

PLANNED PREGNANCY IN A PATIENT OF SLE- SYSTEMIC LUPUS ERYTHEMATOSUS

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INTRODUCTION

Systemic lupus erythematosus (SLE) is a chronic inflammatory connective tissue disease commonly found in the child bearing age group. More commonly it is diagnosed in young women between the age of 20 and 30 years. It is more common in women than men in the ratio of 9:1. The manifestations of SLE are notoriously variable in its presentation, course, and outcome and there are intermittent periods of exacerbation and remission.^[1] (Rahman and Isenberg, 2008). The diagnosis of Lupus is made according to the 1997 revised criteria of the American Rheumatism Association^[2] for diagnosis of systemic lupus erythematosus. If any four or more of these 11 criteria are present, serially or simultaneously then the diagnosis can be made.

Maternal and foetal mortality and morbidity are considerably increased, compared with the general population.^[3] Women with SLE are at higher risk for spontaneous abortions, preeclampsia, preterm delivery and intrauterine growth retardation and neonatal lupus.^[4] Multisystem involvement because of the disease process and the treatment itself like steroids, immune-suppressants and anti-coagulants can pose a risk to both the mother and baby.^[5]

Hence for successful outcome a multi-disciplinary approach with close medical, obstetric and neonatal monitoring is necessary. Presented here is a case report of a pregnant woman with SLE complicated with arthralgia, vasculitis, dermatological manifestations like butterfly rash

over the face, hypothyroidism and neurological complications in the form of epileptic seizures.

KEYWORDS: Systemic lupus erythematosus, pregnancy complications, Prednisolone, hypothyroidism, seizures.

CASE REPORT

Patient named XYZ aged 29 years resident of a nearby area was taking treatment at AVBRH, JNMC Sawangi (Meghe) Wardha which is a rural medical college and tertiary care centre. She had been diagnosed as a case of SLE systemic lupus erythematosus 7 years back and was taking regular treatment from the physician. The basis of diagnosis was facial/malar rash, non-erosive arthritis, seizures, headache and positive antibodies for Antinuclear antibodies (ANA) and Antibodies to anti-double stranded (dsDNA). She was taking steroids in maintenance dose prednisolone 10 mg BD and HCQ hydroxy-chloroquine 200mg BD since the last 7 years. She had developed hypothyroidism for which she was taking tablet Thyroxin 50 mg once daily since the last 6 years. She had also developed neurological complication of epilepsy and had 4-5 episodes of convulsions six years back. Since then she was on anticonvulsants tablet Levepsy 500 mg twice daily. Her haematological and renal profile was normal. Her condition was stable and acceptable with the above treatment. Anti-phospholipid antibody IgG and IgM was negative. Anti-Cardiolipin antibody IgG and IgM was negative and Lupus anticoagulant was 42 seconds which was within normal limits.

The patient was keen to have her own baby and decided to get pregnant in consultation with treating physician and the gynaecologist. She was explained by the Doctors about the disease process and told about the difficulties that may arise during the course of pregnancy. She conceived spontaneously within a few months. Patient came to us as soon as she missed her periods and a urine pregnancy test was done which was positive. Ultrasound scan at 5 weeks showed an intrauterine gestational sac corresponding to 5 weeks 2 days, no foetal pole or yolk sac were seen. The internal os was closed and cervical length was 37mm.

Patient was a primigravida and had been married for one year. Her LMP was 13/12/2017 and EDD was 20/09/2018. Cycles were regular 3/30 days with average flow. There was no history of similar complaints in the family. An ultrasound scan done after 15 days showed a single live intrauterine foetus with CRL of 9mm corresponding to gestational age of 7 weeks. Foetal pole and yolk sac were present and cardiac activity was also present.

Hydroxy-chloroquine HCQ was stopped as soon as pregnancy was confirmed. Prednisolone in the dose of 10mg BD was continued. She was advised to take folic acid supplementation. She was started on low dose aspirin 75mg/day. However, we decided to refrain from giving anticoagulants since her coagulation profile was normal. She was given regular antenatal care – two doses of tetanus toxoid, folic acid and iron and calcium supplementation. She was on prednisolone tablet Omnacortil 10 g BD, anticonvulsant tablet Levepsy 500 mg BD and Thyrox 50 mg BD throughout the pregnancy.

During the course of pregnancy the patient had complaints of swelling over the body, redness all over the body, heartburn, body-ache (arthralgia). She also complained of fatigue, irritability and hair fall. She had skin manifestations in the form of butterfly rash over the face, vascular lesions and redness all over the body, photosensitivity to the sun. The patient had occasional flares during pregnancy presenting as severe bouts of headache and skin manifestations, and arthralgia when the dose of prednisolone needed to be stepped up for a few days. However, she did not have any epileptic seizures during the pregnancy.

On general examination her weight gain was on the lower side about 9 kg. Blood pressure was normal throughout pregnancy. She had redness and flushing of the face, swelling over the lower limbs, puffiness and swelling over the face. Later in the pregnancy the patient had some amount of abdominal oedema as well.

An ultrasound scan done on 15/05/2018 showed a single viable foetus of 21weeks 3 days. Placenta was grade1 anterior not previa, liquor was adequate, and no congenital anomalies were noted on an anomaly scan. Cervical length was 30mm. CBC, Coagulation profile, LFT, KFT were normal.

The patient was called for regular check-up and managed as OPD patient till 34 weeks. Then oligohydramnios and lag in growth was noted. Ultrasound scan showed a single viable foetus with cephalic presentation, corresponding to gestational age of 31 weeks 2 days. Liquor index was 6.5cm, placenta was anterior grade II, and cardiac pulsations were present. Colour Doppler study was normal. The patient was admitted on 16/08/2018 with the diagnosis of 8 months amenorrhoea, known case of SLE with epilepsy, hypothyroidism with IUGR and oligohydramnios. She was kept under observation and Tablet Alamine forte and amino drips were given. She was discharged on request and advised rest at home.

Patient was re-admitted for safe confinement after 15 days. Patient was investigated and kept for observation. Investigations were as follows –Haemoglobin was 11.6 gm%, CBC was within normal limits, Platelets were 3.63 lakhs/cumm. Sickling was negative. Prothrombin time was 13 seconds, INR was 1.04, peripheral smear showed RBC's that were normocytic and normochromic, blood urea was 16mg%, serum creatinine was 0.72 mg%. Liver Function Tests, Kidney function tests and Lipid profile were normal. Urine routine examination was normal. Ultrasound scan done on 30/08/2018 showed a single viable foetus with cephalic presentation, corresponding to gestational age of 33 weeks 1 day. Liquor index was 11.5cm, placenta was anterior grade II, and weighing 2.3 Kg. cardiac pulsations were present. Colour Doppler study was done, which was normal.

She had leaking Per Vaginum on 31/08/2018 at 6.00 am. On per abdominal examination she was 36weeks size with cephalic presentation, uterus was relaxed, and foetal heart rate was regular. Non-Stress Test was normal. On Per Speculum examination there was frank leaking and liquor was clear. On Per Vaginal examination cervical os was closed and post placed.

In view of primigravida 37 weeks of pregnancy, with IUGR and PROM (with known case of SLE, hypothyroidism, and epilepsy) the patient was taken for emergency caesarean section. Spinal anaesthesia was given. A full-term baby was extracted by vertex on 31/08/2018 at 9.49 am. Baby cried immediately after birth had 1 min Apgar of 9/10 and 5 min Apgar of 9/10. Baby weight was 2.25 Kg and placenta weighed 500 gm. Baby was taken for observation to NICU. Neonatal ECG and Echocardiography were done to rule out any cardiac problem. Baby was discharged from NICU after 3 days and baby had no complications.

The patient was closely monitored post-operatively. There were no complications and the patient was given antibiotics Augmentin 1 Gm BD and metrogyl 500 mg 8 hourly. She was given Inj. Neomol 1 gm in drip for relief of pain. Injection Hydrocortisone was given 100 mg 8 hourly for 48 hours. After which she was put on Omnacortil 10 mg BD when she started taking oral diet. Levepsy and Thyrox were continued post-operatively.

Post-operative stay of the patient was uneventful, stitches were removed on 8th day and the patient was discharged on 10th post-operative day. Patient was followed up for over 2 months in the puerperium and showed no abnormalities. As of to-date mother and baby are in good condition. She is now under care of physician and continuing her treatment of prednisolone

Omnacortil, anticonvulsant tablet Levepsy and Thyroxin. Baby is breast feeding and given the routine vaccinations.

DISCUSSION

There is controversy on whether pregnancy increases the risk of lupus. As well as regarding the effect of pregnancy on SLE, it has long been proven that lupus causes poor obstetric outcomes (Smyth et al. 2010).^[6] Pregnant women with lupus are far more likely to have high perinatal mortality and morbidity than healthy pregnant women. Women with lupus are also known to have infertility/subfertility. In our case the patient conceived spontaneously and progressed up to 37 weeks gestation. IUGR in this case could be because of SLE or drug induced. Despite using drugs throughout pregnancy baby was born healthy without any congenital anomalies. Patients without renal involvement fare better as was evident in our case.

The prognosis of pregnant women with SLE and their children has improved significantly thanks to new treatment and care methods.^[7] The prognosis regarding the course of pregnancy in patients with SLE depends significantly on the activity of the disease at the time of conception. Disease complicated with nephritis may have poor prognosis.

In general, pregnancy outcome is better if:

- Lupus activity has been quiescent for at least 6 months before conception
- There is no active renal involvement manifest by proteinuria or renal dysfunction
- Superimposed preeclampsia does not develop
- There is no evidence of antiphospholipid antibody activity.^[8]

CONCLUSION

The feto-maternal outcome in patients with SLE has significantly improved over the last disease. This is because of better understanding of the disease and management based on a multi-disciplinary approach involving various specialities. Hence women with SLE need not always have a poor obstetric outcome and can be given a chance for a pregnancy. With proper multi-disciplinary management, we can ensure good maternal and perinatal outcome.

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