Abstract: P1924

An unusual case of myocarditis

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Topic(s):
Acute Heart Failure - Clinical

Citation:
A 37 year old female presented to the emergency department complaining of fatigue, progressively worsening over one month, following an upper respiratory tract infection. Three years ago, due to Raynaud’s sign, episodes of photosensitive facial rash and a previous admission for arthritis affecting her right knee, she had undergone screening which was negative for active connective tissue disease. She has been a smoker. On admission, there were signs of acutely decompenated heart failure consisting of sinus tachycardia (130bpm) with audible S3, bibasal crackles, elevated jugular venous pressure, ascites, oedema, pallor and cold extremities. Her blood pressure was 90/50 mmHg, oxygen saturation 92% on room air and respiratory rate was 32/min. There was no evidence of infection and her temperature was normal.

ECG showed sinus rhythm with left anterior hemiblock and no signs of ischemia. Laboratory results revealed thrombocytopenia, abnormal liver function tests, severely reduced eGFR (38 ml/min), raised hs-troponin (3.145 pg/ml) and increased CRP and natriuretic peptides. Echocardiogram demonstrated severely dilated left ventricle with D-shape, global hypokinesia and an estimated LVEF of 15% (GLS=−6%). Right ventricle appeared dilated with reduced systolic performance (RV systolic TDI=7cm/sec). There was increased pulmonary pressure with no significant left sided valvular disease.

She was admitted in the ICU for invasive monitoring. She was treated with inotropes (levosimendan and noradrenaline) and diuretics and a gradual improvement of tissue perfusion, dyspnnea and diuresis was noted. The working diagnosis included myocarditis, viral or connective tissue disease related. After the patient’s stabilisation a coronary angiogram was performed and it was negative for CAD. The laboratory work confirmed according to the rheumatology consultation an atypical form of systemic lupus erythematosus (reduced C 3 and C4, positive anti-rib-P). Besides the medical management of heart failure, she received high dose of corticosteroids and chemotherapy (cyclophosmamide). The cardiac MRI confirmed the severely reduced LV function. Additionally, it showed subepicardial and subendocardial fibrosis, especially affecting the antero and inferolateral walls consistent with myocarditis and vasculitis.

Two months later her clinical picture was improved, as well as the echo study findings (LVEF 35%, GLS=−11%, RV systolic TDI=10cm/sec). At that time a repeat MRI scan showed moderate improvement in LV function with sustained fibrosis in the above mentioned segments. The latter, in conjuction with episodes of non sustained VT in the 24h ECG, prompted the placement of an ICD pacemaker. The patient has been under the joint care of Cardiology and Rheumatology department.
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