A 56-year-old asymptomatic man was identified in 1984 with an abnormal 12-lead ECG during a routine examination for a recreational pilot license. An ECG 2 years earlier was normal (Figure 1). Extensive work-up in 1984, including stress testing and coronary arteriography, showed no significant abnormality. In addition, an echocardiogram was within normal limits (Figure 2). In 1994, at 66 years of age, he underwent stress echocardiography, and the diagnosis of nonobstructive hypertrophic cardiomyopathy with ventricular hypertrophy confined to the cardiac apex (apical hypertrophic cardiomyopathy) was made. The abnormal ECG and echocardiographic findings have persisted without significant change to the present time. The patient remains asymptomatic.

This case demonstrates de novo development of apical hypertrophic cardiomyopathy at a relatively advanced age. Note that the ECG abnormalities evolved before the echocardiogram demonstrated left ventricular hypertrophy.

**Figure 1.** ECG tracings in 1982 (left) and 1984 (right) showing development of deep T wave inversion, largely in lateral precordial leads, in 1984.

**Figure 2.** Echocardiographic images in apical 4-chamber view obtained in 1984 (top) and in 1994 (bottom), showing de novo development of apical hypertrophy. LV indicates left ventricle; RV, right ventricle; LA, left atrium; and RA, right atrium. Endocardial surface of left ventricular apex is demarcated by arrows in top and arrowheads in bottom panel. Calibration marks are 10 mm apart.
Apical Hypertrophic Cardiomyopathy Developing at a Relatively Advanced Age
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