### Systemic Lupus Erythematosus

Society for Maternal•Fetal Medicine High-risk pregnancy experts

Patient Education Series

#### **Quick Facts**

- Systemic Lupus Erythematosus is a long-lasting autoimmune disease.
- SLE can affect the kidneys, joints, muscles, skin, immune system, blood, brain, heart, and lungs.
- SLE may cause pregnancy complications such as pregnancy loss, preeclampsia, fetal growth restriction, and preterm birth.
- In rare cases, a condition called neonatal lupus erythematosus (NLE) can affect the baby's organs.
- Pregnancy with SLE should be planned and managed with a rheumatologist and maternal-fetal medicine subspecialist.

SLE is a chronic (long-lasting) **autoimmune disease** in which the immune system mistakenly attacks healthy tissues and organs. SLE can affect many organs in the body. Although there is no cure for SLE, the symptoms can be managed.

People with SLE typically experience periods when their symptoms become worse (called a "flare"), followed by periods with no symptoms (called a "remission").

SLE is more common in females than males and often affects young adults.

The causes of SLE are unclear. It is likely caused by a combination of different factors.

## What organ systems can be affected by SLE?

SLE can affect these organs and tissues:

- Kidneys
- Joints, muscles, and skin
- Immune system
- Blood
- Brain
- Heart
- Lungs

#### How is SLE diagnosed?

SLE is diagnosed by both blood tests and symptoms. Multiple blood tests are required to diagnose SLE.

The first step in testing is an antinuclear **antibody** (ANA) test. This blood test looks for a specific type of antibody in the blood. The presence of these antibodies is a sign of an autoimmune attack on the body's tissues. This test alone does not diagnose lupus. Other blood tests are needed to help support the diagnosis.

#### Can SLE cause pregnancy complications?

SLE is associated with a higher risk of pregnancy loss, preeclampsia, fetal growth restriction (FGR), and preterm birth.

In rare cases, SLE may affect the fetus. **Neonatal lupus erythematosus (NLE)** is a rare but serious complication that may result in skin lesions, heart problems, **anemia**, **hepatitis**, and blood disorders. Although most of these effects are not permanent, a heart problem called congenital heart block occurs in about one-half of babies with NLE. This condition can cause permanent scarring in the baby's heart. About 1 in 5 infants who develop this heart problem die within the first three years of life.

#### How will my pregnancy be managed?

If you are pregnant and have SLE, you need special care that includes additional testing, close monitoring, and often changes in medication. You may have the following tests:

- 1. Blood tests: Testing will be performed regularly throughout your pregnancy and at your first prenatal care visit.
- 2. Blood pressure and symptom checks: Your blood pressure and symptoms will be watched closely.
- **3. Ultrasound** exams and **antenatal testing**: In your third trimester, you may have ultrasound exams and tests to monitor fetal well-being.

## How will my medications be managed during pregnancy?

Some SLE medications should be continued during pregnancy, while others should be avoided. In some cases, new medications may be recommended to prevent complications or to manage flares. Your health-care provider will review your current medications and make any necessary changes.

Your healthcare provider may recommend that you take low-dose aspirin (81-mg tablet) starting at 12 weeks of pregnancy to lower the risk of preeclampsia.

If you are having SLE symptoms, it may be recommended that you start or continue a medication called **hydroxychloroquine**. This medication may also have benefits even if you don't have symptoms. Your pregnancy care provider and **rheumatologist** will review your symptoms and medical history to see whether this treatment is right for you.

All pregnant people should take folic acid during pregnancy and preferably for 3 months before becoming pregnant.

#### Can pregnancy make my SLE worse?

Pregnancy can increase the risk of organ damage and death in people with SLE. Pregnancy can cause complications such as kidney problems, blood clots, or issues affecting the nervous system. If you had these problems before pregnancy, they may worsen during pregnancy.

Most flares during pregnancy are mild. But 15% to 30% of flares are severe, and some can be life-threatening. Treatment during pregnancy depends on how severe the flare is. Additional medications may be given to manage symptoms and prevent further immune system damage.

# Are there things I can do before pregnancy to increase my chances of a healthy pregnancy and baby?

Yes. If you are thinking about pregnancy, experts recommend scheduling a pre-pregnancy healthcare visit with your rheumatologist and a **maternal-fetal medicine (MFM) subspecialist**. This pre-pregnancy visit allows your healthcare providers to:

• Assess your health and discuss the risks that pregnancy might have for you and the fetus.

- Review your medications to decide which ones to continue during pregnancy and whether any should be stopped before you start trying to get pregnant. You should not make any changes in your medications without talking with a healthcare provider.
- Discuss pregnancy timing. If you are having symptoms, your healthcare provider may suggest that you wait until you've been symptom-free for at least 6 months before trying to get pregnant. Many birth control methods are safe for people with SLE and can be easily stopped when you want to become pregnant.

#### Glossary

**Anemia:** A condition where the body has a lower-than-normal number of red blood cells.

**Antenatal test:** Tests or other procedures performed during pregnancy to learn about your health and that of the fetus. They include blood tests, ultrasound exams, and tests of fetal well-being, such as the nonstress test.

Antibody: Protein made by the immune system in response to a foreign substance, such as a virus.

**Autoimmune disease:** A disease in which the immune system attacks the body's own tissues and organs.

**Fetal growth restriction:** A condition in which the fetus is much smaller than expected for the gestational age.

Fetus: During pregnancy, the stage of development from nine weeks to birth.

Flare: A period of time when a person with SLE experiences symptoms.

**Hepatitis:** Inflammation of the liver that can be caused by infections, heavy alcohol use, toxins, medications, or autoimmune disease.

**Hydroxychloroquine:** A medication that is used to treat systemic lupus erythematosus.

**Immune system:** The cells and organs that protect the body against foreign substances, such as bacteria and viruses.

Maternal-fetal medicine (MFM) subspecialist: An obstetrician with specialized training in prenatal care for people with high-risk pregnancies.

Neonatal lupus erythematosus (NLE): An autoimmune disease that affects the fetus.

**Preeclampsia:** A serious medical problem that can happen during and after pregnancy that causes a pregnant person's blood pressure to go very high.

**Preterm:** Delivery of a baby before 37 weeks of pregnancy.

**Remission:** A period of time when a person with SLE does not experience symptoms.

**Rheumatologist:** An doctor who is specifically trained to support people with arthritis and other diseases of the joints, muscles, and bones, including inflammatory diseases and autoimmune diseases.

**Systemic lupus erythematosus (SLE):** A long-lasting autoimmune disease in which the immune system attacks the body's own tissues and organs. People with SLE typically have times when their symptoms flare up, followed by times with no symptoms.

Ultrasound: Use of sound waves to create images of internal organs or the fetus during pregnancy.

To find a maternal-fetal medicine subspecialist in your area, go to <a href="https://www.smfm.org/members/search">https://www.smfm.org/members/search</a>

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