

## Emergency Management of Cerebral Air Embolism as a Complication of CT-Guided Lung Biopsy: A Case Report

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### Abstract

Cerebral air embolism is a rare complication of percutaneous CT-guided lung biopsy that is associated with seizures, neurological deficits such as stroke and, if not promptly recognised, death. This case describes an 80-year-old woman referred for a CT-guided lung biopsy for histological assessment of a suspected malignant cavitating lung lesion. Shortly after the end of the procedure, the patient developed complete left-sided hemiparesis. A CT scan of the head demonstrated air embolus in the right middle cerebral artery (MCA) territory. Urgent transfer to a specialist centre for hyperbaric oxygen therapy was critical to patient recovery.

While transfer was being arranged, high flow oxygen was administered with the patient placed in the left lateral decubitus position to prevent further air entry. After recovery, the patient was then stepped down to a stroke unit for rehabilitation. Full neurological recovery was made.

The case highlights that radiologists should be well-versed in recognising the signs and immediate management of air embolism and anticipate it as a rare but severe complication of lung biopsy.

### Keywords

Air embolism, percutaneous lung biopsy, hyperbaric oxygen therapy.