Acquired Coronary-Cameral Fistula

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A 43-year old woman received orthotopic heart transplantation 14 mo ago. During a recent transthoracic echocardiographic study, the color Doppler revealed a continuous flow of jet at the apical septum of the right ventricle. This flow was present both in systole and diastole, direction being towards the right ventricle. Recently this patient had undergone a routine right ventricular biopsy. An echocardiogram prior to the biopsy did not show this. This flow represents an iatrogenic coronary-cameral fistula, secondary to the right ventricular endomyocardial biopsy. A biopsy can leave cut coronary artery vessel tips creating a fistulous communication between the coronary vessels and the right ventricle.

Figure 1. Four chamber apical view demonstrating a fistulous flow in diastole (A- arrow) and systole (B- arrow) in the apical septal region of the right ventricle. Note the flow is more pronounced in diastole and less, but continuous through systole. Abbreviations: LA = left atrium; RA = right atrium; LV = left ventricle; RV = right ventricle.