



EDİTÖRE MEKTUP/LETTER TO THE EDITOR

High degree atrioventricular block in a patient with ankylosing spondylitis

Ankilozan spondilitli bir hastada yüksek dereceli atrioventriküler blok

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Dear Editor,

Ankylosing spondylitis (AS) is a chronic systemic arthritis that primarily affects the sacroiliac joint and the axial skeleton. AS is strongly associated with the HLA class I molecule HLA B27¹. Signs and symptoms of ankylosing spondylitis may include clinical back pain and progressive stiffness of the spine though it can also involve the hips, shoulders and peripheral joints. Extra-articular manifestations, include uveitis, fibrocavitary apical lung lesions, and serum amyloid A-related amyloidosis. AS has a peak age of onset between 20 and 30 years and a male-to-female ratio of about 3:1 to 4:1². AS is associated with an increased cardiovascular (CV) risk and conduction abnormalities are not so rare as they vary from 2% to 20%^{1,2}.

A 41 years old man treated for ankylosing spondylitis with etanercept for 14 years came complaining for dyspnea on exertion and fatigue started one month ago. He was also treated for Overactive Bladder Syndrome (OAB) with 25 mg mirabegron. No smoking and no other past medical history was referred. An ECG was performed and RBBB with high degree atrioventricular block (complete atrioventricular block alternating to Mobitz II 2:1, Figure 1) was recorded. Etanercept and mirabegron are not described to have side effects as atrioventricular block. He did not refer syncope or dizziness and his laboratory exams including thyroid function tests were completely

normal. He was admitted for monitoring and finally he referred for cardiac pacemaker implantation.

High degree atrioventricular block may develop in ankylosing spondylitis as a consequence of postinflammatory scarring of myocardial tissue and as a result of anomalies in the atrioventricular nodal artery^{2,3}. According to Ronald et al⁴ an extension of the aortitis onto the interventricular septum results in high degree atrioventricular and fascicular blocks. Most common conduction abnormalities in patients with AS include first-degree atrioventricular block and a prolonged QRS interval. Higher-degree atrioventricular block and right or left bundle-branch block have also been reported⁵.

Age of patient, duration of AS, presence of HLA-B27 and peripheral joint involvement are the most common risk factors for the development of cardiac complications⁶. High degree heart block is associated with HLA-B27-positive individuals, even in the absence of signs or symptoms of AS⁷. According to ESC Guidelines, pacing is indicated in patients with third- or second-degree type 2 AV block irrespective of symptoms (Class I, Level C)⁸.

In conclusion, except from well-known manifestations of AS (enlargement and thickening of the aortic root, aortic regurgitation), conduction abnormalities, as high degree atrioventricular block, more rare encountered in AS and they should be treated appropriately.

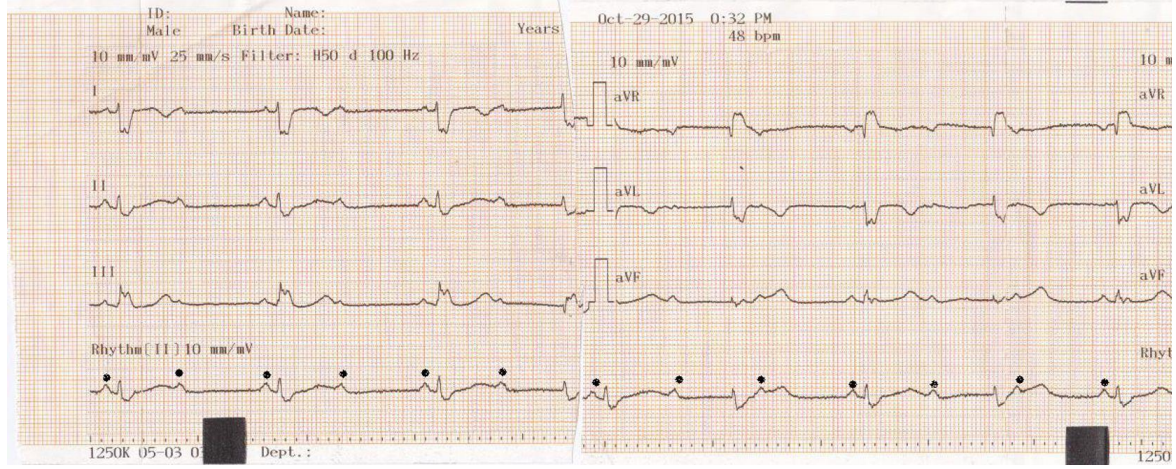


Figure 1. Electrocardiography of patient

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