Valproic Acid

This sheet is about using valproic acid in 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. Valproic is sometimes also called sodium valproate or valproate sodium. Some brand names for valproic acid are Depakene®, Stavzor®, and Depacon®.

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 am taking valproic acid, 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 2-3 days, on average, for most of the valproic acid to be gone from the body.

*I take valproic acid. Can it make it harder for me to become pregnant?*

Studies have found that people with seizure disorders and people with bipolar disorder might have problems with their periods and trouble getting pregnant. This possible increase may be due to the conditions that the people have, rather than the use of medication.

**Does taking valproic acid increase the chance for miscarriage?**

Miscarriage can occur in any pregnancy. Based on the studies reviewed, it is not known if valproic acid increases the 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 the person who is pregnant and the baby. A seizure could cause a person who is pregnant to fall or have an accident that could injure themselves or the 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?*

People who are pregnant and have bipolar disorder who stop taking medication during their pregnancy may have a higher chance for symptoms of depression or mania that could be harmful to both the person who is pregnant and the baby. Episodes of depression or mania are very stressful for a person who is pregnant. During manic or depressive episodes, the person who is pregnant may have more trouble taking care of themselves and keeping themselves safe.

**Does taking valproic acid 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. Studies have found that people who are pregnant 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 person takes valproic acid in the first trimester of pregnancy include heart defects, cleft lip (when the lip does not form correctly and needs surgery to repair after birth), 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 linked to valproic acid use is spina bifida (opening in the 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 in early pregnancy might help lower 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/.

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

Based on the studies reviewed, valproic acid may increase the chance of low birth weight (weighing less than 5 pounds, 8 ounces at birth). There have been reports of temporary low blood sugar levels (hypoglycemia), and some temporary behavior changes in the newborns.

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

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. Some of the long term problems in the exposed children may be due to the how severe the seizure disorder is in the person who is pregnant.

**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?**

There are ways to screen for neural tube defects in pregnancy. A blood test can be done to measure the amount of a protein called alpha fetoprotein (AFP) in the blood of the person who is pregnant. Babies with spina bifida have higher levels of AFP. If the AFP is higher than usual in the blood test, more testing or screenings may be offered to you to find out 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. Talk with your healthcare provider about any prenatal screenings or testing that are available to you. There are no tests available during a pregnancy that can tell if there has been any effect on behavior or ability to learn.

**Breastfeeding while taking valproic acid:**

The amount of valproic acid that passes into breast milk is low. Valproic acid can be compatible with breastfeeding. There is concern that infants exposed to valproic acid through breast milk have a chance to have liver toxicity, so 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. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

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

Based on the studies reviewed, it is not known if valproic acid could affect fertility or increase the chance of birth defects above the background risk. In general, exposures that sperm donors or 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/.

Available pregnancy registries include:

- Europe and other continents: the EURAP Registry (International Registry of Antiepileptic Drugs and Pregnancy) https://eurapinternational.org/.
- Psychiatric medications: https://womensmentalhealth.org/clinical-and-research-programs/pregnancyregistry/.