

Cardiac arrest: an infrequent radiologic diagnosis

A patient in his 80s was brought to our emergency department with severe abdominal pain, hypotension and bradycardia. Initial laboratory findings revealed lactic acidosis. An abdominal CT was requested to rule out intestinal ischaemia or visceral perforation.

The CT showed blood-contrast levels in the superior vena cava and right auricle (figure 1, arrows in A) with minimal contrast flow to the right ventricle (figure 1, point in A). Non-opacified pulmonary arteries left cardiac chambers and aorta. Contrast regurgitation to the inferior vena cava and right suprahepatic vein (figure 1, open arrow in B). Pooling of the contrast agent in the right hepatic lobe (figure 1, asterisk in B). Filling of the portal vein (figure 1, curved arrow in C) explained by reverse flow from right hepatic lobe via sinusoid communication. Reflux into the right renal vein (figure 1, open arrow in D) and paravertebral venous plexus (figure 1, arrow heads in C and D).

The imaging findings were consistent with cardiac arrest.¹ Consequently, the exam was stopped. The clinicians confirmed the absence of pulses and started the cardiopulmonary reanimation manoeuvres. Finally, the patient died.

These images illustrate CT features of cardiac arrest. Medical professionals should be aware of these specific imaging features to promptly initiate cardiac resuscitation and avoid permanent brain damage and death.

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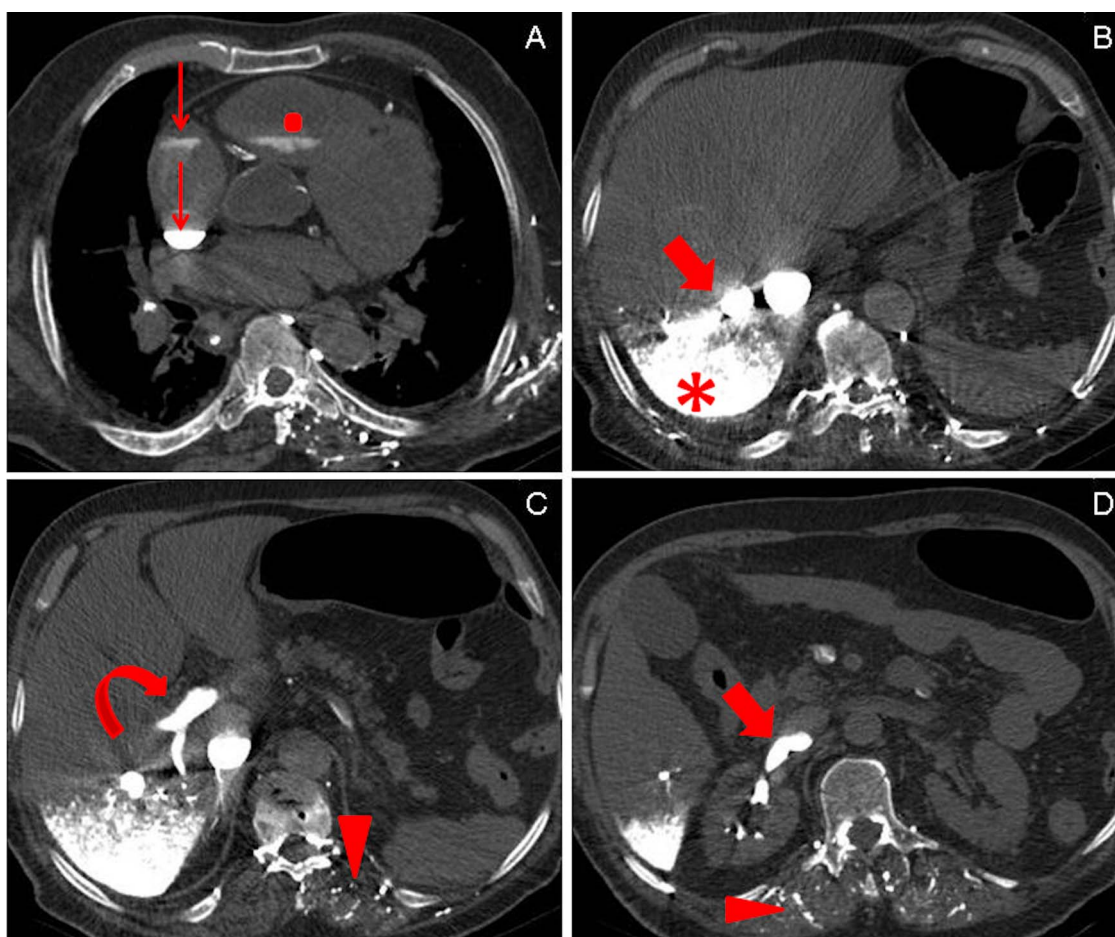


Figure 1 Axial CT images after contrast administration show the typical described findings of cardiac arrest.





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