

Unusual Systematic Presentation Lupus Erythematosus in the Middle of Adult by Dysfunction of Sinus Mode

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Abstract

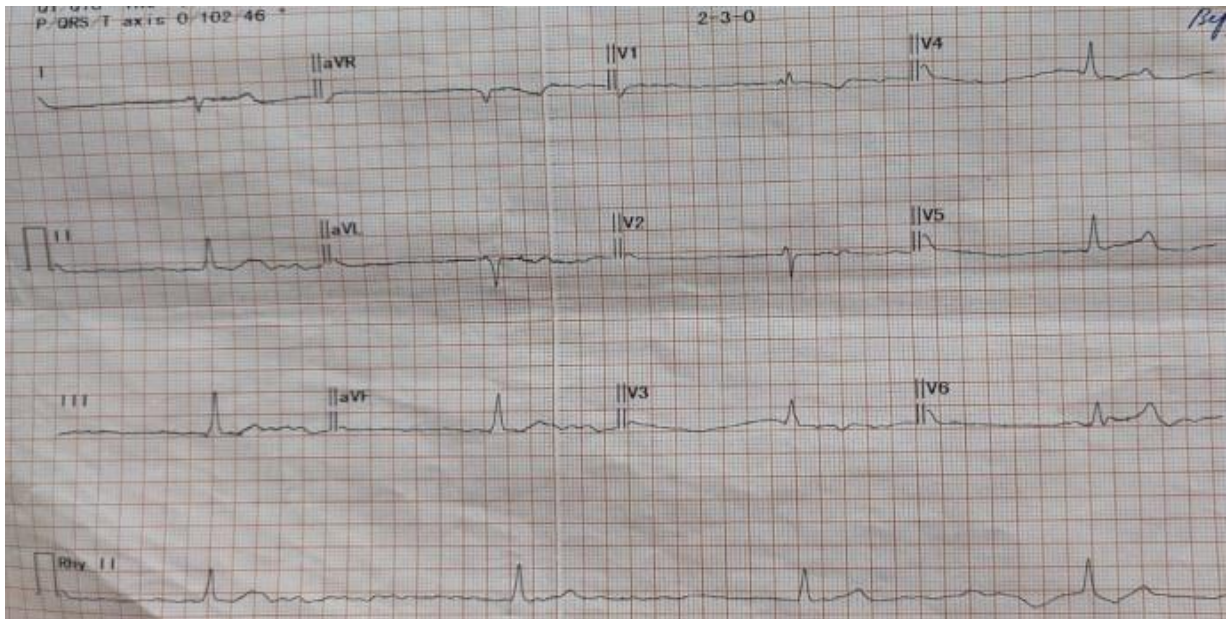
Erythematosus of systematic Lupus a disease of autoimmune, impacts several tissues along with organs by auto antibodies. ¹It includes the heart in the middle of over a percentage of 50 cases along with the most impacted is the pericardium. ² Patients with anti-Ro (SS-A) and anti-La (SS-B) antibodies are at risk of fetal conduction abnormalities during pregnancy. While in adults there are isolated case reports of sinus node dysfunction, complete heart blocks and bundle branch blocks requiring pacemaker support, sinus node dysfunction with junctional rhythm in adults is rarely reported. We present an adult case of SLE with unusual presentation of sinus node dysfunction.

Keywords: SLE, heart block , steroid therapy , pace maker

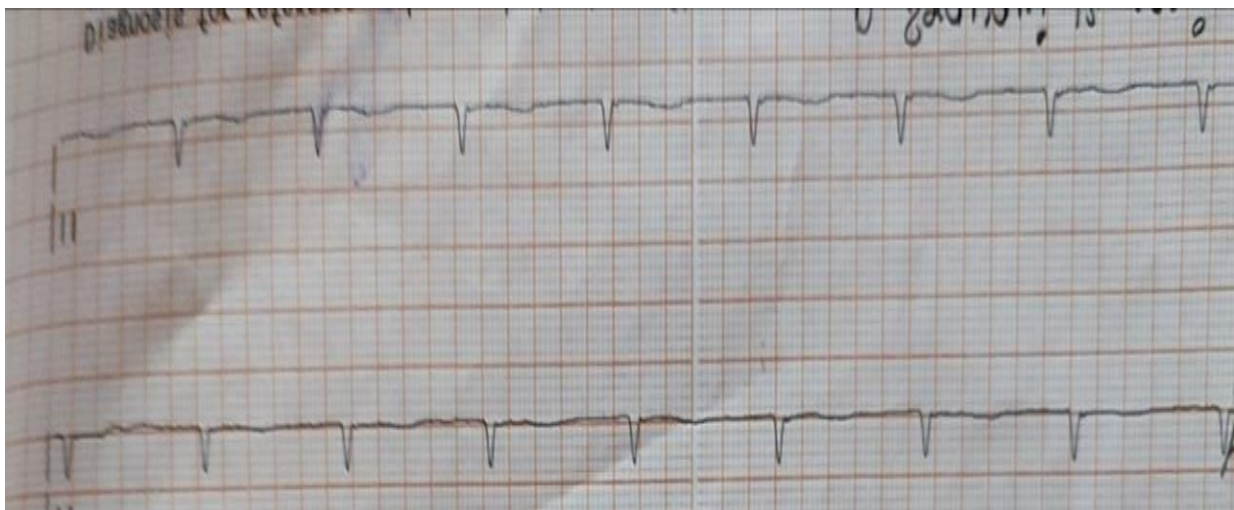
Case Details:

A 29-year-old previously healthy female was admitted with fever, recurrent seizures and syncopal attacks of three days duration. Electrocardiography showed Junctional rhythm with rate of 25 per minute. In view of symptomatic bradycardia temporary transvenous right ventricular pacing was done. Her general examination showed alopecia. Cardiovascular systemic examination showed grade II systolic murmur in tricuspid and mitral area. Pericardial rub was also noted. Other systems were normal. Laboratory results showed anemia ,leucocytosis, raised ESR (170 mm/1st hour) and C-reactive protein (93 mg/L). ANA profile showed positive antinuclear antibodies, anti-smith antibodies, anti SS-A and anti SS-B antibodies. Complete urine examination showed non-nephrotic proteinuria.

Transthoracic 2D- echocardiography showed minimal pericardial effusion, mild PAH, moderate tricuspid regurgitation and mild mitral regurgitation. Her left ventricle systolic function was normal with ejection fraction 56%. Bilateral minimal pleural effusion was noted on CT Chest. CT Brain showed normal study. Systemic Lupus Erythematosus was diagnosed based on clinical manifestations and laboratory data with neurological, cardiac, renal and dermatological involvement. The opinion of Rheumatologist and Neurologist was taken and patient was started on levetiracetam for seizures and pulse steroid therapy with methylprednisolone 1 gram for 3 days followed by prednisolone at a dose of 1 mg/kg/day. Dermatologist opinion was taken and no other specific skin lesions other than non-scarring alopecia noted. Improvement in heart rate up to 50-54 per minute with junctional rhythm was noted after steroid therapy. Patient was on temporary pacing support for 2 weeks and off pacing patient was still in junctional rhythm although at a higher rate. Permanent pacemaker implantation is done for her as the rhythm was not reverted to sinus rhythm



ECG AT PRESENTATION



ECG AFTER STEROIDS FOR 2 WEEKS

Discussion:

SLE can reason cardiomyopathy, myocarditis and valvular disease by artery disease of coronary along with Libman sacks- endocarditis, disturbance of conduction protocol. In addition, in the middle of an adult cohort of SLE about 18 patients(1%), 1366 patients were detected by provide needing pacing of brad arrhythmias, involving 13 patients by an entire block of atrioventricular as well as five victims by the syndrome of sick sinus by symptomatic sinus stops.⁴

Dysfunction of the sinus node, in specific, has been hardly enlisted in the middle of patients of SLE. Additionally, it can reason of happening bradycardia of the sinus, sinus stopping by the rhythm of junctional, block related to sinoatrial, and incompetence of chronotropic as well as other bradycardia episodes about tachycardia along with bradycardia. Besides it, it can be caused or asymptomatic palpitations, heart failure or syncope. The sinus node photogenesis dysfunction in the middle of SLE has been assigned to conduction tissue damage, and sinus periarteritis nodal arteries along with cardiotoxicity of antimalarial induced. SLE autopsies patients have indeed detected the sinus fibrosis node along with vascular lesions to arteries of nodal. Defects of conduction have also been elaborated as myocarditis sequelae in the middle of patients by SLE. Furthermore, the sinus node involvement in the time sphere of active pericarditis has also been examined. This is described through the inner

proximity among the node of the sinus along with the pericardium, from which the node of the sinus has a sub-location of epicardial by infra-millimetric space to the epicardium. ^{3,6}

By the specific antibodies role, such as anti-SSB/La and anti-SSA/Ro, anti-RNP is most of the case belonged to the section of controversial, papers launched through Lazzerini et al and Logar et al included an improved myocarditis prevalence (along with abnormalities of conduction in the middle of as anti-SSB/La, anti-SSA/Ro positive victims. ⁷

Conclusion:

Sinus node dysfunction can be an early manifestation of Systemic Lupus Erythematosus. The problem can impact any heart part along with the conduction system involvement process can outcome in middle arrhythmias of life-threatening., including complete atrioventricular block and sick sinus syndrome. Young adult females presenting with conduction abnormalities should be screened for connective tissue disorders. Screening of siblings and off-springs of such patients for underlying connective tissue disorder is essential

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