Images in Cardiology: Infiltrating Metastatic Cardiac Tumor

JUAN M. ARANDA, JR., M.D., GARY R. COOPER, M.D., GREGORY HUFF,* WILLIAM H. DONNELLY, M.D.*

Division of Cardiovascular Medicine, Department of Medicine; *Department of Pathology, University of Florida, Gainesville, Florida, USA

FIG. 1 (A) Parasternal long-axis view demonstrating massive biventricular hypertrophy with a highly reflective intraventricular septum. (B) Heart sectioned at the level of the papillary muscles showing diffuse infiltration of the right ventricle (RV), intraventricular septum (IVS), and left ventricle (LV) with desmoplastic metastatic tumor. LA: left atrium, AO: aorta.

A 42-year-old woman presented with symptoms of weakness, dyspnea, and low heart rate. She was found to be in third-degree heart block, requiring a pacemaker. Baseline echocardiogram is shown in Figure 1A. Cardiac catheterization demonstrated restrictive physiology. Myocardial biopsy revealed myocarditis and no evidence of amyloid. The patient developed multi-organ failure and cardiac arrest. Despite a seemingly normal chest film, autopsy revealed an infiltrating tumor of pulmonary origin (Fig. 1B). Lung tu-

mors are the most common source of cardiac metastasis and should be considered in the differential diagnosis of infiltrative cardiomyopathy.

Reference

McAllister HA, Hall RJ, Cooley DA: Surgical Pathology of Tumors and Cysts of the Heart and Pericardium. In *Pathology of the Heart and Great Vessels*, pp. 343–366 (Ed. Waller BF). London: Churchill Livingstone, 1988