Journal of Research in Medical and Dental Science
2023, Volume 11, Issue 1, Page No: 174-176

Available Online at: www.jrmds.in
eISSN No. 2347-2367: pISSN No. 2347-2545

A Case Report of Rhupus Syndrome

Karthick Ramalingam*, Chinnu Kishore, M Anandh Mohan, Manoj Kumar Ravilla

Department of General Medicine, Sree Balaji Medical College and hospital, Chromepet, Chennai, India

ABSTRACT

Rheumatoid arthritis and Systemic lupus erythematous are common autoimmune diseases which have different clinical and laboratory findings. When RA and SLE coexist in a patient, they are referred to as suffering from rhupus. In this scenario we describe a case that was diagnosed with rhupus in the 2nd trimester pregnancy with previous history of abortion. The patient had presented with oral ulcer, malar rash and there was bilateral wrist and multiple small joint pains. She was treated with prednisolone and discussion is on role of antiphospholipid in pregnancy.

Key words: Antiphospholipid, Rhupus

HOW TO CITE THIS ARTICLE: Karthick Ramalingam, Chinnu Kishore, M Anandh Mohan, Manoj Kumar Ravilla, A Case Report of Rhupus Syndrome, J Res Med Dent Sci, 2023, 11 (1): 174-176.

Corresponding author: Karthick Ramalingam

e-mail✉: akrreflex@gmail.com

Received: 19-December-2022, Manuscript No. JRMDS-22-87475;

Editor assigned: 21-December-2022, PreQC No. JRMDS-22-87475(PQ);

Reviewed: 05-January-2023, QC No. JRMDS-22-87475;

Revised: 09-Jnauary-2023, Manuscript No. JRMDS-22-87475(R);

Published: 16-January-2023

INTRODUCTION

This entity usually affects bones, soft tissues, lungs, blood vessels, heart, kidney, and lymphoreticular system. Rheumatoid arthritis has a worldwide prevalence of approximately in 0.5–1.0% of adult population and SLE prevalent in 6.5–27.7/100,000 [1,2]. Rhupus can be considered a real overlap syndrome [3-5]. It is usually uncommon clinical condition and hence this case highlights our approach.

CASE REPORT

25-year-old female gravida 3, 2nd trimester (25weeks) at present came with chief complaints of alopecia, oral ulcer for 15 days, rash over the cheek bilaterally in the past 10 days, fever and arthritis in the past 5 days. She was apparently normal 15 days back. Then she developed alopecia which is insidious onset followed by oral thrush and malar rash not associated with itching and rash aggravated on sun exposure. She also complained of fever which is low grade and intermittent associated with chills and also complaints of bilateral wrist joint and small joint pains. (No morning stiffness). She was conscious, alert and obeying oral commands. On examination there was no pallor icterus, cyanosis, clubbing, and lymphadenopathy. On arrival Blood Pressure was 96/60 mmhg, pulse rate was 73/min. On Systemic examination, cardiovascular system first and second heart sounds heard. Respiratory system- bilateral air entry, no added sounds, per abdomen - distended (Fetus), CNS - moves all 4 limbs. On Local examination there was Oral ulcer over left buccal area, swelling and tenderness of wrist along with 2&3rd proximal interphalangeal joint.

Patient is a known case of rheumatoid arthritis on regular treatment [Hydroxychloroquine, Prednisolone and Methotrexate]. After the confirmation of pregnancy, Methotrexate was withheld in view of teratogenicity and she had no other comorbidities.

In light of the symptoms listed above that raise a possible case of systemic lupus erythema, ANA profile (immunofluorescence) was sent which surprisingly came out to be homogenous pattern. Patient was started on DMARDS: prednisolone, Hydroxychloroquine, folic acid and multivitamin supplements. On account of recurrent abortions, antiphospholipid antibodies were sent of which beta 2 glycoprotein IgM and anticardiolipin antibody IgM were positive.

On confirmation of APLA syndrome, patient was started on Aspirin 75 mg and Inj. Enoxaparin BD dose. As there is previous history of pregnancy loss enoxaparin was started. She was asked for follow up with c3, c4 levels. She was advised to do fetal echo to look for fetal bradycardia and heart block. On follow up there was neither bradycardia nor heart block. Fetal heart rate findings of the are shown in Figure 1 and Table 1.

DISCUSSION

SLE is a long-standing autoimmune disorder that can affect any part of the human body leading to inflammatory changes. It mainly affects young women, and the

manifestations are known to worsen in pregnancy due to high levels of estrogen. SLE in pregnancy inducing complete heart block in the fetus is a pregnancy-related complication and rare. Fetal congenital heart block (CHB) is the most common outcome of pregnancies related to SLE. It is seen in approximately 0.5 women testing positive for anti-SS-A/Ro and/or anti-SS-B/La antibodies, and the incidence increases with consequent pregnancies. Moreover, the presence of antinuclear antibodies (ANAs) is considered a hallmark in marking SLE diagnosis. Our patient has consequently diagnosed with high levels of anti-SS-A and anti-SS-B antibodies in the current pregnancy, confirming the diagnosis of SLE. Anticardiolipin antibodies (ACA) belong to the group of antiphospholipid antibodies which are positive in 30-40% cases of systemic lupus erythematosus and also seen in patients with other rheumatic diseases. Presence of cardiolipin antibodies is considered to be significant diagnostic relevance in cases of venous and arterial thrombosis, thrombocytopenia, livedo reticularis, and habitual abortions. Anti-ds-DNA antibodies are detected more frequently and at higher titres in SLE patients with

Table 1: Investigation.

Investigation	RESULTS	BIO. REF. RANGE
CRP	4.8 mg/dl	0-6 mg/dl
Urine protein to creatinine ratio	35	<30
Extractable nuclear antigen quantitative profile	Positive	0-5: Negative
		6-10: Borderline
		11-25: Weak positive
SSA		26-50: Positive
		>50: Strong positive
SSB	Positive	
RO	Positive	
PCNA	Positive	
Nucleosomes	Positive	
Ds DNA	Positive	
Histones	Borderline	
Ribosomal P protein	Borderline	
ANTI CARDIOLIPIN ANTIBODY: (ACLA)		
Anti-cardiolipin antibody IgM	34.7 MPL	<12.5 MPL
IgA	4.09 APL	<12.0 APL
IgG	11.40 GPL	<15.0 GPL
BETA 2 GLYCOPROTEIN		
beta 2 glycoprotein IgM	26.0 SMU	<20.00
beta 2 glycoprotein Ig G	3.7 SGU	<20.00
beta 2 glycoprotein Ig A	12.76 SAU	<20.00
Lupus anticoagulant	No lupus anti-coagulant present	
C3	74.5 mg/dl	90-180 mg/dl
C4	5.9 mg/dl	10-40 mg/dl

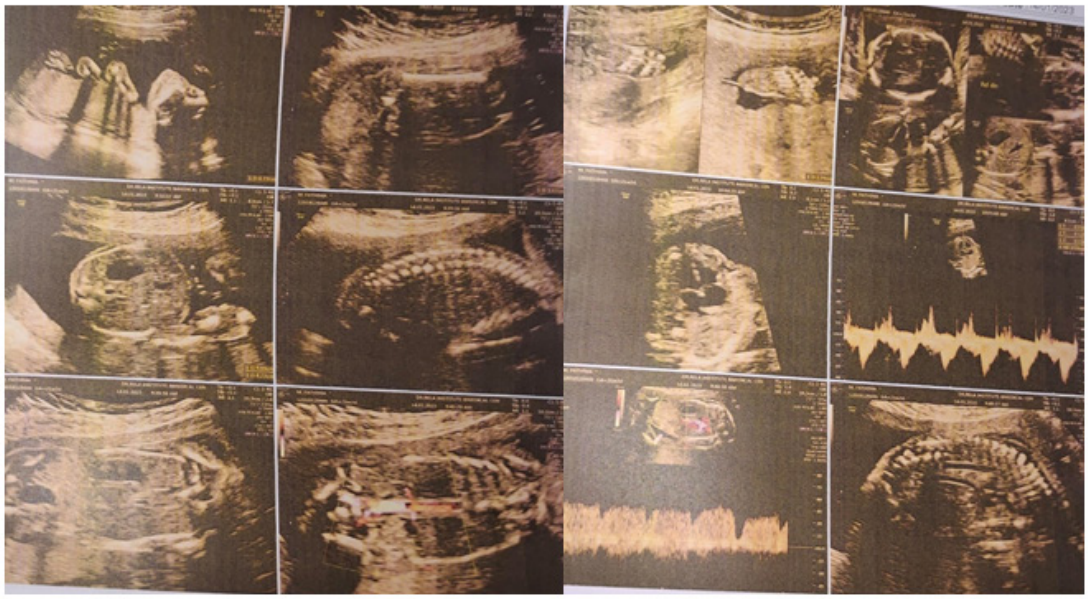

Figure 1: Fetal heart rate.

lupus nephritis. Presence of these antibodies correlates with an increased risk of lupus nephritis flare. Hence it is useful to monitor anti ds-DNA antibody levels and titrate appropriate therapy when titres increase. Beta 2 glycoprotein antibodies unlike anticardiolipin are highly specific for anti-phospholipid antibodies which may be positive in certain infectious diseases. Complement proteins are components of innate system that activate the pathways thereby generating peptides which are necessary to clear immune complexes and generate lytic activity. Increased levels seen in trauma and tissue necrosis, whereas Decreased levels are seen in SLE and autoimmune hemolytic anemia.

The maternal body's autoantibodies cross the placenta and enter the foetal circulation, where they interfere with ion channels and cause fibrosis or affect the foetal heart's atrioventricular tissues, causing conduction abnormalities. The quickest and most straightforward method for foetal congenital heart block diagnosis is foetal echocardiography. Regular antenatal checkups and assessing the mothers with fetal echocardiography early in the pregnancy can help identify the ongoing conduction defects, fetal discomfort. The management mainly comprises organized and timely monitoring for heart block and treating the first known heart block with fluorinated steroids given trans placentally. Prophylactic treatment with steroids is not recommended due to maternal and fetal after-effects. Almost all the patients require a permanent pacemaker in the later years of childhood, and this has shown favorable outcomes in terms of mortality and morbidity.

CONCLUSION

In conclusion, pregnancy associated with SLE is rare and exhibits pregnancy-related severe complications. Fetal congenital heart block is one of the most commonly encountered outcomes and is diagnosed with the help of a fetal echocardiogram. The mothers are managed with transplacental steroids. However, the children eventually require a permanent pacemaker.

REFERENCES

1. McInnes IB, Schett G. The pathogenesis of rheumatoid arthritis. N Engl J Med 2011; 365:2205-2219.
2. Rees F, Doherty M, Grainge M, et al. The incidence and prevalence of systemic lupus erythematosus in the UK, 1999–2012. Ann Rheum Dis 2016; 75:136-141.
3. Fernández A, Quintana G, Rondón F, et al. Lupus arthropathy: A case series of patients with rhupus. Clin Rheumatol 2006; 25:164-167.
4. Amezcua-Guerra LM. Overlap between systemic lupus erythematosus and rheumatoid arthritis: Is it real or just an illusion?. J Rheumatol 2009; 36:4-6.
5. Alfadhli S, Nizam R. Rhupus: A crosswalk between lupus and rheumatoid arthritis. Arthritis 2014; 10:2.