Lithium

This sheet is about exposure to lithium in pregnancy and while breastfeeding. This information is based on available published literature. It should not take the place of medical care and advice from your healthcare provider.

What is lithium?

Lithium is a medication that has been used to treat bipolar disorder and other conditions. Lithium is sold under many brand names, including Cibalith-S®, Eskalith®, Lithane®, Lithobid® and Lithonate®.

Sometimes when people find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take your medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

Stopping lithium may cause a return of symptoms (relapse), especially if it is stopped quickly. If you keep taking lithium, you should have your blood levels of lithium checked often throughout pregnancy. You may need to increase your dose during pregnancy to prevent relapse. Talk with your healthcare provider about monitoring and adjusting your lithium dose as needed.

I am taking lithium but would like to stop taking it before getting pregnant. How long does the drug stay in my body?

People eliminate medications at different rates. In healthy adults, it takes up to nine days, on average, for most of the lithium to be gone from the body. Studies have also shown that the longer a person has been on lithium, the longer it may take for their body to clear it completely after stopping.

I take lithium. Can it make it harder for me to get pregnant?

It is not known if lithium can make it harder to get pregnant.

Does taking lithium increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. It is not known if lithium increases the chance of miscarriage. Two studies have shown an increase in the chance of miscarriage with lithium use. One of the studies looked at some other factors that are also associated with miscarriage (such as age at pregnancy and history of previous miscarriage), but neither study could control for other important factors, such as other medical conditions, or other exposures. A third study did not find an increased chance of miscarriage with lithium use.

Does taking lithium increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. It is not known if taking lithium can increase the chance of birth defects above the background risk. Some studies suggest that taking lithium in the first trimester is associated with a small increased 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. The medical problems associated with this condition can be mild or severe. Other studies have not shown an increased chance of heart defects with the use of lithium.

Does taking lithium in pregnancy increase the chance of other pregnancy-related problems?

One study suggests that the use of lithium during pregnancy, compared to stopping lithium use before pregnancy, was associated with an increased chance of preterm delivery (birth before week 37), higher birth weight, and low blood sugar in the infant. It was not associated with low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth). Two other studies suggested that using lithium during pregnancy might increase the chance of polyhydramnios (excess fluid around the fetus that might lead to preterm delivery and other pregnancy complications).

Using lithium during pregnancy may cause goiter (when the thyroid gland grows larger than usual) and hypothyroidism (very low activity of the thyroid gland) in people who are pregnant. There are case reports of these symptoms in babies who were exposed to lithium during pregnancy. People who are pregnant and taking lithium
should have their thyroid function monitored throughout pregnancy, so they can be treated, if needed.

I need to take lithium throughout my entire pregnancy. Will it cause withdrawal symptoms in my baby after birth?

The use of lithium during pregnancy can cause temporary symptoms in newborns soon after birth. These symptoms are sometimes referred to as withdrawal. There have been reports of less muscle tone, sedation (sleepiness), trouble with breathing and feeding, and jaundice (a buildup of bilirubin in the blood that makes the eyes and skin look yellow) in the newborn when lithium was used near delivery, especially if the mother’s blood lithium level was high. Not all babies exposed to lithium will have these symptoms. It is important that your healthcare providers know you are taking lithium so that if symptoms occur, your baby can get the care that’s best for them.

Does taking lithium in pregnancy affect future behavior or learning for the child?

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.

What screenings or tests are available to see if my pregnancy has birth defects or other issues?

Prenatal ultrasounds can be used to screen for some birth defects, such as Ebstein’s anomaly. Ultrasound can also be used to monitor the growth of the pregnancy. Talk with your healthcare provider about any prenatal screenings or testing that are available to you. There are no tests available during pregnancy that can tell how much effect there could be on future behavior or ability to learn.

Breastfeeding while taking lithium:

Lithium passes into the breast milk and is absorbed by the baby. The amount of lithium in the nursing baby’s blood is less than what is in the blood of the person who is breastfeeding. If someone takes lithium while breastfeeding, they and their 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 function, so monitoring the baby’s lithium level, thyroid function, and kidney function has also been recommended. Monitoring is especially important in very young or preterm infants. If you suspect the baby has any symptoms, contact your baby’s healthcare provider.

The product label for lithium recommends people who are breastfeeding not use this medication. But the benefit of using lithium may outweigh possible risks. Continuing lithium after delivery lowers the chance of a relapse of bipolar disorder. Postpartum relapses are very serious and can lead to postpartum psychosis. Your healthcare providers can talk with you about using lithium and what treatment is best for you. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a male takes lithium, could it affect fertility or increase the chance of birth defects?

There are reports of lower sperm quality and less sperm movement with lithium use. One of these reports found no reduction in fertility (ability to get partner pregnant). Lower sex drive was reported in another study, but this is a common side effect of depression and may not be due to lithium. There are no reports that suggest lithium use in males is associated with increased chance of birth defects. In general, exposures that fathers or sperm donors 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/.

Please click here for references.