

Isolated noncompaction of left ventricular myocardium in an elderly man

Yaşlı bir hastada sol ventrikül "isolated noncompaction"

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A 67-year-old man with isolated noncompaction of the ventricular myocardium (INVM) was evaluated by left ventriculography, which clearly showed extremely prominent trabeculations and deep intertrabecular recesses. He was admitted to our hospital because of dyspnea on effort and palpitation occurring for 6 months. He was mildly hypertensive. Three years earlier, the patient had undergone coronary artery bypass surgery because of three vessels coronary artery disease. On admission to our hospital, a physical examination showed normal blood pressure and heart rate and a mild systolic murmur was heard at the apex. Pulmonary rales and leg edema were absent. All peripheral pulses were palpable; results of the other physical examinations were normal. The electrocardiogram revealed a 2 mm ST segment depression in V2-V4 leads. Mild cardiomegaly was seen at chest telerradiography, and there were no signs of pulmonary congestion. Results of routine laboratory analyses were normal. Cardiac catheterization demonstrated evidently hypokinetic apical segments of left ventricle, mild mitral regurgitation, and no obstruction of

the left ventricular outflow tract. Mildly impaired systolic function was confirmed by an ejection fraction of 50%. After injection of a contrast medium, the apical segments showed remarkable opacification, as evidenced by a loosened, spongy myocardium, with deep intramyocardial recesses and prominent trabeculations without indication of ventricular blood communication with the epicardial coronary artery system (Fig. 1).

These appearances are consistent with myocardial noncompaction, a congenital disorder of endomyocardial embryogenesis. Ventricular noncompaction is usually diagnosed in infants and young adults. Diagnosis of isolated noncompaction has important implications because of the need for familial screening and the possible association with other cardiac anomalies and/or muscle disorders, progressive LV dysfunction, risk of systemic embolism, and life-threatening arrhythmias. Techniques such as coronary angiography and left ventriculography may increase detection rates and promote new insights into the prevalence, spectrum, and natural course of this potentially not-so-rare state.

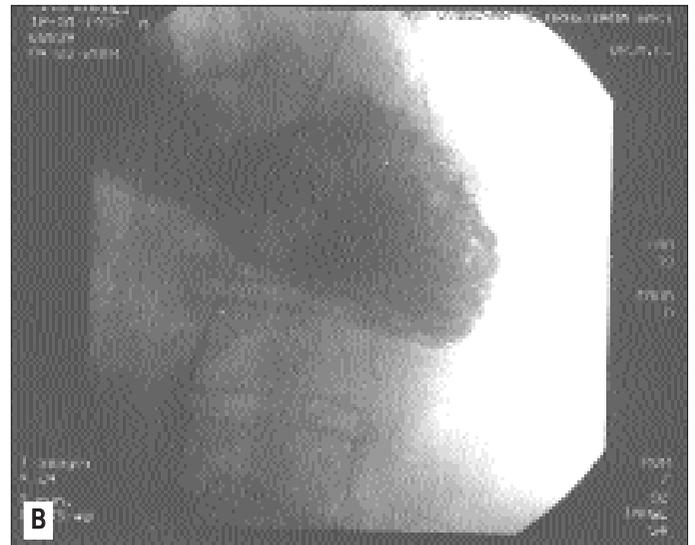
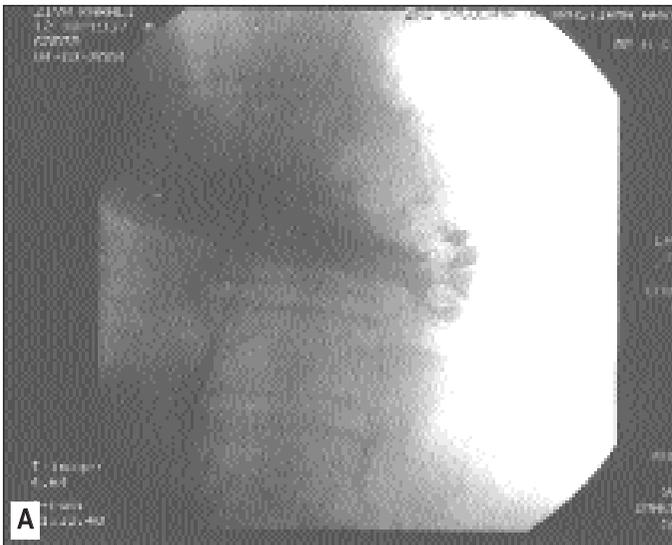


Figure 1. Left ventriculography view of loosened, spongy myocardium, with deep intramyocardial recesses and prominent trabeculations during systole (A) and during diastole (B)