

IMAGE IN CARDIOLOGY

Porcelain aorta rupture after cardiopulmonary resuscitation

Rutura de aorta em porcelana após ressuscitação cardiopulmonar

Iria Silva*, Isaac Pascual, Carlos Morales, Alberto Alperi, Pablo Avanzas, Jacobo Silva, Cesar Moris de la Tassa

Hospital Universitario Central de Asturias, Oviedo, Spain

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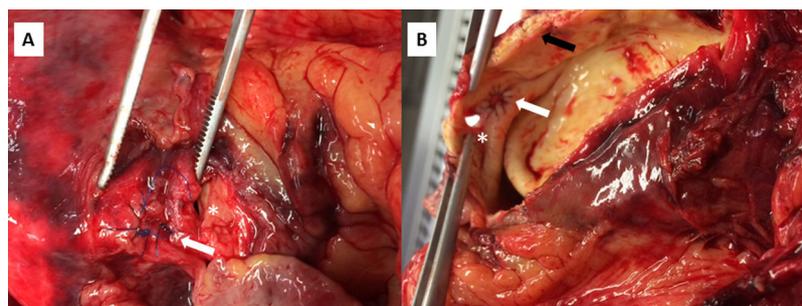


Figure 1 External (A) and internal (B) aorta view. Rupture point (asterisk), saphenous anastomosis (white arrow) and aortic calcification (black arrow).

A 70-year-old man was admitted to our hospital for non-ST-elevation acute coronary syndrome. Coronary angiography showed left main artery and two-vessel disease. Left ventricular function and contractility were normal. Surgical revascularization was decided by the heart team.

Off-pump surgery was performed because of porcelain aorta (left internal mammary to anterior descending

artery and saphenous vein to posterior descending and posterolateral arteries). Three hours after surgery the patient developed progressive hypotension with anterolateral hypokinesia, left ventricular dysfunction and an episode of ventricular fibrillation. Pericardial effusion was excluded. During cardiopulmonary resuscitation (CPR), chest tubes showed active bleeding and severe pericardial effusion was observed. After 40 minutes of CPR death was confirmed. The autopsy showed aortic rupture (Figure 1, asterisk) with preserved bypass anastomoses (Figure 1).

Active bleeding immediately after cardiac surgery is mostly caused by a complication of the surgical procedure.

* Corresponding author.

E-mail address: iriasilvaconde@gmail.com (I. Silva).

We present images of a rare case of a ruptured aorta as an exceptional and lethal complication of CPR that may have been precipitated by the proximity of the saphenous vein anastomosis to a highly calcified and stiff aorta ([Figure 1](#)).

Conflicts of interest

The authors have no conflicts of interest to declare.