

Images in clinical medicine



Very early mitral valve thrombosis

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Very early mitral valve thrombosis

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Image in medicine

Thrombosis of prosthetic valves remains a significant cause of morbidity and mortality following valve replacement. We report the case of a 37-year-old woman, 38 weeks pregnant and not under medical supervision, with a history of mechanical mitral valve implantation in 2015. The patient was admitted to the obstetric emergency room for acute dyspnea. Physical examination revealed crackles in both lung fields, but the patient was hemodynamically stable. Considering the pregnancy context, pulmonary embolism was a potential diagnosis. However, given the history of mitral valve replacement, differential diagnoses included valve desinsertion, endocarditis, or prosthesis thrombosis. Transthoracic Echocardiography (TTE) and Transesophageal Echocardiography (TEE) revealed a high

transprosthetic pressure gradient of 26 mmHg with restricted leaflet mobility. Prosthesis thrombosis was strongly suspected. The patient's condition deteriorated hemodynamically, leading to a redo operation. The mitral prosthesis was successfully removed (A), and a new mechanical mitral prosthesis was implanted under cardiopulmonary bypass. Unfortunately, the fetus died immediately after the operation, and a cesarean section was performed for fetal extraction. Three days later, the patient developed dyspnea with orthopnea. TTE showed a high

transprosthetic gradient of 20 mmHg with no leaflet mobility (B). Thrombolysis was attempted but failed, and the patient was readmitted to the operating room. The new mechanical prosthesis was obstructed by thrombus, prompting the decision to implant a bioprosthetic mitral valve to prevent further valve thrombosis, as biological analysis confirmed antiphospholipid syndrome. Ultimately, any case of prosthetic valve thrombosis necessitates a thorough etiological investigation, which is crucial.

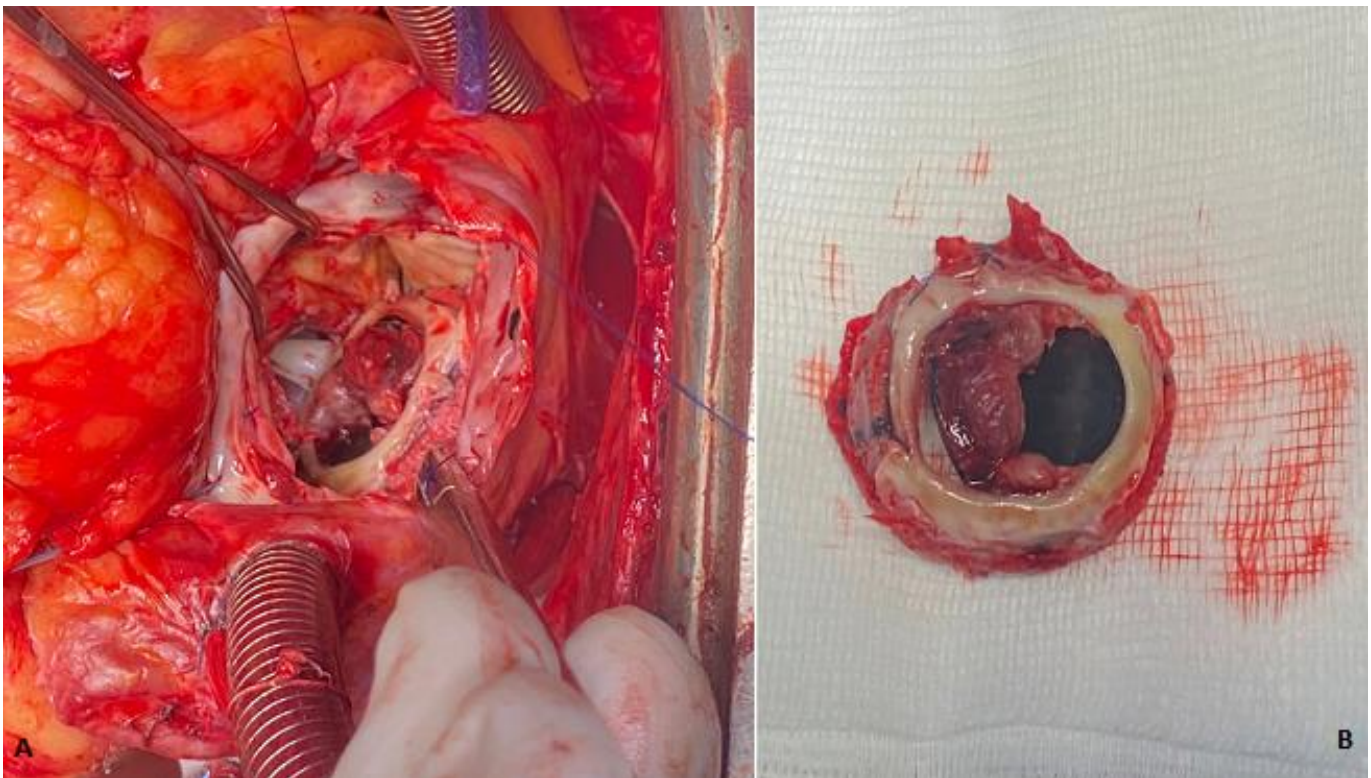


Figure 1: A) thrombus blocking one leaflet and reducing the mobility of the other one; B) specimen of the mitral valve prosthesis showing a fresh thrombus blocking both leaflets