

# Epilepsy and Childbearing

## PREGNANCY

### **What are the risks of anti-seizure medicines?**

Taking anti-seizure medicines in pregnancy increases the risk of congenital malformations (or birth defects) to approximately twice that of the people without epilepsy (4-6% instead of 2-3% risk). The commonest malformations involve the heart, penis, kidneys, extra fingers or toes, the bowel and the face (cleft lip or cleft palate) and spine (spina bifida). The most serious is spina bifida, where the spine does not develop normally and in severe cases, the child will be unable to walk or control their bladder. Some of these malformations can be helped by surgery. This risk is higher for certain anti-seizure medicines, in particular valproate. If you are on valproate, please see our separate document.

Higher malformation risks are associated with higher doses of anti-seizure medicines and are also higher with some combinations of anti-seizure medicines. Genes can also play a part. If you have had a previous baby born with a malformation or family history of malformations, you may have an increased risk.

Some anti-seizure medicines taken by the mother have also been associated with lower intelligence in their children. This has been shown with high doses of valproate and it is not yet known if other anti-seizure medicines can also do this. If you are on valproate, please see our separate document.

It is important to talk to your doctor about your anti-seizure medicines and the suggested dose BEFORE you plan on becoming pregnant.

### **Why should I continue my anti-seizure medicines?**

Tonic-clonic seizures during pregnancy may be more harmful than continuing anti-seizure medicines during pregnancy. Stopping medications increases your risk of seizures. This puts you at risk, particularly during the delivery, of all the dangers of a seizure, including sudden unexpected death in epilepsy (SUDEP). The risks to the unborn baby include injury should you fall during a seizure, premature labour and low birth weight.

With this in mind, it is critical to balance the correct dose of anti-seizure medicines with adequate seizure control.

### **Why should I take folic acid during the pregnancy?**

Folic acid is recommended to reduce the risk of malformations during pregnancy. It is recommended to take 0.5 to 1.0 mg folic acid/day three months before and during the pregnancy. If you are taking valproate, up to 5 mg/day is recommended.

### **What is the Australian Pregnancy Register?**

The Australian Pregnancy Register for Women on Anti-seizure medicines (APR) is a project that has been running for over 20 years to determine which anti-seizure medicines and doses are the safest for the baby while protecting the mother from seizures. It would be of great value if you could be involved in this register. You can contact the Australian Pregnancy Register directly on phone 1800 069 722 or if you provide permission, your treating doctor can give them your contact details.

### **What will happen to my seizures during pregnancy?**

Pregnancy has no consistent effect on epilepsy. If your seizures have been well controlled (no seizures for 1 year before falling pregnant) you are more likely to have a seizure-free pregnancy.

As your metabolism increases during the pregnancy, certain anti-seizure medicine blood levels fall (in particular, lamotrigine and levetiracetam). Your dosage of anti-seizure medicine may need to be increased during the pregnancy to maintain control of your seizures, and doctors may monitor your blood levels of your medications to help guide your dosing.

### **What should I avoid during pregnancy?**

It is important to have a healthy diet and get plenty of rest during your pregnancy. Avoidance of alcohol, smoking (including marijuana) and any illicit drugs is suggested during pregnancy to avoid potential harm to the foetus. If you need to take any medications, let your pharmacist know you are pregnant, so they can check if there are any known effects of the drug on the foetus.

## **THE BIRTH**

### **Do I need to have a Caesarean Section if I have epilepsy?**

Epilepsy is not a reason to have a “Caesarean” section and most women deliver vaginally. The method of delivery will be decided by you and your obstetrician. Generally, early pain relief, avoidance of a prolonged labour and as far as possible, limiting sleep deprivation are important factors to reduce the risk of seizures.

## **AFTER THE BIRTH**

### **What happens to the anti-seizure medicines after my baby is born?**

After delivery your drug metabolism will decrease again, and if you have increased your anti-seizure medicine doses during the pregnancy, your doctor will give you a planned reduction for the weeks after the birth, to avoid you experiencing side effects.

### **Can I breastfeed my baby?**

Breast feeding is encouraged in women with epilepsy who are taking anti-seizure medicines. Anti-seizure medicines pass into the breast milk and the amounts differ between different anti-seizure medicines. The concentrations are low and monitoring of the baby for excessive drowsiness or problems with feeding is suggested. Several studies have demonstrated that breast feeding while a mother is taking anti-seizure medicine does not have an adverse effect on brain development.

Sleep deprivation can be a consequence of breast feeding, which could provoke seizures, so it is important make sure you are getting enough sleep.

### **Can I still breastfeed my baby if they are born prematurely?**

If your baby is born prematurely, their liver and kidney functions are immature and less likely to break down the medications as quickly as a term baby, hence they may have higher drug levels for longer in their body. In this scenario discussions with your baby’s doctor are important. Expressing milk will ensure your supply remains good until your baby’s liver and kidneys have matured and their sucking matures enough for breast feeding, about 32 to 34 weeks in a normally developing preterm baby.

### **Can I drive after my baby is born?**

If you have a seizure during the delivery and have not had any seizures in the previous 12 months, legally you are not able to drive until you are on your stable pre-pregnancy anti-

seizure medicine dose (if your dose has been adjusted) and seizure-free for at least 1 month. This is defined as a provoked seizure from the pregnancy.

If you have a seizure during the delivery and have had any other seizures in the previous 12 months, then you are generally required to be seizure-free for at least 12 months before you are able to drive again. The standards used by the driver licensing authority to decide whether you can drive are set out in the current edition of Assessing Fitness to Drive (<http://www.austroads.com.au/drivers-vehicles/assessing-fitness-to-drive>).

### **What can I do to prevent seizures?**

It is crucial that you get enough sleep in the days and weeks after the birth, and getting extra help and support may be needed, as sleep deprivation can lower seizure threshold. It is important to also eat well, exercise regularly and take your anti-seizure medicines every day.

Expressing breastmilk and getting someone else to give an overnight bottle feed is recommended to improve the number of hours of sleep you get.

### **How can I keep my newborn safe in case I have a seizure?**

Try to have someone with you at least in the first few weeks. In general, do not bath your baby alone, or carry your baby in dangerous areas such as over stairs. Try to change nappies on the floor rather than a change-table to minimize the risk of the baby falling should you have a seizure.

More information can be obtained from Epilepsy Queensland ph 1300 852853 (Parents with epilepsy brochure) and Epilepsy Action ph 1300 374537 (Parenting with epilepsy brochure)

### **What is the risk my baby with have epilepsy?**

In general, the genetics are complex and many factors are involved. If you have generalised epilepsy the chance your child will develop epilepsy is only 1 in 12 and if you have focal epilepsy the chance your child will develop epilepsy is 1 in 50.

If you have a strong family history of epilepsy, it would be good to ask your neurologist about referral to a clinical geneticist for further discussions.