

Image in cardiology

Angioplasty on pulmonary artery compressed by mycotic pseudoaneurysm

Angioplastia sobre arteria pulmonar comprimida por pseudoaneurisma micótico

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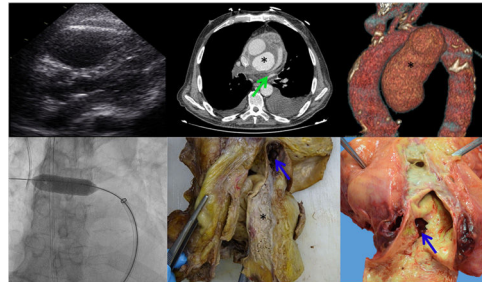


Figure 1.

A 75-year-old man with no relevant medical history required hospital admission 1 month previously for urosepsis due to *Escherichia coli* complicated by pericardial effusion. Pericardiocentesis showed an exudate fluid without evidence of infection. The patient was discharged and required readmission 2 weeks later for constitutional syndrome, fever, hypotension, and poor distal perfusion. An analysis showed high acute phase reactants. Echocardiogram showed preserved left ventricular function, dilated and dysfunctional right ventricle, and slight fibrinous pericardial effusion [figure 1A, video 1 of the supplementary data]. Due to rapid hemodynamic deterioration the patient was intubated, and antibiotic therapy and vasoactive support were increased. Thoracoabdominal computed tomography (CT) angiography showed a pericardial collection and a large pseudoaneurysm in the aortic arch (figure 1B,C, asterisk) that occluded both pulmonary arteries (figure 1B, arrow).

The Heart Team decided to perform a right pulmonary artery angioplasty with 3 stents (figure 1D, video 2 of the supplementary data). The hemodynamic situation improves rapidly, and vasoactive support could be stopped. *E. coli* grew in blood cultures.

Unfortunately, 1 week later, the patient developed signs of peritoneal irritation. A CT scan revealed intense diffuse intestinal ischemia progressing to shock and finally death. The necropsy showed fibrinopurulent pericarditis with collection around the root of great vessels, forming a large pseudoaneurysm (figure 1E,F, arrow: pseudoaneurysm neck).

Despite the fatal outcome in our patient, the percutaneous approach for patients in cardiogenic shock due to obstruction of the great vessels may be useful as a bridge to surgery when their hemodynamic situation improves. Informed consent was obtained from the patient for the publication of his case.

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AUTHORS' CONTRIBUTIONS

M. Maymí-Ballesteros, A. Uribarri and G. Martí-Aguasca were responsible for detecting the case. M. Maymí-Ballesteros contributed with manuscript writing, image analysis, postprocessing, and subsequent editions. A. Uribarri and G. Martí-Aguasca contributed with manuscript review, image analysis and image postprocessing.

CONFLICTS OF INTEREST

None.

APPENDIX. SUPPLEMENTARY DATA

Supplementary data associated with this article can be found in the online version available at <https://doi.org/10.1016/j.rec.2022.09.004>

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