Women with epilepsy: Health Issues

by Cecilie M. Lander

Women of reproductive age who have epilepsy 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 once 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 conception, 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 (syndrome) of epilepsy should be used. Sometimes, an adverse or allergic reactions to the first medication prescribed occurs and then another antiepileptic drug (AED) is used.

As a general rule (and exceptions will occur), any AEDs can be used for focal epilepsies while sodium valproate, lamotrigine, topiramate and levetiracetam are the AEDs used most often for the Genetic Generalized epilepsies.
Unfortunately, valproate and probably topiramate have been shown to have an increased risk of malformations in developing babies so where possible, lamotrigine and levetiracetam may be better initial choices in women. If valproate and topiramate are essential for the control of seizures, then the lowest effective dose should be used. If there is any possibility of an unexpected pregnancy, then it is a reasonable "insurance" for a woman to take a daily

contacting epilepsy queensland: phone 07 3435 5000 or 1300 852 853 (outside brisbane)
email services@epilepsyqueensland.com.au
mail po box 1457 coorparoo bc qld 4151

supplement of 0.5 -1mg /day of folic acid.

Contraception and antiepileptic drugs

AEDs which are hepatic 'enzyme inducers' may enhance the metabolic breakdown of Oral Contraceptive Pills (OCPs), and hence increase the risk of an unexpected pregnancy. These include phenytoin, carbamazepine, barbiturates and probably topiramate in higher doses. If these AEDs are used, then consider using a somewhat higher oestrogen containing OCP or use an alternative method or an additional barrier contraceptive method.

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 may enhance osteopenia which may, over time lead to osteoporosis. Less is known about the new AEDs in this regard.
In general however, the potential gain from the use of these drugs over a long period of time has outweighed the longer term bone risks. 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 Dr. Cecilie Lander for writing and updating this fact sheet.

To be reviewed May 2017