorales species is the angioinvasion which leads to rupture of vessels with massive haemorrhage.

Figure 1 Contrast-enhanced computed tomography of the chest showing the pseudoaneurysm of the right upper lobe pulmonary artery. Image also demonstrates a contrast agent leakage indicating an active bleeding.

Figure 2 Resected right upper lobe with pseudoaneurysm (arrows) of the pulmonary artery (A). B, bronchus; V, vein.
Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; internally peer reviewed.

REFERENCES