

## CARDIOVASCULAR FLASHLIGHT

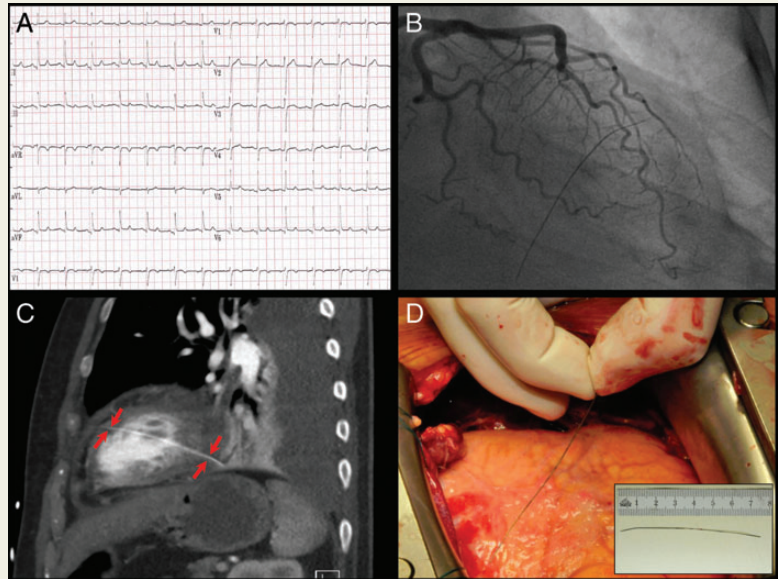
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## Cardiac perforation as a rare complication of acupuncture

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A previously healthy 51-year-old female was referred to the emergency department with ongoing chest pain and dyspnoea. The ECG showed non-significant ST-segment elevations and PQ depression in the limb leads with reciprocal PQ elevation and ST depression in aVR (*Panel A*), suggestive for acute pericarditis. As repetitive blood sampling assessment showed a relevant increase in high-sensitivity Troponin, a coronary angiography was performed to rule out significant coronary artery disease. While the coronary arteries were free from atheromatous plaques, the fluoroscopic images showed a needle-shaped foreign body projecting on the left ventricle (*Panel B*). Transthoracic echocardiography was not able to identify the cause of the foreign body, but computed tomography scan confirmed the presence of a needle-shaped radiopaque structure perforating the left ventricle and protruding into the left lower lobe of the lung (*Panel C*). After discussing the imaging findings as a potential reason for the clinical symptoms, the patient immediately mentioned an acupuncture treatment some days ago. Acupuncture was performed by a non-professional and close friend to treat her chronic musculo-skeletal pain. Cardiac surgery was immediately performed, during which a left-sided haemothorax was evacuated and the thin needle (0.2 × 75 mm) completely removed without cardiopulmonary bypass (*Panel D*). Patient recovery was fast and uneventful and she was discharged on Day 4 after surgery.

Thoracic therapeutic acupuncture could be associated with potential life-threatening complications in inexperienced hands and should only be performed by trained experts in the field.



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