

## Epilepsy and contraception

Women of child bearing age who are sexually active and taking antiepileptic medicine should be made aware that some medications can interfere with the effectiveness of the oral contraceptive pill.

Those who are seeking family planning advice should let the doctor or nurse know about the medication being taken so that appropriate advice can be given.



Some antiepileptic drugs can cause failure of hormonal contraceptives. The enzyme inducing antiepileptic drugs increase the rate at which the liver breaks down the contraceptive hormones.

These include:-

### Chemical Name

eslicarbazepine  
carbamazepine  
oxcarbazepine  
topiramate  
phenobarbitone  
phenytoin  
primidone  
rufinamide

### Trade Name

Zebinix®  
Tegretol®  
Trileptol®  
Topamax®  
  
Epanutin®  
Mysoline®  
Inovelon®

Some women taking an enzyme inducing drug choose to take a high dose of oral contraceptive while others choose another method of contraception.

A tell tale sign that the dose of oestrogen is not sufficient for reliable contraception

is breakthrough bleeding and such an event should be discussed as soon as possible with your doctor, nurse or family planning clinic. Barrier methods such as condoms should be used in the interim. It may be necessary to consider the use of emergency contraception.

Non enzyme inducing antiepileptic drugs do not have any effect on the oral contraceptive pill and include:-

### Chemical Name

clobazam  
retigabine  
ethosuximide  
piracetam  
sodium valproate  
vigabatrin  
clonazepam  
gabapentin  
levetiracetam  
pregabalin  
tiagabine

### Trade Name

Frisium®  
Trobalt®  
Zarontin®  
Nootropil®  
Epilim®  
Sabril®  
Rivotril®  
Neurontin®  
Keppra®  
Lyrica®  
Gabitril®

### Fertility

There is evidence available that women with epilepsy generally have fewer children than other women. Sometimes women with epilepsy, as a possible result of side effects of some antiepileptic drugs, have a menstrual irregularity called Polycystic Ovary Syndrome (PCOS) which is treatable but does make becoming pregnant more difficult. It is in fact a common condition which affects many women who have never had an epileptic seizure in their lives. There is some doubt, therefore, that there is a connection between epilepsy and PCOS but nevertheless those who are experiencing difficulty in conceiving should discuss the possibility of PCOS being the root cause of the problem.

### Planning a Pregnancy

Women planning a pregnancy within the next 12 -24 months should plan to optimise their seizure control.

Before stopping contraception they should have discussions with their doctor/nurse, relating to potential risks associated with their antiepileptic medication. These risks can relate to major foetal malformation ranging from malformation of the spinal cord and the spine (spina bifida) and cleft palate, through to minor unnoticeable malformations such as small fingers and toes.

### Genetic Inheritance

Those women who are planning a pregnancy, and particularly those who have generalised seizures without a known cause, or whose family members have a history of epilepsy, should seek advice about the chances of their children inheriting the condition. The evidence available indicates that the risk of a child having generalised epilepsy might increase from being 5% to 20% when only one parent has the condition, to over 20% when both parents are affected. The risks may be higher when there are many members of a family who have epilepsy.

### Menopause

Hormone replacement therapy (HRT) can be taken at the same time as antiepileptic medicine. Since some antiepileptic drugs might cause thinning of bones, the HRT can successfully counteract this. As well as taking HRT, many menopausal women take calcium and vitamin D to minimize loss of calcium in the bones.

The overall subject of HRT should be fully discussed with the GP.

Epilepsy can develop at any time in life and for some it may present itself coincidentally with the menopause.

Some women consider HRT to be a controversial treatment and prefer to use homoeopathic treatment, and one of the most popular is the use of evening primrose oil. Those who are taking antiepileptic medication and prefer this option should take medical advice before embarking on the treatment.

The combined oral contraceptive pill may interfere with the effectiveness of the non enzyme inducing drug lamotrigine (Lamictal®), resulting in possible break through seizures This is particularly important for women who are already taking lamotrigine who decide to start the oral contraceptive pill, in which case the dose of lamotrigine may need to be increased.

Barrier methods of contraception such as condoms, diaphragm, cap and sponge and the newly developed Mirena coil are not affected by any of the antiepileptic drugs.

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## Pregnancy

All should be aware that over 90% of women with epilepsy enjoy normal pregnancies and deliver perfectly healthy babies.

20% of women with epilepsy experience a decrease in seizures during pregnancy, 50% experience no change in seizure pattern and the remaining 30% experience an increase in seizures. For women who have become seizure free for 12 months before pregnancy, their chances of having a seizure becomes remote.

Non convulsive seizures pose no risk to the baby. Convulsive seizures of short duration and that do not involve a fall also pose no risk to the baby.

Sexually active women of childbearing age should take folic acid and should continue taking the preparation for at least the first three months of any pregnancy. The reason for this is that the risk of miscarriage and of foetal malformation is thought to be reduced by taking folic acid.

### Labour

Most women with epilepsy whose seizures remain active are very strongly advised to deliver in hospital.

The delivery of the child should not be different than that of other mothers other than there being a risk of a seizure occurring. Medication should be continued during the labour period, as missing medication increases the risk of seizures.

There is a 1% -2% chance of having a seizure during labour and so the risk is small.

Most babies are given vitamin K after delivery and this is particularly likely in the case of babies born to women who have been taking antiepileptic drugs. This is normal procedure.

### Breast feeding

The fact that the mother is taking antiepileptic medicine, although an obvious concern, should not be problematic as far as breast feeding goes.

There will be small traces of antiepileptic drugs in breast milk but this is not harmful to the vast majority of babies.



If, however, the baby being breastfed is very sleepy, is hard to wake or has a rash it could be that the mother will be advised to stop breast feeding and start with baby on formula milk.

Concerns about dropping the baby if a seizure occurs can be somewhat alleviated by sitting on the floor with the back to the wall and cushions positioned on either side. By doing this the baby will not have far to fall if the mother loses consciousness.

Breast feeding a hungry baby can be very tiring indeed and since tiredness is a well recognised trigger for seizures, time should be set aside for rest periods. If this becomes a real problem a possible solution is for the woman to express her breast milk using a breast pump and for a partner to feed the baby by bottle so that the mother is given the chance to rest.

### Bottle feeding

Feeding time can be very tiring and since tiredness is, as previously mentioned, a well known trigger for seizures a companion's help with feeding, especially during the night, can be hugely helpful.

### Bathing a baby

Bathing a baby is a most enjoyable experience for both mother and baby but when the mother is subject to transitory loss of consciousness there are obvious risks. Bathing a baby by oneself is a risk and it is advisable for mothers

with epilepsy to have somebody in support at baby's bath time. To lessen risk when alone it would be wise not to use a bath at all, but simply place the baby on a towel or changing mat on the floor and sponge down.



**Changing the baby**

The best option here is to change the baby's nappy with the baby lying in a cot or on a changing mat on the floor rather than on a raised table. The mother should kneel to the side so as to fall away from the baby if a seizure occurs.

### Carrying the baby

It is preferable that the mother does not carry the baby when she is alone especially if seizures are frequent and start with a loss of consciousness. When carrying the baby up or down stairs use a car seat so that the chance of injury to the baby is reduced.

### Outside the home

When out with a pram a good idea is to tie a length of cord from the wrist to the pram so that if a seizure does occur the pram will not run away out of control. The cord should be long enough to ensure that the pram is not pulled over. An alternative is to have a break fitted which comes on when the handle of the pram/pushchair is released.



Purpose made cords are readily available for purchase from high street stores

### Safety of medicines

Antiepileptic drugs, and indeed all drugs, should be safely locked away so that children have no access at any time.

### Hot drinks

The last thing anyone would want is for the baby or indeed the mother to be scalded by spillage of a hot liquid. It is, therefore, essential that hot drinks are kept at a safe distance when feeding or cuddling the baby.