Lithium

This sheet talks about exposure to lithium in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

**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 Lithonate®.

**I take lithium. Can it make it harder for me to get pregnant?**
Studies have not shown that taking lithium makes it more difficult for women to become pregnant.

**I just found out I am pregnant. Should I stop taking lithium?**
Talk with your healthcare provider before making any changes to your medications. Stopping lithium is associated with relapse (return of symptoms) and this risk is even higher when lithium is stopped quickly. There are some situations in which you and your healthcare provider may decide to stop lithium during a pregnancy. If you continue on lithium during pregnancy, you will need to have the levels of lithium in your blood checked often throughout your pregnancy. During pregnancy you may need a higher dose to prevent relapse. At the time of delivery, the dose may have to be reduced to avoid side effects for you and your baby.

**I am taking lithium, but I would like to stop taking it before becoming pregnant. How long does the drug stay in my body?**
People eliminate medications at different rates. In healthy adults, it takes up to four days, on average, for most of the lithium to be gone from the body. Also, 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 stopping.

**Does taking lithium increase the chance for miscarriage?**
Miscarriage can occur in any pregnancy. Although one study showed a slight increase in the chance of miscarriage with lithium use, the study did not account for all the other factors that are associated with miscarriage such as maternal age or history of previous miscarriage. It is not known if use of lithium increases the chance of miscarriage.

**Does taking lithium in the first trimester increase the chance of birth defects?**
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. Some studies have suggested that lithium was associated with a small chance of heart defects, especially a rare heart defect called Ebstein’s anomaly. 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. However, other studies have not shown an association between using lithium during the first trimester of pregnancy and an increased chance of heart defects. This means that it cannot be concluded that lithium causes birth defects.

**Could taking lithium in the second or third trimester cause other pregnancy complications?**
There are case reports of lithium use during pregnancy and the development of a goiter (enlarged thyroid gland in the neck) in the mother. This is the result of hypothyroidism (an underactive thyroid gland). If untreated in the mother, hypothyroidism can lead to a goiter in the baby. The mother’s thyroid function should be monitored throughout
pregnancy, so she can be treated before she or the baby develop any problems.

Also, there have been case reports of decreased muscle tone (hypotonia), sedation (sleepiness), and difficulty with breathing and feeding in the newborn when lithium was used near delivery, especially if the mother’s blood lithium level was high. With treatment, the baby should fully recover in about two to ten days.

Continuing lithium lowers the chance of relapse of bipolar disorder after delivery. Postpartum relapses are very serious and can lead to postpartum psychosis. To lower the chance of lithium toxicity in the mother and baby, the dose may need to be reduced at the time of delivery. Make sure your healthcare provider and your baby’s healthcare provider are aware of your lithium use, so that you and the baby can be monitored after delivery.

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

A screening test called the nuchal translucency scan is an ultrasound that is done during the first trimester of pregnancy. It 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 more detailed ultrasound (called a level II ultrasound) around the 18th week of pregnancy. This is to look at the baby’s growth and development. Your healthcare provider may also discuss having a special ultrasound of the baby’s heart (fetal echocardiogram) around 21-22 weeks of pregnancy. These ultrasounds exams are only used for screening and do not pick up all problems. Based on what is seen, your healthcare provider may recommend follow-up testing.

*Does taking lithium in pregnancy cause long-term problems in behavior or learning for the baby?*

Studies on children up to fifteen years old 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.

*Can I breastfeed while taking lithium?*

Lithium passes into the breast milk and is absorbed by the baby. The amount of lithium found in a nursing baby’s blood is a lot less than what is in the mother’s blood. If a woman takes lithium while breastfeeding, she and her healthcare provider should monitor the baby for symptoms such as restlessness, low muscle tone, or trouble feeding. There are a few reports of reversible changes in the baby’s thyroid and kidney functions so monitoring the baby’s lithium level and thyroid and kidney functions is recommended. Be sure to talk to your healthcare provider about all your breastfeeding questions.

*If a man takes lithium, could it affect his fertility (ability to get partner pregnant) or increase the chance of birth defects?*

Some reports on men who were treated with lithium found reduced sperm quality and sperm movement, while others have not. One of these reports found no evidence that fertility is reduced. 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. There are no reports that suggest lithium use in men is associated with an increased risk of birth defects.

In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/.

Please click here for references.