

Seizure Disorders in Pregnancy



Most women who have a seizure disorder (also called epilepsy) and become pregnant have healthy babies. However, having a seizure disorder does put a woman at increased risk for problems during pregnancy. Women with a seizure disorder who want to have a baby should work with their doctors to get the special care they need before and during pregnancy. This pamphlet will tell you about:

- Care before you are pregnant
- Risks to the woman and her baby
- Treatment during pregnancy



Most women with a seizure disorder who become pregnant will have a healthy pregnancy and a healthy baby.



Seizure Disorders and Women

The nerve cells in the brain produce electrical signals that send messages throughout the body. These messages control the body's movements and functions. In a person with a seizure disorder, the normal pattern of these messages is disturbed. This can cause changes in behavior or sometimes muscle spasm or convulsions (seizures).

Hormones can have a major effect on seizure disorders. For women, this includes the sex hormones that control the reproductive system: **estrogen** and **progesterone**. Changes in the levels of these hormones can make seizures more or less likely. Some women will have changes in seizure patterns when hormone levels shift, such as during pregnancy or right after pregnancy.

Medications to treat seizure disorders are called antiepileptic drugs, or "antiseizure" drugs. In most cases, these drugs will prevent seizures all or most of the time. You may have to try more than one medication before you find the right one for you.

Preparing For Pregnancy

If you have a seizure disorder, preparing for pregnancy can improve your health and that of your future child. You should plan to see your doctor before getting pregnant to discuss your care. If you have not had a seizure in 2 or more years, it may be possible for you to stop the medication gradually. If your doctor does not recommend decreasing the

dose or stopping the medication, he or she may need to prescribe a different medication for you. Some medications are more harmful to the **fetus** than others, so you may need to switch to a different medication during pregnancy. However, the seizures are more harmful to the woman and her baby than any medication. Therefore, if you still



Folic Acid

Women should have 0.4 milligrams per day of folic acid before pregnancy and during the first 3 months of pregnancy to reduce the risk of having a baby with a birth defect. This is even more important for women with seizure disorders because of their increased risk. In addition to the vitamin supplement, folic acid can be found in many food sources:

- Dark, leafy greens and vegetables (such as spinach, collard and turnip greens, Romaine lettuce, broccoli, and asparagus)
- Whole-grain breads and cereals
- Citrus fruits and juices (such as strawberries, oranges, and orange juice)
- Organ meats (such as liver)
- Dried peas and beans (such as pinto, black, navy, and lima beans; chickpeas; and black-eyed peas)

get seizures, it is important to prevent them by using some kind of medication. Your ob-gyn will most likely discuss this with your neurologist (a doctor who specializes in disorders of the nervous system).

Antiepileptic drugs affect the way the body uses folic acid. Not having enough folic acid has been linked to problems during pregnancy and to certain birth defects. For this reason, all women of childbearing age should take 0.4 milligrams of folic acid each day—even if they are not planning a pregnancy. Taking folic acid before and during the first weeks of pregnancy may decrease the risk of these problems (see box above).

Effects During Pregnancy

Pregnancy can change the pattern of seizures and how the body reacts to antiepileptic drugs. For this reason, you should talk to your ob-gyn and neurologist to help you plan the best way to control your seizures without the risk of harming the baby with medications.

For most pregnant women, it may be better to keep taking medication than to risk having seizures during pregnancy. Seizures can harm not only the woman, but also her baby.

Risks for the Woman

How often you have a seizure may change when you become pregnant. Some women have seizures less often, some more often, especially if their medication is not closely monitored.

The amount of medication or the number of medications that are taken may need to change during pregnancy. This is because of hormone changes and changes in how the body processes medications during pregnancy. Blood tests may be done throughout the pregnancy to be sure the levels are constant. If levels are too high, it can lead to side effects. If levels are too low, it can lead to seizures.

Risks for the Baby

In all women, the risk of having a baby with a birth defect is 2–3%. For women with a seizure disorder, the risk is slightly higher—6–8%. This risk may be related to the disorder or to the medication used to treat it. Types of defects, along with other problems that may be caused by them, include:

- Cleft lip or palate (the lip or roof of the mouth is not completely closed)
- Heart defects
- **Neural tube defects** (such as **spina bifida**)
- Low birth weight (small baby)
- Small head
- Delays in growth and development
- Mental retardation
- Bleeding (blood-clotting) problems

Children of women with a seizure disorder also are at an increased risk for having a seizure disorder themselves.

Delivery

Most women with a seizure disorder are able to give birth to their babies vaginally. However, as in all women in labor, a cesarean delivery may be needed

because of problems that occur during labor or delivery.

Postpartum Care

After delivery, your medication may need to be adjusted again. You also may want to choose a method of birth control. Many antiepileptic drugs change hormone levels in a woman's body. This can affect how well birth control methods work. The use of some medications may make hormonal methods of birth control not work as well. In this case, you may need to change your method of birth control. Some women choose to use a barrier method (diaphragm, spermicide, or condoms) along with the hormonal method.

Just after birth, your baby will be given an injection of vitamin K to prevent any potential problems. This is because antiepileptic drugs lower the natural levels of vitamin K (the vitamin that helps with blood clotting) in the body.

Most women with a seizure disorder can breast-feed their babies. Antiepileptic drugs are found in small amounts in breast milk, but in most cases this is not enough to affect the baby.

Finally . . .

Most women with a seizure disorder who become pregnant will have a healthy pregnancy and a healthy baby. Good care before and during pregnancy is key. Working with doctors to maintain careful control of seizures is vital.

Glossary

Estrogen: A female hormone produced in the ovaries that stimulates the growth of the lining of the uterus.

Fetus: A baby growing in the woman's uterus.

Hormones: Substances produced by the body to control the functions of various organs.

Neural Tube Defects: Birth defects that result from improper development of the brain, spinal cord, or their coverings.

Progesterone: A female hormone that is produced in the ovaries and makes the lining of the uterus grow. When the level of progesterone decreases, menstruation occurs.

Spina Bifida: A neural tube defect that results from incomplete closure of the fetal spine.