

Görüntülü olgu örnekleri

Case images

Malignant ventricular arrhythmia as the first manifestation of cardiac sarcoidosis

İlk semptom olarak ciddi ventrikül aritmisiyle başvuran kalp sarkoidozu olgusu

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A 55-year-old female was admitted to our emergency service with complaints of palpitation and shortness of breath. Her medical history was significant for sarcoidosis diagnosed 10 years ago, and she was under corticosteroid

therapy. The physical examination revealed a pulse rate of 205 beats per minute and a blood pressure of 80/50 mmHg. Electrocardiography showed regular wide QRS tachycardia (Fig.). Because of hemodynamic instability, immediate electrical cardioversion was performed, which established normal sinus rhythm with right bundle branch block pattern. Laboratory tests including cardiac biomarkers and thyroid function were normal. Transthoracic echocardiography revealed left ventricular dilation with an ejection fraction (EF) of 40-45%. Midventricular segments of the interventricular septum (IVS) were hypertrophic, measuring 18 mm, whereas apical and basal segments were markedly thin, which was suggestive of cardiac sarcoidosis (Fig. A, Video 1*). Gadolinium-enhanced magnetic resonance imaging (MRI) showed late hyperenhancement of the left ventricular septal, lateral and inferior walls, which corresponded to the areas of noncaseating granulomas. Local thinning of the myocardium secondary to tissue damage was also prominent at the basal and apical seg-

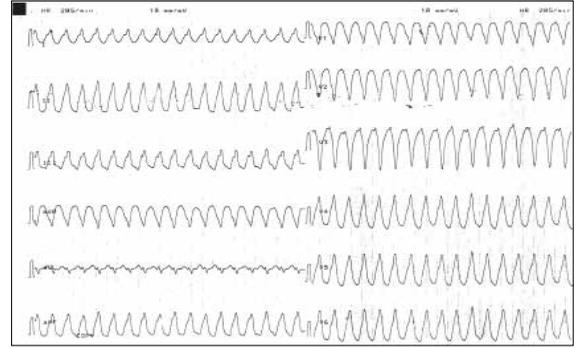
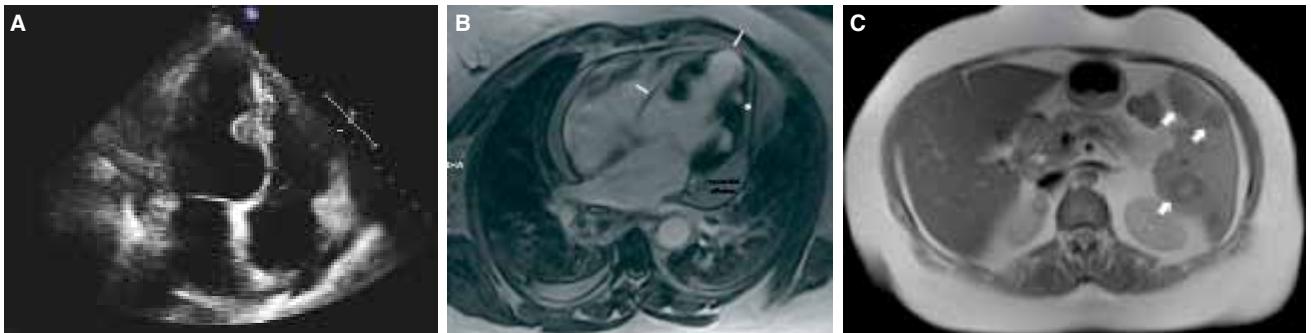


Figure- 12-lead ECG of the patient showing wide QRS tachycardia.

ments of the IVS (Fig. B). In addition, pericardial effusion, adenopathy in the subcarinal and hilar regions, and multiple splenic nodules were seen (Fig. C). Coronary angiography revealed normal coronary arteries. Subsequently, an implantable cardioverter defibrillator was implanted, and the patient was discharged uneventfully. Cardiac involvement in pulmonary sarcoidosis is mostly asymptomatic, but may be present in as many as 25% of the patients. As all of the heart chambers may be involved, different types of arrhythmias including atrioventricular blocks and ventricular-supraventricular arrhythmias may occur. Left ventricular systolic dysfunction and segmental thinning of the myocardium should raise the suspicion of cardiac involvement. Gadolinium-enhanced cardiac MRI is sensitive in demonstration of affected myocardium and also of fibrotic changes resulting in myocardial thinning in advanced cases.



Figures- (A) Apical four-chamber view of echocardiographic examination showing left ventricular dilation and marked thinning of the basal and apical segments of the interventricular septum. (B) Delayed gadolinium-enhanced two-chamber long-axis cardiac magnetic resonance image showing nodular areas of hyperenhancement within the left ventricular free wall (short arrow) and marked thinning of basal and apical segments of the interventricular septum (long arrows). (C) Magnetic resonance image showing multiple splenic nodules. *Supplementary video file associated with this presentation can be found in the online version of the journal.