Oxcarbazepine (Trileptal®, Oxtellar XR®)

This sheet is about exposure to oxcarbazepine in pregnancy or while breastfeeding. This information 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 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 this medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

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

Studies have not been done in people to see if oxcarbazepine can make it harder to get pregnant. When possible, people with seizure disorders or migraine disorders who could become pregnant should discuss their treatment options in pregnancy with their healthcare providers before becoming pregnant. People who want to become pregnant should also discuss taking a folic acid supplement with their healthcare providers.

Does taking oxcarbazepine increase the chance for miscarriage?

Miscarriage can occur in any pregnancy. One study did not find a higher rate of miscarriage among 262 people with epilepsy who took oxcarbazepine compared to those with epilepsy who took other medications.

Does taking oxcarbazepine 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. Animal studies found that oxcarbazepine might increase the chance for birth defects. Oxcarbazepine has not been well studied for use during pregnancy in humans. However, reports on close to 1,300 pregnancies have not suggested a significantly increased chance for birth defects when oxcarbazepine is used. The chance for birth defects might increase when other anticonvulsant medications are used in addition to oxcarbazepine.

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

Animal studies have suggested that oxcarbazepine might cause a 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 people with epilepsy. It is not clear if the chance for low birth weight is due to the medication or the underlying medical condition.

In rare cases, taking anticonvulsant medications during pregnancy, including oxcarbazepine, can cause bleeding problems in the newborn due to low vitamin K levels. People 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?

There are 2 case reports of newborns exposed to oxcarbazepine in pregnancy who had possible withdrawal symptoms after delivery. The symptoms included poor feeding, tremors, irritability, sneezing, and a high-pitched cry. Symptoms went away after 9 to 12 days. Two case reports are not enough to know if oxcarbazepine was the cause of these symptoms.

Does taking oxcarbazepine in pregnancy affect future behavior or learning for the child?
It is unclear if using oxcarbazepine in pregnancy affects future behavior or learning in children. One study among women taking anticonvulsant medications (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. Small studies have found very low levels of the medication in the blood of breastfed infants. 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 such as drowsiness (very sleepy or 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 male takes oxcarbazepine, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?**

Having epilepsy can reduce sperm quality and sexual function and lead to reduced fertility. This makes it difficult for researchers studying seizure medications like oxcarbazepine to know if any adverse effects on male sexual function and fertility are related to the medications or to the underlying seizure disorders themselves. Among men with epilepsy, studies have found improved motility (forward movement) and survival of sperm, improved hormone levels, or improved sexual function reported by men treated with oxcarbazepine compared to those treated with some other seizure medications. It is unclear if these findings improved their fertility.

In general, exposures that fathers or sperm donors have are unlikely to increase the 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 people who take antiepileptic medications, such as oxcarbazepine. Please see the registry website for more information: https://www.aedpregnancyregistry.org/introduction/