A fifty-year-old woman, never smoker, with an L5 vertebroplasty performed four years previously was referred to our unit because of a radiographic finding. The patient had had dyspnea on heavy exertion for four years, episodes of chest tightness and palpitations. Physical examination was normal. CT images revealed a calcific density foreign body in the left pulmonary artery and similar smaller masses in the right chest. A leakage of vertebral cement could be observed at the level of the L5 vertebra, communicating with the left common iliac vein.

The patient was diagnosed with pulmonary embolism (PE) of polymethyl methacrylate (PMMA), a material used as cement in vertebroplasty. Cement leakage to peripheral tissues during the procedure is the most common complication. PE occurs in 3.4–23% of vertebroplasties performed for osteoporotic fractures,1 and is asymptomatic in most cases. Immediate postoperative management of PE is based on the presence of symptoms and the location of the embolization. Observation is recommended in asymptomatic cases, 3–6 months of anticoagulation therapy is recommended in symptomatic cases and in those with central emboli, and surgery is required in severe cases.

In our case, the surgery was old, so we decided treatment unnecessary and but to monitor the patient periodically. No clinical changes have been observed in 3 years of follow-up.

Reference