

Maternal and Fetal Outcomes in Systemic Lupus Erythematosus

Systemic lupus erythematosus (SLE) is a complex chronic multisystem autoimmune inflammatory disease. SLE most frequently affects women of childbearing age. Women with SLE are at an increased risk of pregnancy complications that are exacerbated by active disease associated with a considerable higher risk for fetal and maternal complications.^[1] These complications include disease activity flares, preeclampsia, preterm birth, and fetal loss. Several risk factors have been identified to stratify patients with a high risk for obstetric complications which include anti-SS-A (Ro)/SS-B (La) antibodies (risk of congenital heart block and neonatal lupus) and patients with an established diagnosis of antiphospholipid syndrome or lupus nephritis.

In a nationwide analysis of hospitalized pregnant lupus women, it was reported that there was a noticeable greater improvement in the maternal mortality compared to matched non-SLE women, which was 34 times higher in 1998–2000 to <5 times higher in 2013–2015.^[2] This decrease in mortality among women was found to be greater in SLE women than in those without lupus, suggesting that multiple contributing factors beyond conventional developments in obstetric care may be responsible. Furthermore, women with SLE had a greater progress in rates of preeclampsia or eclampsia and length of stay.^[3] Health-care costs of pregnancy in SLE evaluated in a retrospective observational analysis from a US health claims database demonstrated a worse outcomes in all measures compared with non-SLE mother.^[3]

The rates of SLE-related pregnancies and deliveries have steadily increased over the last 18 years,^[2] implying that lupus care has improved through increased awareness of lupus among the general population and physicians and newer advances in therapies, resulting in more successful pregnancies and outcomes in SLE patients.

Although knowledge about SLE-related pregnancy risk factors has increased over the last decade among the general population, obstetricians, and rheumatologists, changes in outcomes and rates of maternal and fetal mortality, preeclampsia, eclampsia, preterm birth, and fetal loss are not known in North Africa and the Middle East. Ahmed *et al.*^[4] in the current issue of the *journal* reported the maternal and fetal outcomes in pregnant women with SLE and investigated the likely predictors of adverse outcome of 60 pregnancies in 48 women from Benghazi, Libya, over a 10-year period (2008–2018). The authors concluded that the characteristics and outcomes in our series are comparable to those of previously published cohorts internationally. The risk factors identified in the studied population include preexisting hypertension and secondary APL which were associated with an increased risk of pregnancy complications.

Despite the small number and the modest investigative details, the contributions made by Ahmed *et al.* remain a valuable addition to the literature from this part of the world.^[4] The article demonstrated that the outcome of these patients is comparable to that of studies published earlier from different parts of the world. The optimal use of traditional therapy with corticosteroids, immunosuppressive drugs, and hydrochloroquine combined with good antenatal care may have contributed to the good outcome of this cohort of patients

With the explosion in the use of biologics in rheumatology and other clinical conditions, more and more physicians are comfortable to use biologics in the management of SLE in pregnancy driven by the availability of more data about their safety, the success of these therapies in controlling disease activity, and the increase of remission rates.^[5]

Multidisciplinary approach in treating women in the childbearing age with this condition and similar

autoimmune manifestations, who are planning to get pregnant, before conception, during pregnancy, and their follow-up after pregnancy, will contribute significantly to optimize their care and will have a profound effect on successful outcomes.^[6] This should be the platform for a larger prospective study with probably using different therapeutic modalities including biologics with good safety record in pregnancy.

Author contribution

Equal.

Financial support and sponsorship

Nil.

Conflicts of interests

None.

Compliance with ethical principles

Not applicable.

Rajaie A. Namas¹, Bashir T. Salih²

¹Department of Rheumatology, Medical Subspecialties Institute, Cleveland Clinic Abu Dhabi, ²Obstetric Medicine Clinic, Corniche Hospital, Abu Dhabi, UAE

Address for correspondence: Dr. Rajaie A. Namas, Medical Subspecialties Institute, Cleveland Clinic Abu Dhabi, Abu Dhabi, UAE. E-mail: namasr@clevelandclinicabudhabi.ae

Submitted: 04-03-2020 **Revised:** 04-03-2020
Accepted: 04-03-2020 **Published:** 26-03-2020

REFERENCES

1. Carter EE, Barr SG, Clarke AE. The global burden of SLE: Prevalence, health disparities and socioeconomic impact. *Nat Rev Rheumatol* 2016;12:605-20.
2. Mehta B, Luo Y, Xu J, Sammaritano L, Salmon J, Lockshin M, *et al.* Trends in maternal and fetal outcomes among pregnant women with systemic lupus erythematosus in the United States: A cross-sectional analysis. *Ann Intern Med* 2019;171:164-71.
3. Petri M, Daly RP, Pushparajah DS. Healthcare costs of pregnancy in systemic lupus erythematosus: Retrospective observational analysis from a US health claims database. *J Med Econ* 2015;18:967-73.
4. Ahmed AM, Ibkhadra SA, Elbraky FM, Alsaieiti KD. Maternal and fetal outcomes in patients with systemic lupus erythematosus. *Ibnosina J Med Biomed Sci* 2020;12:33-7.
5. Nahal SK, Selmi C, Gershwin ME. Safety issues and recommendations for successful pregnancy outcome in systemic lupus erythematosus. *J Autoimmun* 2018;93:16-23.
6. Andreoli L, Bertias GK, Agmon-Levin N, Brown S, Cervera R, Costedoat-Chalumeau N, *et al.* 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. *Ann Rheum Dis* 2017;76:476-85.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code: 	Website: www.ijmbs.org
	DOI: 10.4103/ijmbs.ijmbs_26_20

How to cite this article: Namas RA, Salih BT. Maternal and fetal outcomes in systemic lupus erythematosus. *Ibnosina J Med Biomed Sci* 2020;12:6-7.

<p>Reviewers: Not Applicable (Invited)</p>	<p>Editors: Salem A Beshyah (Abu Dhabi, UAE)</p>
---	---