Anti-seizure medication and pregnancy

Most women with epilepsy have healthy and successful pregnancies. If you are pregnant, your neurologist may need to adjust your seizure control medication.

Do not change or stop your medication before consulting with them.

If you have epilepsy and are pregnant or are planning a pregnancy, you might be worried about how anti-seizure medications (ASMs) will affect your unborn baby. You might also be worried about your seizure control. Here is what you need to know.

ASMs and seizure control in pregnancy

Pregnancy is different for everyone, and there is no standard way to experience pregnancy if you have epilepsy. Some women have more seizures during their pregnancy, while others have fewer. Some women do not experience any changes to their seizure control at all. Your neurologist will work with you to create a personalised approach to managing your seizures during pregnancy.

Epilepsy Smart Australia

Continuing with your other seizure management activities will be important. Remember that you may need to factor in time for extra rest and sleep throughout your pregnancy. Factors that are related to your ASM treatment and may affect your seizure control during pregnancy include:

- sleep deprivation
- changes in the way ASMs are absorbed and work in your body
- weight gain
- changes in metabolism
- vomiting.

If any of these are worrying you, talk to your doctor right away.

ASMs and foetal development

It is normal to be worried about how your ASMs may affect your unborn baby. A lot of medical research exists on the effects of ASMs during pregnancy. We know from recent research that:

- Women on ASMs have a slightly higher risk (4-6%) of having babies with congenital malformation and birth defects than the rest of the population (2-3%).
- Some ASMs carry a higher risk of congenital malformation and birth defects than others.
- The dosage of certain ASMs can play a role in determining this risk.
- There have not been any significant findings to suggest that ASMs increase the likelihood of miscarriage or stillbirth; however, research in the area is limited.
- Valproate (Epilim, Valprease, Valpro) and Phenobarbitone are the ASMs that contribute to the highest risk of congenital malformation and birth defects, such as spina bifida. This risk changes according to the dose the woman is taking. Valproate has also been associated with effects on brain development, affecting the child's cognition (thinking) and behaviour (autism spectrum disorder).
- Various studies suggest that other ASMs, including Carbamazepine (Tegretol, Teril), Phenytoin (Dilantin) and Topiramate (Epiramax, Tamate, Topamax) may increase the risk of congenital malformations, but not to the extent that Valproate does, particularly at higher doses.
- Lamotrigine (Lamictal, Lamidus, Logem, Reedos) and Levetiracetam (Keppra) are the ASMs with minimal adverse effects on an unborn child when taken by a pregnant woman. During pregnancy, the body clears these medications quickly, and the dosage needs to be increased to maintain effectiveness. Blood tests to check your blood levels may be ordered during pregnancy by your neurologist.
- Taking a 5mg dose of folic acid as directed by your doctor may help protect against ASM-related congenital malformations and brain developmental problems.
- If you take ASMs, the foetus is at most risk of developing congenital malformations during the first trimester of pregnancy.

What kinds of problems can occur?

Valproate has been linked to neural tube defects such as spina bifida; however, there is little evidence to suggest a connection between any other ASM and specific congenital malformations or birth defects. The other most common defects include cardiorespiratory problems such as bulbus cordis, cleft palate, urogenital defects such as hypospadias, and having extra fingers or toes.

Management of ASMs during pregnancy

It can feel overwhelming to consider the risks associated with ASM use in pregnancy. However, it is important to note that most women (93%) with epilepsy experience successful pregnancies and have healthy babies. The best way to increase the chance of a healthy pregnancy is by planning your pregnancy with the support of your doctor before you try to get pregnant.

Pregnancy planning

If you are planning to have a baby, it is important that you:

- Keep taking your ASMs. Suddenly stopping your ASMs could increase the severity and how often you have seizures, which could harm you and your unborn baby. Your doctor may change your medication during pregnancy to protect the baby from any possible harm or provide better protection for you against seizures.
- Organise a consultation with your doctor or specialists as soon as you decide to consider pregnancy. Discuss the following at the appointment:
  - Your current level of seizure control.
  - Your current ASM treatment and if changes are needed before you get pregnant.
  - Taking folic acid. You may need to take a higher level of folic acid for a longer time.
  - Any risks related to your ASM treatment and how to manage these risks.

Other information

- If you are experiencing an unplanned pregnancy, organise an urgent appointment with your doctor to discuss your options.
- Try to stay in good health. Some considerations to manage your health include:
  - Be aware of your seizure triggers and avoid them by getting plenty of sleep and using coping strategies for any stress you may be feeling.
  - Take your ASMs as instructed by your doctor.
  - Eat a healthy diet to prevent excessive weight gain, which can affect the way your ASMs are absorbed.

Getting help

Pregnancy can be stressful, especially if you are worried about managing the risks between your ASM treatment, seizure control and having a healthy baby. Remember that support is available to you through your doctor or specialist. You can also access information and support through the National Epilepsy Support Service.

Other resources

The **Australian Pregnancy Register for Women on ASMs** can enrol you on their register if you are pregnant and interested in participating in research about these issues.

Phone: 1800 069 772
Web: www.neuroscience.org.au/australian-epilepsy-pregnancy-register

Epilepsy support

The National Epilepsy Support Service (NESS) is available Mon – Sat, 9:00am – 7:00pm (AEST) to provide support and information across Australia. Phone: 1300 761 487. Email: support@epilepsysmart.org.au

Lived experience

We recognise all people living with epilepsy and the impact it has on their lives. We take a moment to acknowledge the lived experience they have shared with us. In sharing their stories, we acknowledge the strength and resilience people living with epilepsy have shown in the face of not getting a fair go.

A medical note

The information contained in this publication provides general information about epilepsy. It does not provide specific advice. Specific health and medical advice should always be obtained from a qualified health professional.

Special thanks to Professor Terence O'Brien, Chair of Medicine and Head, The Central Clinical School, Monash University, and Program Director, Alfred Brain and Deputy Director of Research, Alfred Health, The Alfred Centre, for his pro bono support in reviewing this resource.

The Epilepsy Smart Australia Program received funding from the Australian Government.

Information provided in this document is for education and training purposes only and not for the provision of medical advice or clinical care. To the maximum extent permitted by law, the Epilepsy Foundation is not liable for any loss, damage, liability, cost or expense (including any legal cost and expense) arising directly or indirectly from the use of this information in connection with the provision of medical advice or clinical care.

This resource is CAL exempt. © Copyright Epilepsy Foundation, 2021.