Lithium and Pregnancy

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to lithium may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care professional.

What is lithium?
Lithium is a medication used to treat bipolar disorder, which is also called manic-depression. Lithium may also be used to treat other psychiatric and medical conditions. Lithium is sold under many brand names such as Cibalith-S®, Eskalith®, Lithane®, Lithobid® and Lithionate®.

Should I stop taking lithium before I get pregnant?
No, you should not stop taking lithium without first talking to your health care provider. Your health care provider may recommend that you either continue taking lithium throughout pregnancy, discontinue it at certain points during pregnancy, or discontinue taking lithium completely during pregnancy. The recommendation will be based on a variety of factors, such as the type and severity of the condition being treated, the likelihood you may relapse without medication, the stage of pregnancy you are in, and other risk/benefit considerations. Stopping lithium too quickly has been associated with relapse of symptoms in individuals with bipolar disorder and is not recommended.

If you continue on lithium during pregnancy, you will need close monitoring of your blood lithium levels. Pregnancy can change the way your body breaks down the medication. It is best to take the lowest dose that works for you and spread the dose out over the course of the day.

How long should I wait to become pregnant after I have stopped taking lithium?
It takes about 20 hours for half of the drug to be cleared from your body. Studies have shown that the longer an individual has been on lithium, the longer it may take for the body to clear it completely after it has been discontinued.

Generally, the lithium is cleared from the body over a three to four day period.

Can taking lithium make it more difficult for me to become pregnant?
No. Studies have not shown that taking lithium makes it more difficult for women to become pregnant.

Does lithium cause an increased risk for miscarriage?
One study showed a slight increase in the risk of miscarriage with lithium use. However, there are other factors that play role in the rate of miscarriage, which include maternal age, gestational age, and history of previous miscarriage that may have contributed to the risk in this study.

Can taking lithium during pregnancy cause birth defects?
Yes, although not very often. There is an increased chance for heart defects if lithium is used when the heart is forming during the first trimester. A very rare heart defect called Ebstein's anomaly has been seen in addition to other more common types of heart defects. Ebstein's anomaly is the abnormal placement of one of the valves that controls blood flow in the heart. This rare heart defect may cause mild medical problems or a severe life-threatening condition. Studies have suggested the rate of any heart defect with lithium exposure is approximately 1-5%. This is only somewhat greater than the background rate for heart defects in the general population, 0.5%-1.0%. No other birth defects have been linked to lithium use in pregnancy.
Will taking lithium during pregnancy have an effect on my baby's behavior and development?

Studies on children up to seven years of age who were exposed to lithium during pregnancy did not find significant physical, mental, or behavioral problems when compared to children who were not exposed to lithium during pregnancy.

I need to take lithium throughout my entire pregnancy. Are there any concerns with lithium use in the second or third trimester?

Yes. There are case reports of lithium use during pregnancy and the development of a goiter (enlarged thyroid gland in the neck) in the mother. If untreated in the mother, this can lead to a goiter in the baby. The mother’s thyroid function should be monitored throughout pregnancy, so she can be treated before the baby develops any problems.

In addition, there have been individual reports of reversible thyroid and kidney toxicity, decreased muscle tone (hypotonia), difficulty breathing and feeding in the newborn when lithium was used near delivery. With careful treatment, the baby should fully recover in two to ten days.

Because of the risk for relapse, postpartum depression or psychotic event is often of great concern; pregnant women who need to take lithium in late pregnancy are not usually weaned off early in the third trimester. Instead, lithium can be stopped 24-48 hours prior to a planned delivery or at the start of labor. Once the baby is delivered, lithium can be restarted at the dosage that was used before the pregnancy began. You should be sure your health care provider and your baby’s health care provider are aware of your lithium use, so the baby can be monitored after delivery.

I have been taking lithium since early in my pregnancy. Are there any special tests I can have during pregnancy that can tell me about my baby’s health?

Yes. A first trimester ultrasound can be used to measure a pocket of fluid normally found behind the baby’s neck. This measurement can be used as a tool to screen for heart defects. If you were taking lithium during the first ten weeks of pregnancy, it is recommended that you also have a level II ultrasound, around the 18th week of pregnancy. This is to examine the baby’s growth and development. It is also recommended that you have a fetal echocardiogram, a special ultrasound of the baby’s heart, at 21-22 weeks of pregnancy.

These three tests are only used for screening and do not pick up all problems. Based on what is seen, your health care provider may recommend follow-up testing.

I will be taking lithium after I deliver the baby. Can I take lithium while breastfeeding?

Lithium passes into the breast milk and is absorbed by the baby. While the amount of lithium found in a nursing baby’s blood is less than what is in the mother’s blood, it may be of concern. There are a few reports of harmful effects on the breastfed baby. If a woman takes lithium while breastfeeding, she should monitor her baby for any significant changes in behavior. These may include restlessness, low muscle tone, or difficulty feeding. Some reports suggest having blood tests on the baby to check lithium levels, as well as thyroid and kidney function. Be sure to talk to your health care provider about all your options for breastfeeding.

We are trying to become pregnant, and my partner takes lithium. Will his exposure decrease his fertility or cause birth defects in our children?

One study found that men who were treated with lithium had reduced quality and movement of their sperm. Decreased sex drive was reported in another study, but this is a common side effect of depression and may not be due to the lithium use. While these effects may make it harder to become pregnant, more studies need to be done in this area before it is known if lithium use in men really decreases fertility. There are no reports that suggest lithium use in men is associated with an increased risk of birth defects. In general, medications that the father takes do not increase risk to a pregnancy. For more information, please see the OTIS fact sheet Paternal Exposures and Pregnancy at http://www.mothertobaby.org/files/paternal.pdf

September 2014
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