



Pregnancy and Lupus

Pregnancy is no longer considered an impossibility if you have lupus. Advancing technology and better understanding of the disease and its effects on the body have improved pregnancy outcomes over the last 40 years. If planned properly when lupus symptoms are in remission, and with close monitoring by your rheumatologist and specialists in maternal-fetal medicine, your chances for a successful pregnancy are excellent.

Risk Factors

These factors can make you at higher risk for lupus flares and poor fetal outcome during your pregnancy

- Pre-existing or present hypertension
- History or presence of kidney disease
- History of previous preeclampsia
- History of low platelets
- History of blood clots
- History or presence of antiphospholipid antibodies

Planning Your Pregnancy

Although many lupus pregnancies will have no complications, all lupus pregnancies are considered “high risk”—meaning problems may occur and must be anticipated. The best time to be pregnant is when you are doing well with your health. Women whose lupus is in remission have much less trouble with pregnancy than women whose disease is active.

It is strongly recommended that you meet with your doctor three to six months in advance of when you plan to try to become pregnant. At this visit your doctor will probably recommend that you stop taking certain medications, including blood pressure medications, CellCept® (mycophenolate mofetil; MMF), cyclophosphamide, and methotrexate.

Generally, Plaquenil® can be continued to help prevent a lupus flare. It is rare that Plaquenil causes fetal problems, and the risk of a flare outweighs the fetal risk. Prednisone also should be continued. If you are on mycophenolate mofetil or mycophenolic acid, talk to your doctor about switching to azathioprine, which often is an acceptable alternative.

Being Pregnant

Your pregnancy should be managed by a perinatologist or maternal-fetal specialist (an obstetrician experienced in high-risk pregnancies) and your regular rheumatologist, or a rheumatologist who specializes in pregnancy and autoimmune concerns.

These are the necessary laboratory tests your doctor will request once you are pregnant:

- Urinalysis – to check for protein in the urine
- Complete blood count
- Blood chemistry tests – to look at kidney and liver function
- Antiphospholipid antibodies – to check for risk of miscarriage

- Anti-SSA/Ro and Anti-SSB/La antibodies – to see if the fetus has a risk of heart block (see Neonatal Lupus on page 4), in which case the doctor will request a fetal echocardiogram starting at 18 weeks
- Anti-DNA antibodies
- Complement levels

You will need to do your part as well.

- See your rheumatologist at least once every trimester—more often if you have a lupus flare.
- If you flare, you may need to be treated with prednisone, which does not cross the placenta except at high doses.
- See your perinatologist and obstetrician regularly and frequently, and follow their instructions about rest, exercise, diet, and medications.
- Pay very close attention to what your body is telling you and tell your doctors about anything that doesn't seem right.
- Make the right lifestyle choices: Don't smoke, drink alcohol, or take recreational drugs, and limit caffeine.

Complications

The following conditions have been known to appear in women with lupus who are pregnant. We list them here not to frighten you, but so that you may recognize any complications that may occur. If you suspect anything may be wrong, contact your doctors right away.

Preeclampsia (also known as toxemia of pregnancy or pregnancy-induced hypertension). Preeclampsia occurs when there is a problem with the placenta; a change in the mother's immune response to fetal/placental tissue also may contribute to the development of preeclampsia. The symptoms include a sudden increase in blood pressure and protein in the urine after at least 20 weeks of pregnancy; severe headaches and blurred vision may also occur. Preeclampsia is a serious condition that requires immediate medical care and often immediate delivery of the baby.

HELLP Syndrome. HELLP stands for *hemolysis* (the premature destruction of red blood cells), *elevated liver enzymes*, and *low platelets*. This condition occurs in 1-2/1,000 pregnancies, and in 10-20 percent of pregnant women with severe preeclampsia or eclampsia. Although HELLP usually develops before the pregnancy is 37 weeks along, it may develop in the week after the infant is born.

Antiphospholipid antibodies. Antiphospholipid antibodies (which include the lupus anticoagulant, anticardiolipin antibodies, and antibodies to B2 glycoprotein I) can interfere with the function of the placenta, usually during the second trimester, by causing blood clots that prevent the placenta from growing and functioning normally, which can slow fetal growth. If you have antiphospholipid antibodies, you may need to have an early delivery.

Intrauterine growth restriction (IUGR). Slowed fetal growth can have several causes, most commonly hypertension, the presence of antiphospholipid antibodies, and/or lupus disease activity, especially lupus kidney disease.

Impaired kidney function. The presence of lupus kidney disease also increases the chance of having complications during pregnancy. When kidney function is impaired due to active lupus, excess protein can spill into the urine (proteinuria), causing swelling (edema) in the lower extremities.

Flares of lupus. Women who conceive after being in remission for five or six months usually are less likely to experience a lupus flare than those who get pregnant while their lupus is active. It is important to realize that the normal body changes that occur during pregnancy may be similar to symptoms of a lupus flare: edema (swelling) in joints, especially in the knees; skin rashes (the "blush" of a pregnant woman); hair loss (after delivery). Frequent doctor visits can determine whether these are normal symptoms of pregnancy or signs of active lupus.

Preterm delivery. You do not have to worry if you deliver before 40 weeks, as 37 weeks is still considered in the normal range. However, the chance of giving birth before 37 weeks does appear to be more frequent in women with lupus than in otherwise healthy women. Women with lupus are always encouraged to arrange for their baby's delivery at a hospital with a neonatal intensive care unit (NICU).

Fetal loss. Loss of the fetus can occur in any pregnancy; however, spontaneous miscarriages and stillbirths are more frequent in women with lupus. The two greatest risk factors are a history of previous fetal loss and high levels of antiphospholipid antibodies. The risk of fetal loss also may be increased if: lupus nephritis is active at conception; there is evidence of proteinuria, antiphospholipid antibodies, lupus anticoagulant, or hypertension; or the serum creatinine level is high.

Neonatal Lupus

Neonatal lupus is not true lupus; it is a rare condition associated with anti-SSA/Ro and/or anti-SSB/La antibodies from the mother acting upon the fetus. At birth, the baby may have a skin rash, liver problems, or low blood cell counts, but these symptoms disappear completely after six months with no lasting effects. The most serious symptom is congenital heart block, which causes a slow heartbeat. This is usually detected when the fetus is between 18 and 24 weeks old, and most infants eventually need a pacemaker.

If a mother has had one baby with neonatal lupus, there is an 18 percent chance that she will have another child with the same problem. The chance that the baby born with neonatal lupus will develop any form of lupus later in life, however, is very, very low.

Breastfeeding

Breastfeeding is generally safe, but you should always consult your doctors, including your baby's pediatrician, and your pharmacist for the latest information about the medications you are taking, and whether they might affect the baby.

Medication Use and Breastfeeding

The following information is taken from the *Physicians' Desk Reference (PDR)* text on prescription drugs.

Considered Safe

- aspirin
- corticosteroids (prednisone, prednisolone, methylprednisolone)
- dexamethasone (Decadrol®, Hexadrol®)
- heparin
- hydroxychloroquine (Plaquenil®)
- warfarin (Coumadin®)

Considered Unsafe

- cyclophosphamide (Cytosan®)
- methotrexate

Possibly Unsafe

- azathioprine (Imuran®)
- non-steroidal anti-inflammatory drugs (Naproxyn®)

Safety Unknown

- betamethasone (Celestone®)
- cyclosporine

- mycophenolate mofetil (CellCept®)

Conclusion

For additional information on pregnancy and alternatives to pregnancy when you are planning your family, visit the LFA Web site, [lupus.org](http://www.lupus.org). The Lupus Foundation of America has additional resources, including printed materials and online information which can help you understand the many aspects of this disease.

[Improving Outcomes of Lupus Pregnancies](#)

[Reproduction and Contraceptive Health with Lupus](#)

15 Questions with Dr. Lisa Sammaritano

[Reproductive Health and Lupus](#)

October 2008 webchat transcript with Dr. Bonnie Bermas

[Pregnancy and Lupus](#)

August 2007 webchat transcript with Dr. Rosalind Ramsey-Goldman

Lupus Foundation of America, Inc.

<http://www.lupus.org/>