Women with epilepsy – Fertility

By Cecilie Lander

Most women with epilepsy will have little problem conceiving and producing a healthy child. It has been found that up to 30% of menstrual cycles in epileptic women are anovulatory; this is observed more often in focal (partial) epilepsies than in genetic generalized epilepsies and may be a cause of infertility.

Sodium valproate may occasionally be associated with an increased risk of polycystic ovaries; other reports indicate that polycystic ovaries may be found in up to 1 in 5 women with epilepsy regardless of the type of medication. For the most part, just having polycystic ovaries (PCO) is not necessarily associated with any symptoms at all. The more advanced condition of polycystic ovary syndrome (PCOS) is polycystic ovaries in conjunction with infertility, obesity, a tendency to diabetes and hyperlipidemia. Because of infertility and potential metabolic abnormalities, this is of greater concern. PCOS may be marginally increased in epileptic populations and is probably enhanced, at least in some women, by sodium valproate usage.

Uncontrolled epilepsy that causes tonic clonic generalized seizures may be associated with an increased risk of foetal loss including miscarriage and stillbirths. This is very high (30 - 50% foetal loss) if status epilepticus (continuing seizures, one after the other) occurs.

Antiepileptic medication, pregnancy and epilepsy

Planning Pregnancy

The possible effect of antiepileptic drugs (AED) on the development of the child is an important and complex subject. It is not possible to answer all the questions on this issue here because each AED carries different risks. Certain combinations of AEDS may also carry different risks. This is why it is very important to carefully consider all AED options and to establish the best seizure control on the safest AEDS before conception occurs.

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Antiepileptic Drugs and the Developing Child

The use of AEDs in pregnancy approximately doubles the 'normal population' risks of malformations in the child. The general population risk for foetal malformation is 2 - 3%, and the risk of foetal malformation for women with epilepsy on AEDS is in the order of 4-6%.

Data obtained from Pregnancy

Registers around the world have confirmed that sodium valproate used in pregnancy in high doses (>1000mg/day) carries an unacceptably high risk of malformations and that doses lower than this are also associated with higher risk. Other AED exposed pregnancies may also result in higher malformation risks with higher AED doses. However, these concerns need to be balanced with the need to adequately control the mother's seizures during pregnancy.

The Australian Pregnancy Register for Women on Antiepileptic

Medication

To discover the exact risk of each drug or drug combination on the developing baby is a difficult task. However the Australian Pregnancy Register has been established since 1999 for women on AEDS who are pregnant in order to answer this question. If you are a pregnant woman taking AEDs for any indication, please contact the Register. (Ph: 1800 069 722)

Monitoring through pregnancy

The obstetrician will regularly monitor the mother's health, the baby's development, arrange ultrasound scans at the appropriate times, and decide the most appropriate management of delivery. However the AEDs may need monitoring as well and so regular visits to the doctor treating the epilepsy are required. Some AEDs including phenytoin, lamotrigine and levetiracetam are metabolized more quickly during pregnancy and the doses may need to be increased in order to prevent seizures occurring during the pregnancy.

Breast feeding and Antiepileptic Drugs

AEDS are excreted into breast milk. However the amounts are usually small and the developing baby has been exposed to this AED throughout pregnancy. The research data to date suggests that in the great majority of cases, breast feeding is safe and can be recommended.

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