Epilepsy - Contraception / Pregnancy Issues

This leaflet provides some initial advice about contraception and pregnancy for women who have epilepsy. However, it is best to seek expert advice on these issues from a doctor or epilepsy nurse when you are planning to start using contraception or when considering starting a family. There are other leaflets in this series that give general information about epilepsy.


Contraception

Some anti-epilepsy medicines have a side-effect of increasing the speed in which some contraceptive pills and injections are processed by the liver. These medicines are known as liver enzyme inducers, as they speed up certain processes in the liver cells.

The following anti-epilepsy medicines are liver enzyme inducers:

- carbamazepine
- oxcarbazepine
- phenobarbital
- phenytoin
- primidone
- topiramate

The other anti-epilepsy medicines, including sodium valproate, lamotrigine and ethosuximide, are not liver enzyme inducers. If you are taking an anti-epilepsy medicine which is not a liver enzyme inducer then your contraceptive choices, doses, etc, are usually the same as for any other women. (However, see below about lamotrigine). See separate leaflet called ‘Contraceptive Choices’ for details of the options.

However, if you are taking an anti-epilepsy medicine that is a liver enzyme inducer, then the following is recommended:

- If you take the combined oral contraceptive pill (COCP) - the dose of the oestrogen part needs to be at least 50 micrograms, which is more than the usual dose. However, it is usually preferable to use alternative contraception, if possible.
- The progestogen-only contraceptive pill (POCP) is not recommended.
- Progestogen implants are not recommended.
- The combined transdermal contraceptive patch is not recommended.
- If you use emergency contraception tablets - the initial dose of levonorgestrel should be increased to 3 mg (you will need to take two tablets instead of one).
- The progestogen injection called Depo-Provera® does not interfere with liver enzyme-inducing medicines. You can continue with this in the usual way.

Note: using either barrier methods of contraception or having any type of coil inserted (including the intrauterine system, Mirena®) are usually the most suitable forms of contraception to consider if you are taking a liver enzyme-inducing medicine for your epilepsy.
Special consideration - lamotrigine and the pill
There is some evidence that the COCP (the pill) may interact with lamotrigine (Lamictal®) in some women. Lamotrigine is an anti-epilepsy medicine. It is not a liver enzyme inducer but may interact with the COCP in another way. The interaction may work both ways. That is, the lamotrigine may make the pill less effective and the pill may also make the lamotrigine less effective and increase your risk of seizures. Therefore, the doses of both medications may need to be adjusted.

It may be preferable to consider an alternative method of contraception if you are taking lamotrigine and need to use contraception.

Note: for reliable contraception, it is best to seek advice from a doctor or nurse. They will be able to tell you if your epilepsy treatment affects any methods of contraception.

Pregnancy

When you become pregnant you should register with the UK Epilepsy and Pregnancy Register (see below for contact details).

Most pregnant women with epilepsy have a normal pregnancy and childbirth.

The frequency of seizures may increase in pregnancy in around 3 in 10 women with epilepsy. For women with epilepsy, the risk of complications during pregnancy and labour is slightly higher than for women without epilepsy. The small increase in risk is due to the small risk of harm coming to a baby if you have a serious seizure whilst pregnant, and also the possible small risk of harm to an unborn baby from some anti-epilepsy medicines (discussed further below).

Note: the risk of complications to your unborn baby is greater with a seizure compared with the risk of not taking your epilepsy medication.

Risk from anti-epilepsy medicines

Until recently it was thought that if you take anti-epilepsy medicines when you are pregnant, you have a very small increased risk of having a baby with a birth defect. However, this may depend on exactly which medicine you take.

A large research study published in 2011 concluded that taking a newer anti-epilepsy medicine whilst pregnant - that is, lamotrigine, oxcarbazepine, topiramate, gabapentin, or levetiracetam - was not associated with an increased risk of having a baby with a major birth defect.

Previous research on older anti-epilepsy medicines - that is, phenobarbital, phenytoin, valproate, and carbamazepine - had shown that taking these during pregnancy gave a small increased risk of having a baby with a birth defect. For example, a small increased risk of having a baby with a neural tube defect (such as spina bifida), facial defects, congenital heart defects and hypospadias (a defect of the penis).

This study mentioned above followed up 1,532 Danish women who were taking one of these newer medicines and who had given birth. The rate of serious birth defects in children born was no different to the rate of the normal population. A research study such as this is reassuring and gives good evidence about the safety of these medicines during pregnancy. However, it does not guarantee that there is absolutely no risk. For example, this study mainly looked at the rate of serious birth defects such as neural tube defects (for example, spina bifida), facial defects, and congenital heart defects. It did not specifically look for less serious or more subtle possible problems. Further research would be welcome to confirm the safety of the newer anti-epilepsy medicines.
Before becoming pregnant
Before becoming pregnant, it is best to seek advice from your doctor or epilepsy nurse. You should be seen by an epilepsy expert to discuss your treatment during your pregnancy in detail. The potential risks and benefits of adjusting your treatment, if necessary, can be discussed. If your pregnancy is planned carefully then any risk of complications may be minimised.

Most of the advice is the same as for any other woman who is planning a pregnancy. (See separate leaflet called 'Pregnancy - Planning to Become Pregnant?'. For example, advice on diet, smoking, alcohol, avoiding infection, etc.)

However, other things that may be discussed include:

- In some cases it may be wise to change to a different medication which is less likely to cause harm to a developing baby (depending on the medication you are already taking).
- It may be an option to stop or reduce the dose of your treatment before you become pregnant if your seizures have been well controlled. However, deciding to come off anti-epilepsy medication can be a difficult decision. Factors such as the type of epilepsy that you have can be important. For example, if you have the type of epilepsy that causes severe tonic-clonic seizures, there is a risk that you could have a severe seizure when you are pregnant if you stop your medication.
- Advice to take folic acid at a strength of 5 mg a day. This should ideally be taken before you become pregnant and be continued until you are 12 weeks pregnant. Although folic acid is recommended for all women who are pregnant, the dose for women taking anti-epilepsy medicines is higher than usual. Taking folic acid has been shown to reduce the risk of having a baby born with a spinal cord problem such as spina bifida.
- Advice to notify your pregnancy to the UK Epilepsy and Pregnancy Register (see 'Further information', below). This is to allow information to be gathered to improve the future management of pregnant women with epilepsy.

Breast-feeding
Breast-feeding for most women taking anti-epilepsy medicines is generally safe. Your doctor, midwife or health visitor can advise you in more detail.

What are the risks that your child will also have epilepsy?
In general, the probability is low that a child born to a parent with epilepsy will also have epilepsy. However, it can partly depend on your family history, as some types of epilepsy run in families.

Therefore, genetic counselling may be an option to consider if you have, or your partner has, epilepsy and also a family history of epilepsy.

Further information
UK Epilepsy and Pregnancy Register
Helpline: 0800 389 1248 Web: www.epilepsyandpregnancy.co.uk/

Epilepsy Action
New Anstey House, Gateway Drive, Leeds, LS19 7XY
Helpline: 0808 800 5050 Web: www.epilepsy.org.uk

Epilepsy Society
Chesham Lane, Chalfont St Peter, Gerrards Cross, Bucks, SL9 0RJ
Helpline: 01494 601 400 Web: www.epilepsysociety.org.uk
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