Pre conception

Pre conception counselling

Ideally pre conception counselling should be introduced as soon as a woman with epilepsy reaches childbearing age or at diagnosis for women whose epilepsy arises during the childbearing years. The introduction of the Adolescent Transition Clinic at Addenbrooke’s Hospital will also ensure that young girls with epilepsy are given appropriate and timely advice on contraception, preconception and pregnancy.

When should folic acid be introduced?

The UK Medical Research Council study found that 4mg per day of folic acid given pre conception protected the unborn from neural tube defects by 72%. So far no studies have specifically looked at the effect of folate supplementation in women taking anti epileptic medication. It is therefore recommended that folic acid 5mg daily be given to all women taking anti epileptic medication from at least 1 month prior to conception until at least the end of the first trimester to minimise the risk of congenital malformations.

When should contraception be stopped?

Women taking anti epileptic medication should be advised to use other non hormonal contraception while they wait for their menstrual cycle to establish itself. They should also be advised to introduce folic acid supplementation at the same time in order to reduce the risk on neural tube defects. Ideally at least one month should be allowed before trying to achieve a pregnancy, this also allows the minimum recommended time for pre conception folic acid supplementation.

Which patients require vitamin K?

All patients taking hepatic enzyme inducing anti epileptic medication should be given vitamin K 10mg daily starting from week 36 of gestation in order to reduce the risk of haemorrhagic disorders of the newborn. These anti epileptic medication include phenobarbitone, primidone, topiramate, carbamazepine, phenytoin and oxcarbazepine. This can be prescribed by the general practitioner, neurologist or obstetrician. The supplements should be discontinued immediately after delivery.
At what stage should change of medication be considered?

Ideally medication review should be considered during adolescence. However women should be encouraged to seek medical advice well before they start trying to achieve a pregnancy. Medication changes can be complex especially in those patients taking more than one AED. A referral to the Epilepsy team at least a year before the woman starts a family is ideal. In some cases, change of medication may not be necessary for example those patients who are well controlled on Lamotrigine or carbamazepine. The decision to change medication would depend on individual assessment of each patient. Changes to medication after conception provide very little benefit if at all.

Should anti epileptic (AEDs) medication be withdrawn before pregnancy?

AEDs should not be withdrawn during pregnancy as the risk of seizures and their consequences may be greater at this stage than the risk of birth defects. Referral to the pre conception clinic or the epilepsy in pregnancy clinic as the case may be would help to allay some of the fears women have about taking medication in pregnancy.

What are the chances of fetal abnormalities when taking AEDs?

There is a better than 95% chance that most women taking AEDs will have a perfectly normal baby. The risk of teratogenicity varies depending on the dose and the type of drug. Malformations range from hypospadias to spina bifida. Delay in mental development has also been noted particularly with Valproate. The table below illustrates the most recent findings from the UK epilepsy and pregnancy register 2005. The risk also depends on whether the patient is taking one drug or more AEDs. For example a patient taking lamotrigine alone runs a risk of 2-4% of birth defects. If Valproate is part of the treatment, the risk may increase by up to 10%.