A rare cause of cardiogenic shock

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A 49-year-old woman without medical history was admitted following out-of-hospital cardiac arrest. She had complained of chest pain and EKG demonstrated sinus rhythm with ST-elevation in lead AVR and diffuse ST-depression. She then developed ventricular fibrillation, and received CPR and IABP. Autopsy demonstrated normal coronary arteries. Left ventricular end-diastolic pressure was 16 mmHg and there was no gradient between LV and aorta. Light microscopy of the tumour showed a 2 cm large papillary frond, consisting of a central core of dense and surrounded by a layer of loose connective tissue and covered by endothelial cells, confirming papillary fibro-elasticoma (Panel B, ×6.25, H&E). Review of the LV angiogram demonstrated an oscillating structure in the aortic root (Panels C and D, Supplementary material online, Movie, RAO view).

Cardiac papillary fibro-elasticomas are usually an incidental finding, but may present with thrombo-embolism or, in this case, mechanical obstruction of a left main coronary ostium. Timely recognition might prevent poor outcome.

EKG, electrocardiogram; CPR, cardiopulmonary resuscitation; IABP, intra-aortic balloon pump; LVEDP, left ventricular end-diastolic pressure; LV, left ventricle; TTE, transthoracic echocardiography; TEE, transoesophageal echocardiography; H&E: haematoxylin & eosin (stain).

Supplementary Material is available at European Heart Journal online.