An unusual cause of tall R wave in lead V1: cardiac lipoma

A 59-year-old woman was admitted with atypical chest pain. Surface electrocardiography showed sinus rhythm with tall R wave in lead V1, northwest axis, clockwise rotation and suspicious left anterior fascicular block (figure 1). Echocardiography revealed a heterogeneous mass in the interventricular septum with protrusion into the right ventricular (RV) cavity and normal left and RV wall thickness. MRI suggested the diagnosis of lipoma involving the septum (figure 2). Close follow-up was decided as treatment strategy.

Tall R wave in V1 may be present in different cardiac abnormalities such as posterior myocardial infarction, RV hypertrophy, hypertrophic cardiomyopathy, left septal fascicular block, Duchenne muscular dystrophy and Wolff-Parkinson-White patterns. This case suggests that cardiac tumours also should be kept in mind in the differential diagnosis of R in V1.

Kumral Cagli, Derya Tok, Fatma Nurcan Basar

Department of Cardiology, Turkiye Yuksek Ihtisas Hospital, Ankara, Turkey

Correspondence to Dr Kumral Cagli, Department of Cardiology, Turkiye Yuksek Ihtisas Hospital, 06100 Sihhiye, Ankara, Turkey, kumralcagli@yahoo.com

Contributors KC has written the manuscript. DT has prepared images and collected related literatures. FNB had role in interpretation of the ECG.

Competing interests None.

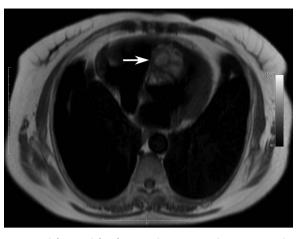


Figure 2 Axial T1 weighted magnetic resonance image suggesting the presence of benign lipoma (arrow) in the interventricular septum that has the same signal intensity as fat tissue.

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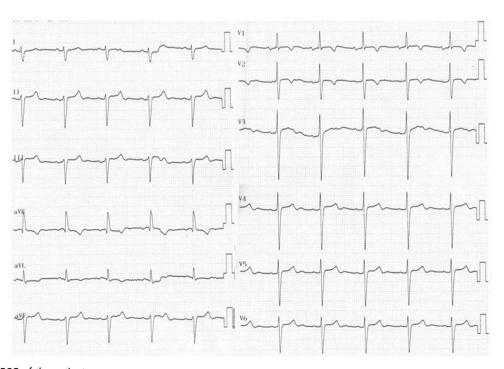


Figure 1 Surface ECG of the patient.