

Guidelines confirm safety of pregnancy in women who have epilepsy – with caveats

➔ Healthy women can expect an uneventful pregnancy and delivery, provided they avoid valproate and refrain from smoking

Janelle Yates,
Senior Editor

First-trimester exposure to the antiepileptic drug valproate increases the risk of major congenital malformation, particularly neural tube defects and facial clefts, according to recent guidelines developed by the American Academy of Neurology and the American Epilepsy Society.¹⁻³ The guidelines recommend that women who have epilepsy avoid taking valproate during pregnancy.

“Good evidence shows that valproate is linked to an increased risk for fetal malformations and decreased thinking skills in children, whether used by itself or with other medications,” said lead guideline author Cynthia Harden, MD, director of the Epilepsy Division at the University of Miami’s Miller School of Medicine and member of the American Academy of Neurology.

CONTINUED ON PAGE e2

**IN THIS
ARTICLE**

**The guidelines,
summarized
page e2**

BREAKING NEWS!

Presence of seizures in pregnancy elevates risk of preterm birth

Women with epilepsy who have seizures during pregnancy appear more likely to give birth to preterm, small, or low-birth-weight babies than women without epilepsy, according to a report by Chen and colleagues in the August issue of *Archives of Neurology*.

Some previous studies had reported a link between adverse pregnancy outcomes and a mother’s epilepsy, but others found no association, the authors note.

“Our study further illuminates these conflicting data to suggest that it is the seizures themselves that seem to contribute greatly to the increased risk of infants being delivered preterm, of low birth weight and small for gestational age. For women who remained seizure-free throughout pregnancy, null or mild risk was identified, compared with unaffected women,” the authors write.

View the study at <http://archneur.ama-assn.org/>.

The guidelines also suggest that, if at all possible, women who have epilepsy avoid taking more than one epilepsy drug at a time during pregnancy because the use of more than one antiseizure medication increases the risk of birth defects.

In addition, the guidelines recommend that physicians avoid prescribing the epilepsy drugs phenytoin and phenobarbital during pregnancy to lower the risk of diminished cognitive skills in children.

It is estimated that approximately 500,000 women of childbearing age in the United States have epilepsy, and that 3 to 5 of every 1,000 births are to women who have epilepsy. Most people who have epilepsy have well-controlled seizures and are otherwise healthy, said Harden.

Safe pregnancy is likely in women who have epilepsy

Aside from the risks associated with valproate, phenytoin, phenobarbital, and polytherapy, pregnancy in women who have epilepsy appears to be relatively safe.

“Overall, what we found should be very reassuring to every woman with epilepsy planning to become pregnant,” said Harden.

“These guidelines show that women with epilepsy are not at a substantially increased risk of having a cesarean section, late-pregnancy bleeding, or premature contractions or premature labor and delivery. Also, if a woman is seizure-free 9 months before she becomes pregnant, it’s likely that she will not have any seizures during the pregnancy.”

As a safeguard, measure blood levels of antiseizure drugs

Harden recommended that pregnant women who have epilepsy consider having their blood tested regularly.

“Levels of seizure medications in the blood tend to drop during pregnancy, so checking these levels and adjusting the medication doses should help to keep the levels in the effective range and the pregnant woman seizure-free.”

Guidelines cover range of issues

Here is a summary of the other main recommendations in the guidelines:

Avoid certain drugs; discourage smoking

- Besides avoiding valproate and antiepileptic drug polytherapy during the first trimester, women who have epilepsy should avoid these regimens throughout pregnancy to prevent adverse cognitive outcomes in the infant.
- Women who take antiepileptic drugs are probably at increased risk of a small-for-gestational-age baby and, possibly, delivering a newborn with an Apgar score below 7 at 1 minute.
- Women who have epilepsy and who smoke may increase the risk that they will develop premature contractions, premature labor, and premature delivery.

Monitor levels of some drugs

- Monitor levels of lamotrigine, carbamazepine, and phenytoin during pregnancy. Also monitor levels of levetiracetam and oxcarbazepine (a monohydroxy derivative). Blood levels of antiepileptic drugs tend to drop during pregnancy, and the dosage may need to be adjusted.

Seizure-free pregnancy is possible

- Counsel women who have epilepsy that remaining free from seizures for at least 9 months before pregnancy greatly increases the likelihood that they will remain seizure-free during pregnancy.

Folic acid may be beneficial

- Consider giving women who have epilepsy at least 0.4 mg of folic acid daily before they become pregnant, as it appears likely to lower the risk of major congenital malformation. It is unclear whether a higher daily dosage offers greater protective benefits.

Counsel the mother about breastfeeding concerns

- Women who have epilepsy and who




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choose to breastfeed should be counseled that primidone and levetiracetam probably pass into breast milk in significant amounts. In addition, gabapentin, lamotrigine, and topiramate may pass into breast milk in significant amounts. In contrast, valproate, phenobarbital, phenytoin, and carbamazepine probably do not pass into breast milk in clinically important amounts.

The guidelines were developed after a review of all scientific studies available on each topic and were published in the online issue of the journal *Epilepsia*. Their development was supported in part by the Milken Family Foundation.

“For too long, women living with epilepsy have feared the added risk of premature birth and other consequences of both their epilepsy and their medications,” said Howard R. Soule, PhD, chief science officer for the Milken Family Foundation. “The results

of this project will help relieve the worries of these women and their families.”

For more on the guidelines, visit the American Academy of Neurology Web site at: www.aan.com/index.cfm?axon=redirect&&path=/go/practice/guidelines. 

References

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