

Women with epilepsy: Health Issues

Women of reproductive age who have epilepsy can have a number of specific concerns.

For instance, a young woman of eighteen with newly diagnosed epilepsy does not want to relinquish any of the 'normal' expectations of her age group. Ideally, she wants to be in control of her life and therefore wants her epilepsy completely controlled with suitable medication that is at both effective and free of adverse side effects.

She desires a career of her choice and to drive a car. She wants effective contraception and when ready, safe, uneventful pregnancies and healthy children. Is all of this possible?

The answers of course are many and varied, according to every woman's specific situation.

The woman with epilepsy may find it harder to achieve these goals than her sister who does not have epilepsy, but the goal of appropriate medical management is to maximize the potential achievement of all these goals.

This fact sheet will outline some broad general principles of management.

New diagnosis of epilepsy: Which antiepileptic drug?

The goal of epilepsy treatment is to completely prevent seizures, and this is achievable in about 70% of cases. The most appropriate drug for the specific type (or syndrome) of epilepsy should be used. Sometimes, an adverse or allergic reaction to the first medication prescribed occurs and then another antiepileptic drug (AED) is required.

As a general rule (and exceptions will occur), any AEDs can be used for focal epilepsies while sodium valproate, lamotrigine, topiramate, levetiracetam and perampanel are the AEDs used most often for the generalised epilepsies.

Unfortunately, valproate and to a lesser extent topiramate, have been shown to cause an increased risk of major malformations in developing babies.

Valproate may also cause learning difficulties and increase the risk of autism in children exposed to valproate in pregnancy.

*Therefore, valproate must
be avoided in women of
childbearing age.*

Levetiracetam and lamotrigine are better initial choices in women with generalised epilepsy. Only after other antiepileptic drugs have failed to be effective should valproate be considered. If valproate is absolutely essential to control seizures, then the lowest effective dose should be used.

Supplementary folic acid is advised to all women, especially those on AEDs and of childbearing age, to reduce risks of malformations. (Talk to your doctor about the dose but it's usually about 1mg /day).

Contraception and antiepileptic drugs

For women who want user-independent highly effective contraception, the Mirena intrauterine device may be the appropriate choice.

Oral Contraceptive Pills (OCPs) are effective for many women on AEDs as long as they are taken daily at the same time and are not forgotten. It is important to ask your doctor about any possible problems with the OCP and your AED because some AEDs may enhance the metabolic breakdown of the OCP and also may affect other implanted hormones such as Implanon or Depo-provera. This might increase the risk of an unexpected pregnancy. The AEDs with this disadvantage include phenytoin, carbamazepine, barbiturates and also topiramate and perampanel in higher doses. If these methods are used, your doctor may consider prescribing a higher oestrogen containing OCP. The use of an additional barrier contraceptive method will help to ensure contraception.

Some oral hormones can lower blood lamotrigine levels and may increase the risk of seizures.

Do antiepileptic drugs affect weight?

While there are reports of many AEDs tending to cause weight gain, sodium valproate is probably the most recognized. Topiramate may suppress appetite and induce weight loss.

The menstrual cycle and seizure patterns

Increased seizures around the time of the menstrual period are called Catamenial epilepsy. In some women, there are two peaks in seizure occurrence - one peak at the time of ovulation and another just before or during the menses. This occurs because of direct hormone effects on epilepsy and also the effects of cyclic hormones on AED metabolism.

Antiepileptic drugs and bone health

Phenytoin, carbamazepine and valproate can increase bone turnover which may lead to osteoporosis and increase risk of a bone fracture. Less is known about the new AEDs in this regard but they seem to be less problematic.

It is important to ensure that there is an adequate intake of dietary calcium and that Vitamin D levels (normally obtained from exposure to sunlight) are sufficient. If the Vitamin D level in the serum is low in women taking these AEDs, then consideration should be given to Vitamin D supplementation.

Special thanks to Drs. Cecilie Lander and Lata Vadlamudi for writing this fact sheet.

To be reviewed May 2022

Although every effort has been made to ensure accurate and up to date information is provided, Epilepsy Queensland and its advisors cannot accept any liability in relation to the information provided. It is strongly recommended that you discuss any information with your doctor.