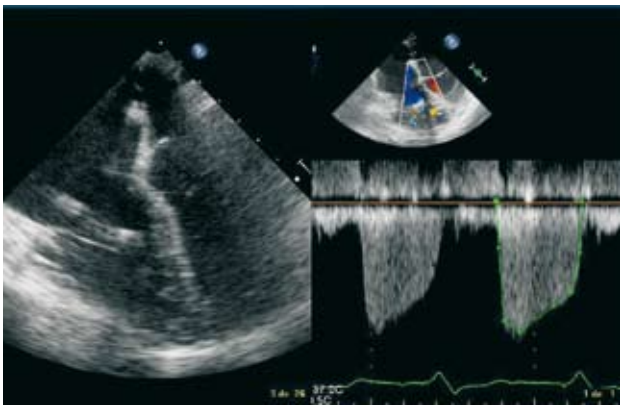

Figure 1.

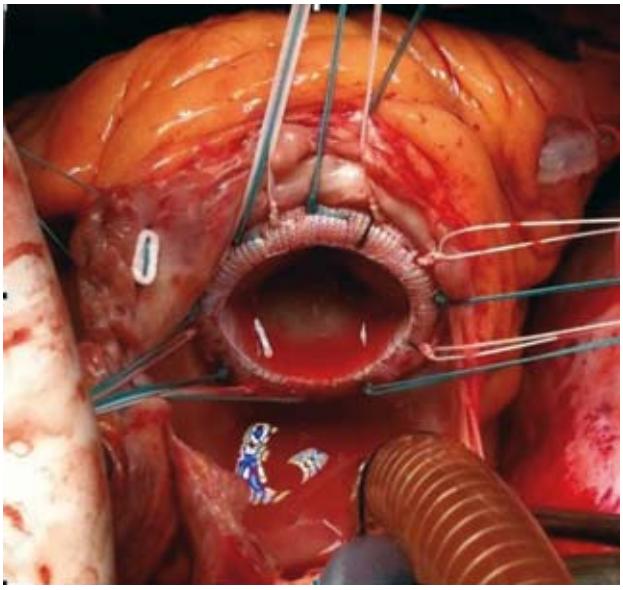

Figure 3.

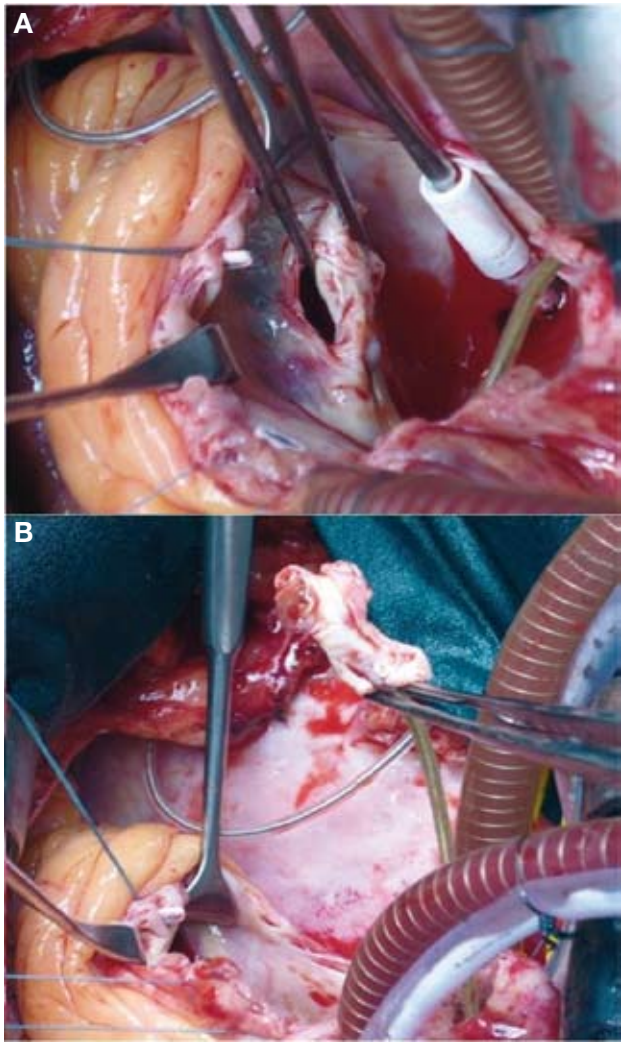

Figure 2.

Tricuspid Valve Stenosis Due to a Pacemaker Lead

A 59-year-old woman with complete atrioventricular block was treated by implantation of a permanent endocavitary pacemaker in 1982. In 1991, she presented vena cava thrombosis that led to a superior vena cava syndrome and required placement of a self-expandable stent. In 1996, she experienced stenosis of the left subclavian vein, and in 2003, pulmonary thromboembolism. All these events were attributed to a local effect of the pacemaker lead. A new epicardial electrode was implanted in 2003, but it was impossible to remove the first pacemaker lead. Oral anticoagulation was started at that time.

The patient was referred to our service because she had experienced grade III (NYHA) dyspnea over the previous year. Echocardiography showed severe tricuspid stenosis that had been triggered by fibrosis and calcification of the valve caused by the pacemaker lead as it passed along the septal leaflet; the maximum gradient was 11 mm Hg, mean gradient 7.7 mm Hg, and the area was 0.76 cm^2 (Figure 1).

During surgery, we found a highly unstructured tricuspid valve with severe stenosis due to fusion of the commissures and thickening of the subvalvular apparatus (Figure 2A). The lead was embedded in one of the tricuspid leaflets (Figure 2B), and therefore, any attempt at repair was impossible. Valve replacement with a 25-mm Carpentier Perimount bioprosthesis (Figure 3) was decided upon, based on the patient's history of thromboembolism and the low thrombogenic profile of this type of prosthesis. She was discharged at 7 days following the procedure, at which time echocardiographic study showed a normally functioning prosthesis.

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