Nusantara Hasana Journal
Volume 5 No. 7 (Desember 2025), Page: 225-230
E-ISSN: 2798-1428

RECURRENT PREGNANCY LOSS IN A PREGNANT WOMAN WITH SYSTEMIC LUPUS ERYTHEMATOSUS: A CASE REPORT AND LITERATURE REVIEW

Primadella Fegita[1], Chandra Adilla[2]

[1,2]Universitas Baiturrahmah

Email: primadella@fk.unbrah.ac.id

Abstract
Systemic lupus erythematosus (SLE) is a chronic autoimmune disease that predominantly affects women of reproductive age and poses significant risks during pregnancy. Pregnant women with SLE have a higher incidence of maternal and fetal complications, including recurrent pregnancy loss, preterm birth, and fetal growth restriction. Early recognition and multidisciplinary management are essential to improve pregnancy outcomes. We report a case of a 31-year-old pregnant woman (G4P0A3) at 19–20 weeks of gestation who presented with progressive joint pain, thrombocytopenia, alopecia, and photosensitive facial rash. The patient had a history of three previous pregnancy losses. Immunological examination revealed positive anti–double-stranded DNA antibodies, confirming the diagnosis of systemic lupus erythematosus with mild disease activity. Obstetric ultrasound showed a single live intrauterine fetus consistent with gestational age. The patient was managed collaboratively by obstetrics–gynecology and internal medicine teams. Treatment included systemic corticosteroids and hydroxychloroquine, along with supportive obstetric care. Despite conservative management, the patient developed signs of impending abortion and subsequently experienced a complete spontaneous abortion. Post-abortion care was provided, and the patient remained hemodynamically stable. This case highlights the significant impact of systemic lupus erythematosus on pregnancy outcomes, particularly recurrent pregnancy loss, even in patients with mild disease activity. Early diagnosis, preconception counseling, and close multidisciplinary monitoring throughout pregnancy are crucial to reduce maternal and fetal morbidity in women with SLE.
Keywords: *Systemic lupus erythematosus, pregnancy, recurrent pregnancy loss, autoimmune disease, case report*

INTRODUCTION

Systemic lupus erythematosus (SLE) is a chronic multisystem autoimmune disease characterized by the production of pathogenic autoantibodies and immune complex deposition, leading to inflammation and organ damage. The disease predominantly affects women of reproductive age, with a female-to-male ratio reaching up to 15–22:1, making pregnancy-related complications a major clinical concern in this population. Despite advances in immunomodulatory therapy, SLE remains associated with significant maternal and fetal morbidity during pregnancy.

Pregnancy in women with SLE is classified as high risk due to an increased incidence of adverse outcomes, including recurrent pregnancy loss, preterm birth, fetal growth restriction, hypertensive disorders of pregnancy, and thromboembolic events. These complications are influenced by disease activity, immunological status, hematological abnormalities, and the presence of antiphospholipid antibodies. Even in cases of mild disease activity, unfavorable pregnancy outcomes may still occur, underscoring the unpredictable nature of SLE during gestation.

Nusantara Hasana Journal
Volume 5 No. 7 (Desember 2025), Page: 225-230
E-ISSN: 2798-1428

Recurrent pregnancy loss is one of the most challenging obstetric complications in women with autoimmune diseases, particularly SLE. While antiphospholipid syndrome is a well-recognized cause of pregnancy loss in SLE, not all patients exhibit positive antiphospholipid antibodies. This highlights the need for comprehensive clinical evaluation and individualized management strategies in pregnant women with SLE, regardless of antibody profile.

This case report describes a pregnant woman with systemic lupus erythematosus and a history of recurrent pregnancy loss who experienced spontaneous abortion during the second trimester despite mild disease activity and multidisciplinary management. The case emphasizes the importance of early diagnosis, close collaboration between obstetricians and internists, and vigilant monitoring throughout pregnancy to improve maternal and fetal outcomes in women with SLE.

CASE PRESENTATION

A 31-year-old pregnant woman, gravida 4 para 0 abortus 3, at 19–20 weeks of gestation, was referred from the Internal Medicine Department with a confirmed diagnosis of systemic lupus erythematosus (SLE). She presented with worsening left knee pain over the preceding two days, accompanied by joint swelling and warmth. The patient reported a one-month history of polyarthralgia involving the small joints of the hands and both knees. Additional symptoms included diffuse hair loss and a photosensitive facial rash that had developed over the previous three months.

The patient had a notable obstetric history of three previous pregnancy losses, all occurring before 20 weeks of gestation. She had been diagnosed with SLE two months prior to the current admission, following evaluation for thrombocytopenia during early pregnancy. Immunological testing revealed positive anti–double-stranded DNA antibodies. Antiphospholipid antibody testing, including anticardiolipin IgG and IgM, was within normal limits. She had been receiving oral methylprednisolone (24 mg/day) as maintenance therapy prescribed by an internist.

On physical examination, the patient was hemodynamically stable, with a blood pressure of 116/73 mmHg and no signs of infection or active bleeding. Musculoskeletal examination revealed tenderness and swelling of the left knee. Obstetric examination showed a gravid uterus consistent with gestational age, with no uterine tenderness or vaginal bleeding at admission.

Laboratory investigations demonstrated thrombocytopenia with a platelet count of 56,000/µL, mild anemia (hemoglobin 11.7 g/dL), and normal renal and hepatic function. Urinalysis showed no proteinuria or active sediment. Obstetric ultrasonography revealed a single live intrauterine fetus consistent with 19–20 weeks of gestation, with normal biometric parameters and a fetal heart rate of 172 beats per minute. The placenta was located on the anterior uterine wall.

The patient was diagnosed with pregnancy complicated by systemic lupus erythematosus with mild disease activity. A multidisciplinary management approach involving obstetrics–gynecology and internal medicine was initiated. Treatment included systemic corticosteroids, hydroxychloroquine, and supportive obstetric therapy. Despite conservative management, the patient developed lower abdominal pain followed by vaginal spotting. Her condition progressed to

Nusantara Hasana Journal
Volume 5 No. 7 (Desember 2025), Page: 225-230
E-ISSN: 2798-1428

spontaneous expulsion of fetal tissue, and she was diagnosed with a complete spontaneous abortion.

Post-abortion management was provided according to standard obstetric protocols. The patient remained clinically stable, with no evidence of excessive bleeding or infection, and was subsequently discharged with continued follow-up under internal medicine care.

RESULT AND DISCUSSION

Systemic lupus erythematosus (SLE) is a well-recognized high-risk condition in pregnancy due to its complex immunological, inflammatory, and vascular effects on both maternal and fetal outcomes. Although advances in disease-modifying therapy have significantly improved survival and fertility in women with SLE, pregnancy-related complications remain common, particularly in patients with a history of adverse obstetric outcomes (Polić and Običan, 2020; Buyon et al., 2019).

In the present case, the patient experienced recurrent pregnancy loss despite having only mild SLE disease activity at the time of pregnancy. This finding highlights an important clinical point: low disease activity does not necessarily equate to low obstetric risk. Previous studies have demonstrated that pregnancy outcomes in SLE are influenced not only by current disease activity but also by cumulative disease burden, prior pregnancy history, hematological abnormalities, and immunological disturbances (Clowse et al., 2017).

One of the most striking features in this case is the presence of significant thrombocytopenia. Hematological manifestations, particularly thrombocytopenia, are independently associated with poor pregnancy outcomes in women with SLE, even in the absence of antiphospholipid antibodies (Andreoli et al., 2017). Thrombocytopenia may reflect active immune-mediated platelet destruction and systemic inflammation, which can impair placental development and uteroplacental circulation, thereby increasing the risk of pregnancy loss.

Antiphospholipid antibody testing in this patient was within normal limits. While antiphospholipid syndrome is a well-established cause of recurrent pregnancy loss in SLE, approximately 30–40% of pregnancy losses in women with SLE occur in the absence of detectable antiphospholipid antibodies (Lateef and Petri, 2013). This suggests that other mechanisms—such as immune complex deposition in placental tissue, complement activation, endothelial dysfunction, and inflammatory cytokine imbalance—may play a significant role in placental insufficiency and fetal demise (Salmon and Girardi, 2008).

The second-trimester timing of pregnancy loss in this case further supports a non-genetic etiology. Unlike first-trimester losses, which are commonly associated with chromosomal abnormalities, second-trimester losses are more frequently linked to maternal systemic conditions, including autoimmune diseases and placental pathology (Cunningham et al., 2018). The patient's history of three prior pregnancy losses strongly suggests an underlying persistent pathological process rather than sporadic obstetric events.

From a therapeutic perspective, the patient received systemic corticosteroids and hydroxychloroquine, both of which are considered safe and recommended during pregnancy in women with SLE (EULAR, 2017). Hydroxychloroquine, in particular, has been shown to reduce disease flares, improve placental function, and decrease the risk of adverse pregnancy outcomes (Clowse et al., 2016). Despite

Nusantara Hasana Journal
Volume 5 No. 7 (Desember 2025), Page: 225-230
E-ISSN: 2798-1428

appropriate therapy, pregnancy loss still occurred, emphasizing the unpredictable nature of SLE in pregnancy and the need for individualized risk stratification.

This case underscores the critical importance of preconception counseling in women with SLE. Current guidelines recommend that pregnancy should ideally be planned during a period of disease remission lasting at least six months, with optimization of immunological and hematological parameters prior to conception (EULAR, 2017; ACR, 2020). In this patient, SLE was diagnosed during pregnancy, limiting the opportunity for optimal preconception preparation and risk modification.

Finally, this case highlights the value of a multidisciplinary approach involving obstetricians and internists in managing pregnancies complicated by SLE. Early recognition of warning signs, close maternal–fetal surveillance, and timely intervention remain the cornerstone of care. Nevertheless, even with optimal management, adverse outcomes may still occur, reinforcing the need for realistic counseling regarding pregnancy risks in women with SLE.

CONCLUSIONS AND RECOMMENDATIONS

Systemic lupus erythematosus remains a major challenge in obstetric care, particularly when it affects women of reproductive age with a history of recurrent pregnancy loss. This case illustrates that adverse pregnancy outcomes may occur even in the presence of mild disease activity and in the absence of antiphospholipid antibodies. Hematological abnormalities, previous obstetric history, and underlying immune dysregulation appear to contribute significantly to pregnancy failure in women with SLE. Early diagnosis, careful disease monitoring, and a multidisciplinary management approach are essential to optimize maternal and fetal outcomes. Preconception counseling and pregnancy planning during a sustained period of disease remission should be strongly emphasized in women with SLE. Clinicians should remain vigilant, as favorable clinical and laboratory parameters do not completely eliminate the risk of pregnancy loss in this population.

Women with systemic lupus erythematosus should receive structured preconception counseling. Pregnancy is strongly recommended only after achieving sustained disease remission for at least six months, with stabilization of hematological and immunological parameters. Clinicians should recognize that mild clinical disease activity does not necessarily indicate low obstetric risk. A comprehensive assessment including previous pregnancy outcomes, hematological abnormalities (particularly thrombocytopenia), and immunological markers is essential. Optimal care for pregnant women with SLE requires close collaboration between obstetricians, internists/rheumatologists, and, when necessary, fetomaternal specialists. Regular maternal–fetal surveillance should be individualized based on risk profile. The use of pregnancy-compatible medications such as hydroxychloroquine and appropriately dosed corticosteroids should be maintained to reduce disease flare and improve placental function, unless contraindicated. Patients should be counseled honestly regarding the persistent risk of adverse pregnancy outcomes despite optimal management. This approach supports shared decision-making and psychological preparedness. Further studies are needed to better elucidate non–antiphospholipid mechanisms of pregnancy loss in SLE, particularly in patients with negative antiphospholipid antibody profiles but significant hematological involvement.

Nusantara Hasana Journal
Volume 5 No. 7 (Desember 2025), Page: 225-230
E-ISSN: 2798-1428

ETHICAL STATEMENT

Written informed consent was obtained from the patient for the publication of this case report and accompanying clinical data. Patient anonymity has been preserved, and no identifiable personal information is disclosed in this manuscript. This case report was prepared in accordance with ethical standards and the principles of the Declaration of Helsinki.

REFERENCES

Andreoli, L., Bertsias, G.K., Agmon-Levin, N., Brown, S., Cervera, R., Costedoat-Chalumeau, N., Doria, A., Fischer-Betz, R., Forger, F., Moraes-Fontes, M.F., Khamashta, M., King, J., Lojacono, A., Marchiori, F., Meroni, P.L., Mosca, M., Motta, M., Ostensen, M., Pamfil, C., Raio, L., Tincani, A. (2017) EULAR recommendations for women's health and the management of family planning, assisted reproduction, pregnancy and menopause in patients with systemic lupus erythematosus and/or antiphospholipid syndrome. *Annals of the Rheumatic Diseases*, 76 (3), 476-485.

Buyon, J.P., Kim, M.Y., Guerra, M.M., Laskin, C.A., Petri, M., Lockshin, M.D., Sammaritano, L., Branch, D.W., Porter, T.F., Sawitzke, A., Merrill, J.T., Stephenson, M.D., Cohn, E., Garabet, L., Salmon, J.E. (2015). Predictors of pregnancy outcomes in patients with lupus: a cohort study. *Annals of Internal Medicine*, 163 (3), 153-163.

Clowse, M.E.B., Jamison, M., Myers, E., James, A.H. (2008). A national study of the complications of lupus in pregnancy. *American Journal of Obstetrics and Gynecology*, 199 (2), 127.e1–127.e6.

Clowse, M.E.B., Wallace, D.J., Weisman, M., James, A., Criscione-Schreiber, L.G., Pisetsky, D.S. (2013). Predictors of preterm birth in patients with mild systemic lupus erythematosus. *Annals of the Rheumatic Diseases*, 72 (9), 1536-1539.

Cunningham, F.G., Leveno, K.J., Bloom, S.L., Spong, C.Y., Dashe, J.S. (2018). *Williams Obstetrics. 25th edn*. New York: McGraw-Hill Education.

Fanouriakis, A., Kostopoulou, M., Alunno, A., Aringer, M., Bajema, I., Boletis, J.N., Cervera, R., Doria, A., Gordon, C., Govoni, M., Houssiau, F., Jayne, D., Kouloumas, M., Kuhn, A., Larsen, J.L., Lerstrøm, K., Moroni, G., Mosca, M., Schneider, M., Smolen, J.S., Boumpas, D.T. (2019). 2019 update of the EULAR recommendations for the management of systemic lupus erythematosus. *Annals of the Rheumatic Diseases*, 78 (6), 736-745.

Okon, L.G., Werth, V.P. (2013). Cutaneous lupus erythematosus: diagnosis and treatment. *Best Practice & Research Clinical Rheumatology*, 27 (3), 391-404.

Polić, A.,cObičan, S.G. (2020).cPregnancy in systemic lupus erythematosus. *Birth Defects Research*, 112 (15), 1115-1125.

Smyth, A., Oliveira, G.H., Lahr, B.D., Bailey, K.R., Norby, S.M. (2010). A systematic review and meta-analysis of pregnancy outcomes in patients with systemic lupus erythematosus and lupus nephritis. *Clinical Journal of the American Society of Nephrology*, 5 (11), 2060-2068.

Tektonidou, M.G., Andreoli, L., Limper, M., Amoura, Z., Cervera, R., Costedoat-Chalumeau, N., Cuadrado, M.J., Dörner, T., Ferrer-Oliveras, R., Hambly, K., Khamashta, M.A., King, J., Marchiori, F., Meroni, P.L., Mosca, M., Pengo,

Nusantara Hasana Journal
Volume 5 No. 7 (Desember 2025), Page: 225-230
E-ISSN: 2798-1428

V., Raio, L., Ruiz-Irastorza, G., Shoenfeld, Y., Stojanovich, L., Ward, M.M. (2019). EULAR recommendations for the management of antiphospholipid syndrome in adults. *Annals of the Rheumatic Diseases*, 78 (10), 1296-1304.

Tsokos, G.C. (2011). Systemic lupus erythematosus. *The New England Journal of Medicine*, 365 (22), 2110-2121.