Valproic Acid

This sheet talks about using valproic acid in a pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is valproic acid?
Valproic acid is a medication that has been used to control seizures in the treatment of epilepsy, and to treat bipolar disorder and migraines. Some brand names for valproic acid are Depakene®, Stavzor®, and Depacon®.

I take valproic acid. Can it make it harder for me to become pregnant?
Studies have found that women with seizure disorders and women with bipolar disorder might have menstrual problems and difficulty getting pregnant. This possible increase may be due to the conditions that the women have, rather than to the use of the medication.

I am taking valproic acid, but I would like to stop taking it before becoming pregnant. How long will valproic acid stay in my body?
People eliminate medications at different rates. In healthy adults, it takes 2-3 days, on average, for most of the valproic acid to be gone from the body.

I just found out that I am pregnant, should I stop taking valproic acid?
Talk with your healthcare providers before making any changes to this medication. The possible benefits of taking valproic acid to treat your specific condition must be weighed against the possible risks to the pregnancy and the baby. Women who are taking valproic acid and are planning a pregnancy or could become pregnant should discuss their treatment options with their healthcare provider before becoming pregnant.

Does taking valproic acid increase the chance for miscarriage?
Miscarriage can occur in any pregnancy. There is not a known increased chance for miscarriage with the use of valproic acid during pregnancy. The maternal condition that the woman is taking the medication for may have a small increased chance for miscarriage.

What could happen to my baby if I stopped taking my valproic acid and then had a seizure during my pregnancy?
Having a seizure while pregnant may be harmful to the baby. Complications for your baby depend on many things, such as the type of seizure, how long the seizure lasts, and the number of seizures that happen. Epileptic seizures might cause periods of time when the baby is not getting enough oxygen, which could lead to problems with development. These seizures could also be life-threatening for both mother and baby. A seizure could cause a mother to fall or have an accident that could injure herself or her baby.

What could happen to my baby if I stopped taking my valproic acid and then had a relapse of bipolar disorder during my pregnancy?
Women with bipolar disorder who stop taking medication during their pregnancy may be at an increased risk for episodes of depression or mania that could be harmful to both the mother and the baby. Recurrence of depression or mania is very stressful for a pregnant woman. During mania or depressive episodes, the pregnant woman may have more trouble taking care of herself and keeping herself safe.
Does taking valproic acid 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. Studies have found that women who take valproic acid have a greater chance of having a baby with a major birth defect. Birth defects are typically classified as major if they need surgery to be repaired. The chance of a birth defect seems to be greater with higher doses of valproic acid or with taking more than one seizure medication. Some of the birth defects that are more likely to happen if a woman takes valproic acid in the first trimester are heart defects, cleft lip (lip develops with a split), or a neural tube defect (an opening in the baby’s spine or skull). Some babies exposed to valproic acid may also have more minor birth defects like facial differences, such as a thin upper lip.

The most common neural tube defect associated with valproic acid is spina bifida (opening in spine). The chance of a neural tube defect when taking valproic acid is approximately 1 in 50 to 1 in 100 (1-2%). Taking extra folic acid before trying to get pregnant and continuing in early pregnancy might help reduce the chance of some birth defects in pregnancies exposed to valproic acid. Talk to your healthcare provider about how much folic acid you should take. For more information on folic acid, please see the MotherToBaby fact sheet at: https://mothertobaby.org/fact-sheets/folic-acid/.

Could taking valproic acid in the second or third trimester cause other pregnancy complications?

Some, but not all, of the women taking valproic acid may have a smaller baby (below six pounds at birth). There have been reports of temporary low blood sugar levels (hypoglycemia), and some temporary behavior changes in the newborns.

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

An increased chance for behavior and learning problems has been seen in babies who were exposed to valproic acid during pregnancy. Different studies have shown an increased chance for developmental delay, decreased language and memory skills, and decreased social and adaptive behavior skills. Not all studies have shown the same results, and some of the long term problems in the exposed children may be due to the severity of the seizure disorders in the pregnant woman during pregnancy.

I have been taking valproic acid for the last few years and I just found out I am pregnant. What tests are available to see if my baby has spina bifida or other birth defects?

Prenatal screening for neural tube defects is available in pregnancy. A blood test can be done to measure the amount of a substance called alpha fetoprotein (AFP) in the mother’s blood. Babies with spina bifida have higher levels of AFP. If the AFP is higher than usual in the blood test, more testing/screening may be offered to you to determine if the baby has birth defects.

An ultrasound that looks at the baby’s spine can be used to screen for spina bifida. Ultrasounds can also screen for some other birth defects, such as a heart defect or cleft lip. All of these prenatal screening/testing options can be discussed with your healthcare provider. There are no tests available during a pregnancy that can tell if there has been any effect on behavior or ability to learn.

Can I breastfeed while taking valproic acid?

Valproic acid is passed into breast milk, but has been measured at low or undetectable levels and seems to be compatible with breastfeeding. There is concern that breastfed infants whose mothers are taking valproic acid are at risk for liver toxicity, so the infants should be monitored for any changes or problems. If you suspect the baby has symptoms such as jaundice (yellowing of the skin or eyes), rash, or fever, contact the child’s healthcare provider. Talk to your healthcare provider about all of your breastfeeding questions.

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

Valproic acid may have effects on sperm shape and movement that could make it harder to get pregnant. There are no studies that look at paternal effects on pregnancy while taking valproic acid. 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/.

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