

## Embolic pulmonary complication of a cerebral arteriovenous malformation treatment

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Study conducted at Hospital Geral de Fortaleza, Fortaleza, CE, Brazil

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A 34-year-old man was admitted in the emergency room with headache, vomiting, gait ataxia, dizziness and vertigo. He was submitted to a cranial CT that showed an important hydrocephalus secondary to a fourth ventricle compression by a posterior fossa hematoma. He received advanced life support in an intensive care unit (ICU) and was submitted to an external ventricular drainage (EVD), posteriorly converted to ventriculoperitoneal shunt (VPS) (visualized in the right hemithorax). After stabilization a magnetic resonance image (MRI) and an arteriography revealed a large cerebellum arteriovenous malformation (AVM).

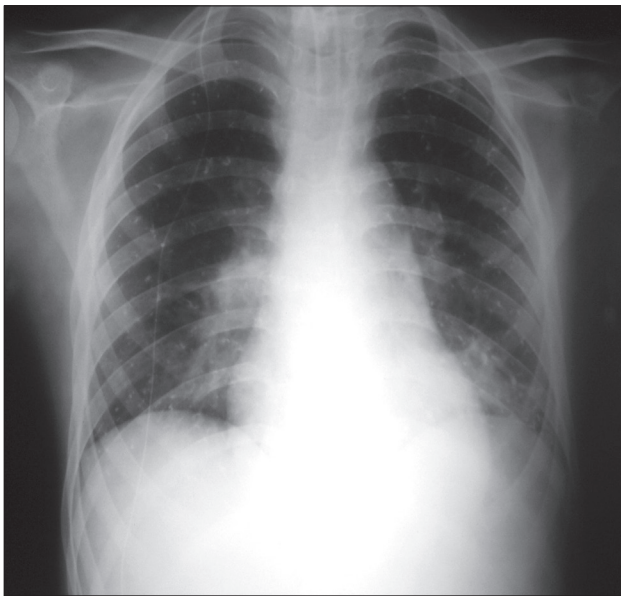


Figure 1 – Lateral x-ray.

It was decided to treat the AVM with surgery preceded by endovascular embolization with N-butyl-cyanoacrylate (Histoacryl). One day after the third section of embolization, the patient evolved to moderate respiratory distress. The x-ray revealed migration of the Histoacryl to the lung. The patient developed respiratory insufficiency and died.

Although nidus embolization with Histoacryl is an effective and safe technique that may permit complete cure of brain AVMs, with or without surgical resection and/or radiosurgery, serious complications are described<sup>1-3</sup>. There is no specific data related to Histoacryl migration frequency in the endovascular therapy, but it has already been described in the treatment of bleeding gastric ulcer and skull base tumors, as anecdotal cases<sup>4-7</sup>.



Figure 2 – PA x-ray.

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