Soft-tissue images. Video-assisted thrombectomy of a mechanical prosthetic valve

A 65-year-old woman was admitted for replacement of a pacemaker battery. She had undergone mitral valve replacement with a mechanical valve prosthesis (Carbomedics; Sulzer, Austin, TX) and pericardial reconstruction of the interatrial septum after resection of a left atrial myxoma 10 years previously. The coumadin she was taking was discontinued and she was given heparin intravenously in the days surrounding the battery replacement procedure.

A few days after battery replacement, she complained of severe shortness of breath. Transesophageal echocardiography showed severe restriction in motion of the 2 prosthetic valve leaflets, so she underwent immediate operation. Under cardiopulmonary bypass through right anterior thoracotomy a thrombectomy was performed with the aid of videothoracoscopy (Figs. 1 and 2). Postoperatively, transesophageal echocardiography showed normal motion of the 2 leaflets of the mechanical prosthesis.

The patient's recovery was smooth, and she was well 1 year postoperatively.

Although thrombolysis is also used in cases of acute prosthetic valve thrombosis, surgical thrombectomy assisted by thoracoscopic instrumentation is an option in cases of acute thrombosis related to variation in the level of anticoagulation. The advantage of the use of videoscopy is that the surface under the prosthesis can be visualized to insure complete removal of clot, which would not be possible by direct vision.



FIG. 1. Findings on videothoracoscopy, showing acute thrombosis of the prosthetic orifice.



FIG. 2. Thrombectomy of the prosthesis is done with thoracoscopic visualization and instrumentation.

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