



Case Report

Rare cases of pregnancy with SLE

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1. Introduction

Systemic lupus erythematosus (SLE) is an autoantibody mediated multisystem autoimmune disease, with considerable female predominance.¹

Women with SLE are at higher risk for exacerbations of the disease during pregnancy, spontaneous abortions, intrauterine fetal death, pre-eclampsia and Eclampsia, preterm delivery and intrauterine growth retardation, fetal heart block.

However, over the past few decades, there has been a trend towards more favorable outcomes.

This case report summarizes the management in a parturient with SLE who underwent emergency caesarean section (LSCS) for massive accidental hemorrhage

2. Case Presentation

2.1. Case 1

A 27 years old 6th month primi gravida, was a known case of SLE with CRF and Chronic H.T., admitted with c/o hemoptysis with fever with chills with nausea and admitted under nephrologist, physician and intensivist. Treatment given²

Inj. Ceftriaxone and Inj peperacillin and tazobactam
Inj. Pantoprazole, Inj.metoclopramide Inj. Ondeesterone
Inj. Paaracetamole 100 ml iv according to fever
Tab. Hsqs 200 mg p/o BD (Hydroxy chloroquine)
Tab. Omnacortil 75 mg p/o BD
Tab.lobetalol 100mg p/o BD
Tab. Paracetamole 650 mg p/o TDS

SECOND TRIMESTER ANTENATAL USG:

A single live intrauterine fetus with 21 wk 5 days maturity with estimated fetal weight - 410gm with normal amount of liquor. Both uterine artery PI~ 0.9 with normal TIFFA scan

The patient was suffering from primary sjograns syndrome- an immune disorder accompanying rheumatoid arthritis and lupus nephritis.[3]

After the patient was referred to us the further management done was:

Inj dextrose 10% followed by inj hermin iv slowly at weekly interval

Tab. Duphastone 1 bd
Tab. Ecosprine 150 1hs
Tab Nifedipine 10 mg 1bd
Cap. Labetalol 100 mg BD

The patient was under regular monitoring by sonography and fetal Doppler.

The fetal Doppler report as per 22-6-2018 was:

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CGA maturity of 32 weeks. EFW: 1712 gms MCA PI 1.6, Umbilical Artery PI: 1.0 CPR>1

Umbilical Artery PI:1.8.

The following chart presents the detailed hematological report.³

Renal function test= S CREATININE 2.9G/DL, GFR=21 ml/min/1.73m²

S. Sodium 133, S. Potassium 5.0, S. Chloride 96, Urine Showed 78.2 PUS Cell Count.

Liver Function Test =SGPT 27, SGOT 17, S. Albumin 3.2, S. Globulin 2.6, A/G Ratio 1.2

ANA (BY I.F.) DILUTION 1:100 = POSITIVE (++++)

Profile = ANTI DsDNA Strong Positive

ACA = Negative

ANCA C & P = Negative

CBC = HB : 6.6 G/DL WBC : 10530 PLATELET : 2,80,000

CRP =29.3 MG%

D-DIMER = 0.21

MNPT = 4.1

Renal biopsy: focal sclerosing glomerulonephritis⁴

Maternal: Electrophysiological study of (23-06-2018) facial nerves revealed evidence of mild moderate right facial axonal neuropathy.

The patient came with massive accidental haemorrhage on 26-6-2018 at 9:00 pm.

Emergency LSCS was done. The neonate weighing 1.6 kg with Apgar score 4 was shifted to NICU.

Total 8 unit of RCC and 2 unit of FFP were given. Persistent hypertension was aggravated severely after surgery.

Inj. Labetalol iv stat given followed by inj. Betaloc given. Cap. Depin continued S.L.

Inj. NTG started in 250 ml NS for uncontrolled BP with above treatment.

Top Nitro patch kept for 24 hours, inj. Lasix given after every 2nd RCC and Calcium Gluconate after every 3rd unit of RCC.

Inj. Piperacillin with tazobactam 2.5 mg in 100 ml NS. And inj. Metrogyl iv every 8 hourly continued for five days after LSCS With other supportive treatment. On 3rd day tab Hydralazine started orally BD.

Patient developed big prolapsed piles (due to? Vasculopathy) which reduced manually through Rectum.

2.2. Case 2

Female 23 years old has come with 26 weeks of pregnancy for expert usg at our center for opinion.

Fetus has fetal Brady cardia around 96 beats per minute constant and was advised by another Gynec for termination.

We have done detail usg and counseling and taken opinion with endocrinologist and done her SLE profile.

Reports are positive and started HCQ twice a day and tablet betamethasone 2mg twice a day and continue pregnancy



Fig. 1: A): Fetus with good Apgar score; B): Placental haemorrhage; C): Mother with moon faceshowing Bell's Palsy

with risk of above all complications.

Regular follow up with usg shows fetal bradycardia continue 96-100 bpm.

Fortunately patient went 33 weeks of pregnancy, and we have done nothing plan LSCS under steroid coverage.

Female child of 2.250 Gm cried son after birth with bradycardia of 96 bpm

Baby kept under observation for 24 hrs at neonatal unit and send for pediatrics consultancy at Ahmedabad CIMSS hospital and echo was normal with bradycardia and no intervention of pace maker was advised.

Follow up till date baby is fine with bradycardia and weight gain also about 4.00 kg.

Mother is on tab HCQ once daily.

3. Discussion

The peak incidence of SLE occurs between the ages of 15 and 40 years, with an estimated female-to-male incidence of 9:1.

It is characterized by autoantibody production and a dysfunctional immune system resulting in organ inflammation and consequent damage.

Positive antinuclear antibody test is the characteristic laboratory test used to help diagnose lupus.

Pregnancy outcome is influenced by placental dysfunction, the presence of antiphospholipid antibodies,⁵ preconceptional lupus activity, the severity of renal involvement, and the course of SLE during pregnancy. SLE may be associated with secondary APS (anti-phospholipid syndrome) that is a multisystem disorder characterized by recurrent systemic arterial and venous thrombosis, recurrent abortion, thrombocytopenia and neurological disorders.

Clotting factors are also affected but tests such as partial thromboplastin time can be falsely elevated because the



Fig. 2: Baby

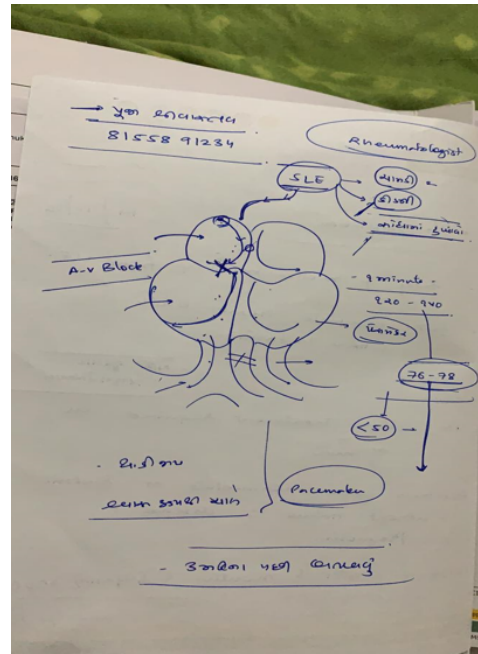


Fig. 4:

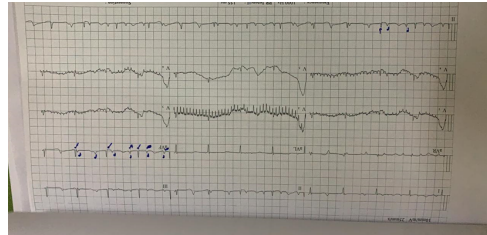


Fig. 5: Baby ECG

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Page 1 of 2

ECHO Report DL: 18/11/2019

Patient Details
 Patient ID: 262013
 Name: [Redacted]
 Age: 1 Days
 Gender: Female
 Blood Group: [Redacted]
 Referral Doctor: Dr. KETAN GADHAVI

ECHO Identification Detail
 Doctor Incharge: Dr. DIVYESH SADADIWALA
 Clinical Status Of Patient: DS

ECHO Code
 Finding Description:
 1. Small ASD, L-to-R shunt.
 2. Normal systemic and pulmonary venous drainage.
 3. AV concordance. D-loop ventricles.
 4. VA concordance.
 5. Two patent A-V valves.
 6. IAB: Small (2 mm) Ostium Secundum ASD L-to-R shunt.
 7. Intact ventricular septum.
 8. No LVOT/RVOT obstruction.
 9. No MR, No TR, No AR.
 10. Small (1.5 mm) PDA flow seen.
 11. LAH arching arch. No coarctation of aorta.
 12. Normal ventricular size and function.
 13. No PAM.
 14. No pericardial effusion.

Conclusion:
 Small ASD L-to-R shunt. Small PDA L-to-R shunt (physiological shunt for day 1). Normal ventricular size and function. No PAM.

Dr. DIVYESH SADADIWALA

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Fig. 3: Echo

LABORATORY REPORT

Registration on: 12-Nov-2019 19:03
 Collected on: 12-Nov-2019 19:03
 Approved on: 13-Nov-2019
 Sample Type: [Redacted]
 DR. A. K. PANDYAN (D)
 SHREE SUPER SPECIALITY PATHOLOGY
 LABORATORY@SURENDRANAGAR

| Sl. No. | Name | A(Std) | B(Std) | C(Std) | Mean | Result | CO value | Std dev |
|---------|---------|--------|--------|--------|-------|--------|----------|---------|
| 1 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 1.74 | |
| 2 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.18 |
| 3 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.06 |
| 4 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.13 |
| 5 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.07 |
| 6 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.07 |
| 7 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.06 |
| 8 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 1.77 |
| 9 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.31 |
| 10 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.07 |
| 11 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.02 |
| 12 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.04 |
| 13 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.05 |
| 14 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.08 |
| 15 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.05 |
| 16 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.11 |
| 17 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.09 |
| 18 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.12 |
| 19 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.06 |
| 20 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.08 |
| 21 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.09 |
| 22 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.09 |
| 23 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.05 |
| 24 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.11 |
| 25 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.06 |
| 26 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.05 |
| 27 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.00 |
| 28 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.05 |
| 29 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.05 |
| 30 | Flow BC | 11 AU | 11 AU | 11 AU | 11 AU | 11 AU | 0.00 | 0.05 |

Signature Quantifications Software 3.8 - 49 - KAPDTANAGAR - EA190328 - vsp 11
 18/11/2019

Fig. 6: Mother lupus positive

lupus antibodies react with phospholipids used to determine PTT.

A more serious and rarer complication is the reaction of antibodies with factors VIII, IX, XII that leads to bleeding. Complete coagulation profile (BT, CT, PT, APTT) and prophylactic precautions against DVT are indicated. The risks for other serious complications, such as pre-eclampsia, hypertension, bleeding and serious infections, are also raised two-fold to eight-fold. Musculoskeletal manifestations and mucocutaneous symptoms occur frequently.

Respiratory complications include restrictive lung disease, myopathy affecting diaphragm or chest wall muscles and interstitial infiltration secondary to treatment with cyclophosphamide and azathioprine, which may potentiate need for post-operative mechanical ventilation.

Cardiac lesions include pericarditis, myocarditis that may lead to CHF and cardiac valvular lesions (Libman-Sachs endocarditis) that are usually asymptomatic. So, ECG and echocardiogram should be done.

Prophylactic antibiotic is indicated for labor and delivery, as they are prone for infections.

Nephritis is a known complication of SLE as in our case and is a strong predictor of poor outcome.⁴ Hypertension, proteinuria and nephrotic syndrome often accompany lupus nephritis. Urine analysis, BUN, serum creatinine, electrolytes and blood sugar should be performed frequently.⁶

Neurologic complications like peripheral neuropathy, cranial nerve palsies, psychosis, intracranial bleeding may be due to vasculitis or due to steroid therapy.

The fetal complications are higher rates of fetal loss, preterm birth, intra-uterine growth restriction (IUGR), and neonatal lupus syndromes (NLS). Maternal antibodies cross the placenta and lead to fetal manifestations.

Patients who are on HCQ before pregnancy are more likely to develop fetal heart block during pregnancy.² The presences of SSA and SSB anti bodies Can lead to fetal heart block and néonatal lupus. Which can be managed with betamethasone OR I/V Immunoglobulin.¹ Treatment of patients with antiphospholipid antibody-associated recurrent pregnancy loss with heparin and low-dose aspirin have been shown to improve live birth rates,² while patients with positive antinuclear antibodies failed to show any improvement in implantation and pregnancy rates but not proven yet and further studies going on.

Anesthetic management of pregnant patients with SLE depends on the multisystem nature of the disease, the severity of the organ involvement and adverse effects of drugs used in treatment.

Sjogrens syndrome is a disorder of immune system identified by its two most common symptoms — dry eyes and a dry mouth.³

4. Source of Funding

None.

5. Conflict of Interest

None.

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Manish R Pandya Professor & HOD

Rutvi Pandya 1st Year Resident

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