Safe pregnancy is possible for women with interstitial lung disease

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A new study shows that women with interstitial lung disease (ILD) related to autoimmune disease may not need to terminate their pregnancies—despite the increased risk of adverse outcomes—provided

they have close monitoring from their team of multidisciplinary physicians before, during and after pregnancy. Results of the research was presented at ACR Convergence, the American College of Rheumatology's annual meeting (ABSTRACT #1446).

Interstitial lung disease is a condition that involves inflammation and scarring of tissue inside the lungs. Patients may experience severe breathing difficulties as their lung tissue stiffens and scars. ILD may be seen in people who also have other autoimmune diseases, including scleroderma, lupus, and sarcoidosis.

Patients with ILD are often advised to avoid or even terminate pregnancy based on very limited published data on potential outcomes or complications of pregnancy with the disease. For this study, researchers at Duke University School of Medicine in Durham, North Carolina collected retrospective data on pregnancy outcomes of patients with ILD secondary to autoimmune disease, creating the largest cohort to date. Their goal was to provide physicians with the data to better counsel ILD patients on pregnancy risks.

"Our goal was to allow healthcare providers and patients to make more informed decisions on whether to conceive or continue pregnancies," says the study's co-author, Megan Clowse, MD, MPH, Associate Professor of Medicine, Division of Rheumatology and Immunology at Duke. "Our hope is that patients with ILD and their providers can have more open and honest conversations on pregnancy risks, likely allowing more women living with ILD to safely create the families they desire."

The researchers reviewed medical records on pregnancies in patients diagnosed with ILD secondary to autoimmune disease at Duke University Health System from January 1996 to July 2019. They classified the pregnancies according to the severity of ILD based on two standard breathing tests for the disease: forced vital capacity and

diffusion capacity for carbon monoxide, with cut-off values that were normal, mild, moderate or severe. They also defined adverse pregnancy outcomes, including pre-eclampsia, preterm delivery, infants small for their gestational age, fetal death and neonatal death, according to two standard scores: PROMISSE-APO and PROMISSE-APO SEVERE.

Sixty-seven patients who had 94 pregnancies, including five twin pregnancies, were included in the study. Their average maternal age was 32.1 and 83% identified as Black. Overall, 69% of the pregnant patients were diagnosed with sarcoidosis, and 31% had a connective tissue disease-associated ILD. Of the 64 pregnancies with available data to classify their ILD severity, 11% were severe ILD, 25% were moderate ILD, 50% were mild ILD and 14% were normal. All the pregnancies in the severe group had connective tissue disease-associated ILD, and 89% of the normal pregnancies had sarcoidosis. Seven of the pregnancies were conceived when the woman was taking mycophenolate, a medication known to cause pregnancy loss and major birth defects.

The study's results showed that 70% of the pregnancies resulted in a live birth. Ten percent were terminated. The results also showed a 15% rate of pre-eclampsia. None of the women died, though patients with severe ILD had more adverse pregnancy outcomes. Only 2.1% required care in an ICU during or soon after delivery. In 4.2% ILD patients experienced significant shortness of breath due to increased fluid volume around the time of delivery, and in one case, the patient developed postpartum heart failure. In eight pregnancies, the patient required oxygen during delivery and one patient was intubated mid-pregnancy for asthma.

The study's findings suggest that women with stable ILD do not necessarily have to avoid conception or terminate pregnancy, says Dr. Clowse.

"Women with ILD who are considering pregnancy should discuss their

individual risks for pregnancy and disease-related complications with their rheumatologist, pulmonologist, high-risk obstetrician and/or other specialists prior to stopping contraceptive measures," she says. "Furthermore, patients on teratogenic immunosuppressives should to be switched over to pregnancy-compatible medications prior to pregnancy to decrease the risk of pregnancy loss and birth defects. By planning pregnancy, we hope that women with stable ILD can have safer and healthier outcomes. In the future, work needs to be done to confirm these findings in other centers. Additionally, developing best practices in the clinical setting will likely increase the ability of women living with ILD to have safe pregnancies and healthy babies."

More information: acrabstracts.org/abstract/preg … titial-lung-disease/

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