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Clin. Cardiol. 27, 280 (2004)

Images edited by Richard A. Kerensky, M.D.

Images in Cardiology: Heterotopic Heart Transplantation

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FIG. 1 Electrocardiogram revealing atrial fibrillation in the recipient's heart and normal rhythm in the donor's heart, which was totally paced via a permanent pacemaker with corresponding distal aortic (AO) pressure (scale 0–150 mmHg).

FIG. 2 Echocardiogram demonstrating donor's (d) and recipient's (r) hearts. LA = left atrium, LV = left ventricle, RA = right atrium, RV = right ventricle, Ao = Aorta

A 64-year-old man who had undergone heterotopic heart transplantation (HHT) in 1993 was admitted to our hospital because of shortness of breath. The patient developed multiorgan failure due to gram negative urosepsis and succumbed on the 27th day (Figs. 1, 2).

Barnard and Losman first carried out a form of HHT in 1974, whereby the donor heart acted as a left ventricular assist device.¹ Yacoub and co-workers subsequently performed it successfully in a number of patients.² Heterotopic heart transplantation is indicated in patients with severe, nonreversible

pulmonary hypertension and in cases of a large discrepancy in body mass (> 33%) between the donor and the recipient.

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