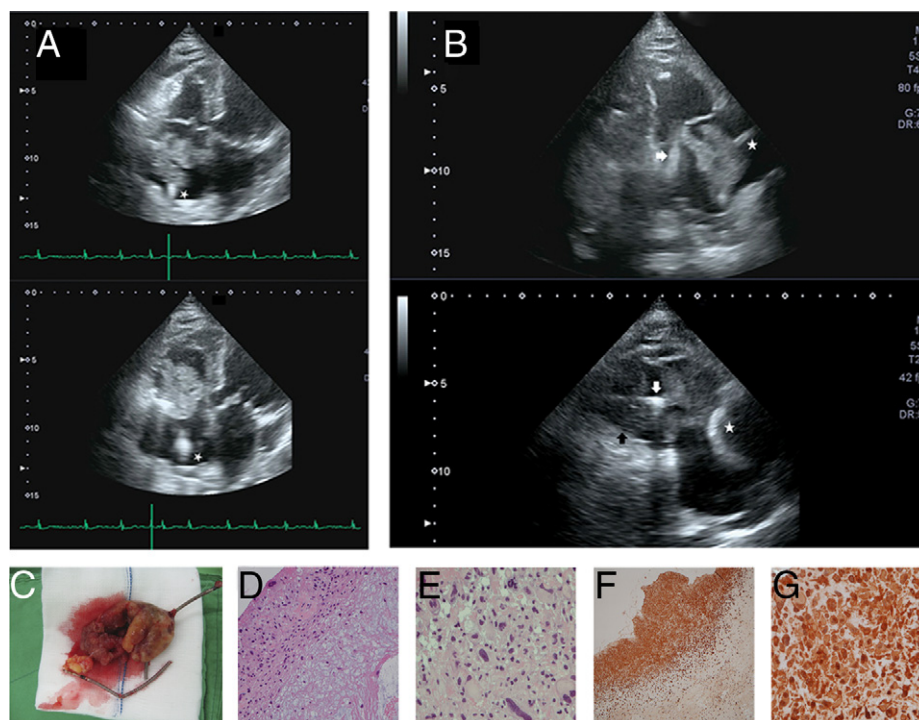


IMAGES IN CARDIOLOGY

A Primary Cardiac Sarcoma Spreading Along the Pacing Leads of a Permanent Pacemaker

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An 86-year-old man had sinus node dysfunction, with a dual-chamber pacemaker implanted at another hospital 8 years ago. He was evaluated because of lower leg edema and thrombocytopenia. An echocardiogram revealed a mobile lobulated mass, sized 5.0×2.0 cm, attached to the atrial lead (*) in the right atrium (A, Online Video 1), moving through the tricuspid valve during diastole and causing partial obstruction of tricuspid inflow. Another mass of smaller size was attached to the shaft of the ventricular lead (white arrow, B, Online Video 2). The tip of the ventricular lead was embedded in a fixed mass (black arrow) at the apex of the right ventricle. At operation, one large mass measuring $5 \times 3 \times 2$ cm was found in the right atrium, with the main body along the atrial lead; another small mass was found along the ventricular lead in the right ventricle (C). Pathology of the mass revealed short spindled to epithelioid tumor cells with pleomorphic nuclei and brisk mitosis in a myxoid background (D and E) and positive immunohistologic stain for vimentin (F and G). There was no evidence of extracardiac tumor by computed tomography scan of the chest. The final diagnosis was primary cardiac sarcoma spreading along pacing leads.