Oxcarbazepine (Trileptal®, Oxtellar XR®)

This sheet is about exposure to oxcarbazepine in pregnancy or 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 oxcarbazepine?

Oxcarbazepine is a medication that has been approved for the treatment of partial seizures. It has also been used to treat migraine, symptoms of dementia, epilepsy, trigeminal neuralgia (nerve pain in the face) and bipolar disorder. Some brand names for oxcarbazepine are Trileptal® and Oxtellar XR®.

Sometimes when women 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. Having a seizure while pregnant could be harmful to the woman who is pregnant as well as the pregnancy. Women who have bipolar disorder and stop taking their medication are at increased risk for episodes of depression or mania that may be harmful to both the woman who is pregnant and the fetus.

Women should discuss their options for treatment, including medications, with their healthcare providers before getting pregnant when possible. Women who want to become pregnant should also discuss taking a folic acid supplement with their healthcare providers.

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

Studies have not been done in humans to see if oxcarbazepine can make it harder to get pregnant. Having a seizure disorder, as well as long-term use of seizure medications, might make it harder to get pregnant.

Does taking oxcarbazepine increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. One study did not find a higher rate of miscarriage among 337 women with epilepsy who took oxcarbazepine compared to those with epilepsy who took other medications.

Does taking oxcarbazepine increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. Animal studies suggest that oxcarbazepine might increase the chance of birth defects. However, reports on almost 2,600 human pregnancies have not suggested a significantly increased chance of birth defects when oxcarbazepine is used. The chance for birth defects might increase when other anticonvulsant medications are used with oxcarbazepine.

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

Animal studies have suggested that oxcarbazepine might increase the chance of lower birth weight. One human report also found low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth) in 7 out of 8 newborns exposed to oxcarbazepine in pregnancy. However, this report also found that low birth weight was more common among infants born to women with epilepsy. Another study of 94 infants did not suggest that exposure to oxcarbazepine at any point in pregnancy increased the chance of low birth weight.

In rare cases, taking anticonvulsant medications during pregnancy, including oxcarbazepine, can cause bleeding problems in the newborn due to low vitamin K levels. Women taking oxcarbazepine in pregnancy should talk with their healthcare providers about taking vitamin K supplements near the end of their pregnancies. They can also talk to their child’s pediatrician before delivery about giving the newborn a vitamin K supplement at birth.

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

It is not known if oxcarbazepine can cause withdrawal symptoms in a baby after birth. There are 2 case reports of newborns exposed to oxcarbazepine in pregnancy who had possible withdrawal symptoms after delivery. The

symptoms went away after 9 to 12 days and included poor feeding, tremors, irritability, sneezing, and a high-pitched cry. Two case reports are not enough to know if oxcarbazepine was the cause of these symptoms. In contrast, a study of 94 infants exposed to oxcarbazepine at any point in pregnancy did not find an increased risk for withdrawal symptoms compared to infants not exposed to oxcarbazepine.

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

It is unclear if using oxcarbazepine in pregnancy can increase the chance of behavior or learning issues in children. One study looking at women taking anticonvulsant medications during pregnancy (only 10 took oxcarbazepine) found delayed verbal skills in infants evaluated at age 7 months. Another study that evaluated children at ages 6-14 years suggested an increased chance of intellectual disability after prenatal exposure to anticonvulsant medications including oxcarbazepine. However, other studies have found no differences in neurodevelopment, learning ability, or need for speech therapy in children exposed to oxcarbazepine compared to children exposed to some other anticonvulsant medications or those not exposed to these medications at all.

Breastfeeding while taking oxcarbazepine:

Oxcarbazepine passes into breast milk. Eleven case reports found very low levels of the medication in the blood of breastfed infants. Seventeen case reports describe healthy children with no side effects after being exposed to oxcarbazepine through breast milk. If you suspect the baby has any symptoms (being very sleepy, unable to wake for feeds, or poor weight gain), contact the child's healthcare provider. Be sure to talk to your healthcare provider about all your breastfeeding questions.

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

It is not known if taking oxcarbazepine can affect a man's fertility (ability to get a woman pregnant). Men who have epilepsy might have reduced sperm quality and sexual function. This makes it hard to know if effects on a man's sexual function and fertility are related to the medication, to the underlying condition, or other factors. 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 on Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references

North American Antiepileptic Drug (AED) Pregnancy Registry: There is a pregnancy registry for women who take antiepileptic medications, such as oxcarbazepine. Please see the registry website for more information: https://www.aedpregnancyregistry.org/introduction/

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, March 1, 2024.