



The American College of
Obstetricians and Gynecologists



FREQUENTLY ASKED QUESTIONS
FAQ129
PREGNANCY

Seizure Disorders in Pregnancy

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What is a seizure?

A seizure is a change in behavior or a muscle spasm or convulsion.

Why do seizures happen?

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 disruption can cause seizures.

What effects do hormones have on 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.

How can pregnancy change my seizures?

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.

The amount of medication or the number of medications that are taken may need to change during pregnancy. These changes may be necessary 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 that medication levels are constant. If levels are too high, it can lead to side effects. If levels are too low, it can lead to seizures.

If I have a seizure disorder, how can I prepare for pregnancy?

You should plan to see your health care provider 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 health care provider 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, seizures are more harmful to the woman and her baby than any medication. Therefore, if you still get seizures, it is important to prevent them by using some kind of medication.

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. Taking folic acid before and during the first weeks of pregnancy may decrease the risk of these problems (see the FAQ [Nutrition During Pregnancy](#)).

What is the chance for women with seizures of having a baby with a birth defect?

For women with a seizure disorder, the risk of having a baby with a birth defect is 6–8%, slightly higher than for women without seizure disorders (2–3%). 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 the following:

- 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 of having a seizure disorder themselves.

Will my baby need special care after birth?

Antiepileptic drugs lower the natural levels of vitamin K (the vitamin that helps with blood clotting) in the body. Just after birth, your baby will be given an injection of vitamin K to prevent potential problems caused by low vitamin K levels.

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

Will my medication change after I give birth?

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. These hormone changes can decrease the effectiveness of hormonal birth control methods. You may need to change your method of birth control. Some women choose to use a barrier method (diaphragm, spermicide, or condoms) along with a hormonal method.

Glossary

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

Fetus: The developing offspring in the uterus from the ninth week of pregnancy until the end of pregnancy.

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.

If you have further questions, contact your obstetrician–gynecologist.

FAQ129: Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to institution or type of practice, may be appropriate.

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