

Mechanical Prosthetic Valve Thrombosis

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A 51-year-old female patient with a double-disk mechanical mitral valve prosthesis for one year had a history of inadequate use of anticoagulation therapy and developed progressive dyspnea. On admission to the emergency room of *InCor*, Sao Paulo, she presented respiratory distress, tachypnea, BP of 80/40 mmHg, jugular venous distension and pulmonary crackles. Transesophageal echocardiography was performed one hour

after admission, and showed a large thrombus adhered to the mechanical prosthesis with restriction to disk motion; reduced prosthetic valve area (VA = 0.6 cm^2); increased gradients (peak gradient of 38 mmHg and mean gradient of 26 mmHg); and moderate paraprosthetic leak. Emergency surgery was indicated; however, the patient died immediately before the procedure due to cardiovascular collapse.



Fig. 1 – A and B - Transesophageal echocardiogram showing large thrombus adhered to the prosthetic mitral valve with reduced area; C - moderate paraprosthetic leak on color-Doppler-flow mapping; D - clear flow acceleration consistent with reduced prosthetic valve area LA - left atrium, RA - right atrium, LV - left ventricle, RV - right ventricle, MP - mechanical prosthesis, TH - thrombus, MR - mitral regurgitation

Key Words

Thrombosis; Heart Valve Prosthesis; Blood Coagulation.

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