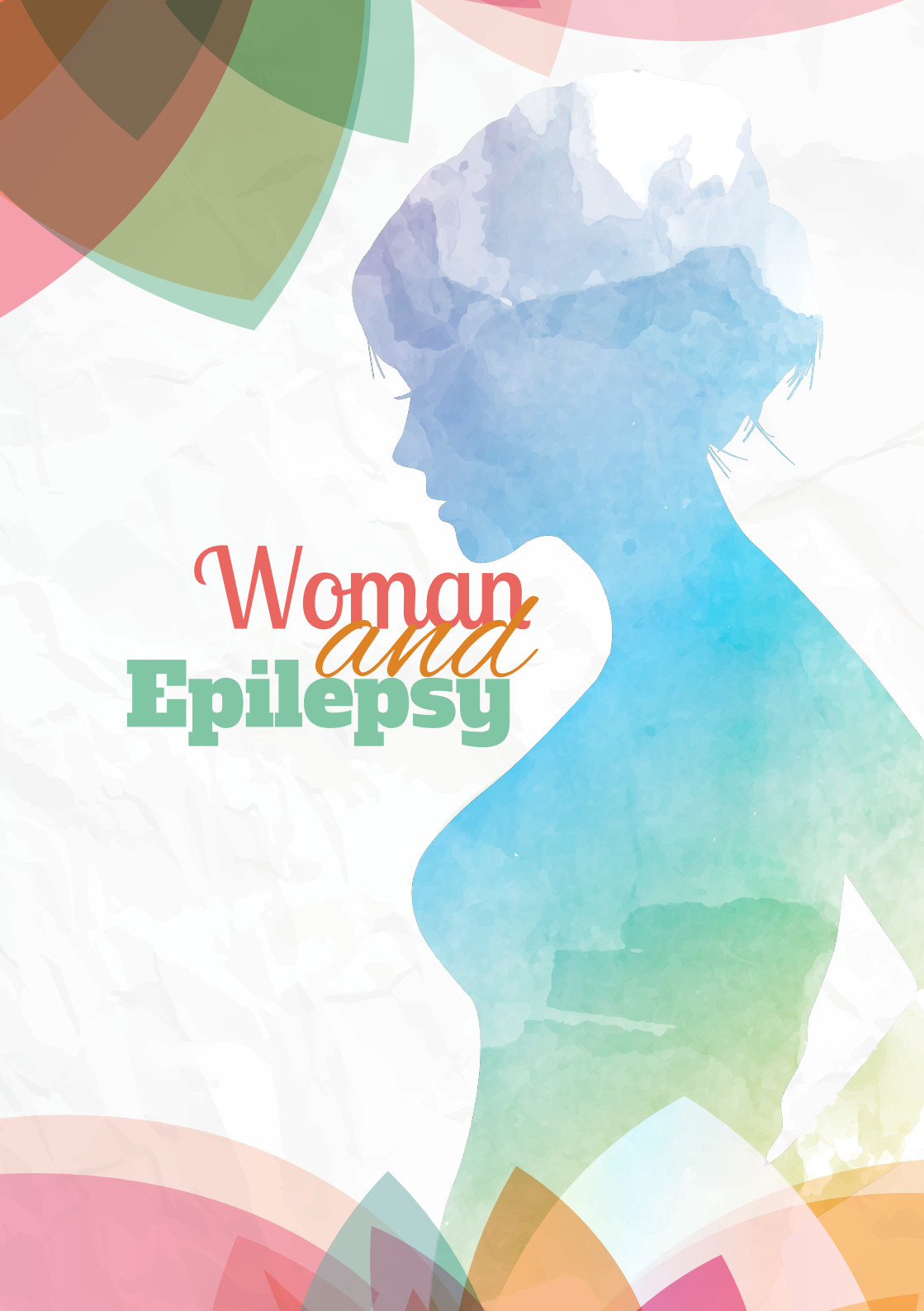
Woman
and
Epilepsy

Menstrual cycle, sexuality and fertility

Can epilepsy or the drugs I take for epilepsy make my menstrual cycle irregular?

Women with epilepsy report more frequent menstrual cycle irregularities. Both epilepsy itself and the drugs taken can contribute to this, in particular valproate. Menstrual irregularities could be associated with a higher rate of polycystic ovarian syndrome in women taking antiepileptic drugs, but this has not been confirmed by all studies.

Why do some women have seizures only or mostly during their menstrual period?

The female sexual hormones, estrogen and progesterone, affect the brain and its susceptibility to generate epileptic seizures. Blood concentrations of these hormones and their relations vary during the reproductive cycle and for this reason some women may experience seizures mainly or exclusively during their periods or on the preceding days. Less frequently, seizures can worsen or manifest exclusively in the period of ovulation.

Is there any medication I could take only during my menstrual period?

For some women with seizures well-controlled at other times and seizures that continue to show up during menstruation or in the preceding or following days despite therapy, add-on drugs can be used only on the most critical days. For this strategy to work, the menstrual cycle must be regular and the seizure trend highly predictable. The most commonly used drugs for this purpose are benzodiazepines like clobazam and the diuretic acetazolamide.

Do epilepsy and the antiepileptic drugs I am taking affect my sex life?

People with epilepsy report more frequent sexual disorders. It is not easy to separate the role of epilepsy itself from that of the drugs or psychological factors. However, some drugs that interfere with sex hormones in the liver have been implicated in a less satisfying sex life in men and women. In addition, drugs with a more "sedative" effect on the central nervous system may reduce libido. If you are experiencing reduced libido or sexual satisfaction, talk to your neurologist.

Does epilepsy affect fertility?

Some studies have shown that men and women with epilepsy become parents less frequently. A slight reduction in fertility may be due to a direct effect of the seizures or antiepileptic drugs on reproductive hormones, and to psychological and social factors. In addition, there are major differences related to the type of epilepsy and associated disorders, which may affect a couple's intention to become parents.

Can I use a hormonal contraceptive?

The combined (estroprogestinic) contraceptives interact in the liver with some antiepileptic drugs, namely phenobarbital, phenytoin, carbamazepine and oxcarbazepine at any dose, topiramate above 200 mg per day, perampanel starting from 10 mg per day. This causes a reduction in contraceptive efficacy. The same mechanism applies not only to the "pill", but also to transdermal patches and vaginal ring formulations. There are no contraindications for the use of these compounds for purposes other than contraception (e.g. endometriosis, menstrual irregularities). Similar considerations should also be made for progestin-only oral contraceptives. The latters are also slightly reduced by lamotrigine, an interaction which, however, is not considered relevant.

There is no interaction of antiepileptic drugs with the progestin-releasing intrauterine device ("coil").

The interaction between contraceptives and antiepileptic drugs may also be important in the other direction. Estroprogestinic therapy can modify the metabolism of lamotrigine, reducing its blood levels and consequently its effectiveness. On the other hand, since this mechanism starts and ends very quickly, if the dose is increased to counteract the reduced efficacy, overdose effects may occur in the week in which the contraceptive is periodically suspended. For this reason, concomitant administration is generally not recommended or should be monitored with great care.

Motherhood

I want a baby, will I have a difficult pregnancy?

In some but not all studies it has been found that women with epilepsy may have a slightly increased risk of some complications during pregnancy including hypertension, bleeding and preterm births. In most cases pregnancy is straightforward.

Should antiepileptic drugs be suspended when planning a pregnancy?

Only in rare cases can antiepileptic drugs be suspended when planning pregnancy, because the risk of seizures is generally greater than the risk associated with the drugs. In any case, drug discontinuation when the pregnancy has already started generally does not offer any advantages and abrupt interruption must be avoided because it is dangerous.

Will the drugs I take harm my child?

A slightly increased risk of congenital defects, i.e. defects present at birth, has been observed in babies exposed to certain antiepileptic drugs during the first trimester of pregnancy, especially if taken at high doses. In addition, an increased risk of behavioral disorders and delayed cognitive development has been observed for valproate. For these reasons, restrictions on the use of valproate in women have been issued by the European and national drug authorities. Other drugs, such as lamotrigine and levetiracetam, carry a very low risk, no higher than that of pregnant women who do not take them. Low doses are usually associated with a lower risk.

Will I have to change antiepileptic therapy before, during or after pregnancy?

Some therapeutic strategies can minimize the risk of fetal malformations while ensuring good seizure control for the mother.

As for all women, folic acid supplementation at least 2-3 months before conception and during the first trimester of pregnancy is highly recommended. When possible, and on the basis of medical judgment, it is a good idea to use a single antiepileptic drug, chosen among those with lower risk, at the minimum effective dose. The pregnancy should therefore be planned in advance with your neurologist, since any change in medication should be made before conception. When already pregnant, usually the safest solution is to continue the current therapy. In any case, your neurologist will evaluate and discuss the risks and benefits of any decision.

Plasma drug doses and any seizures should be regularly monitored during pregnancy. The metabolism of some antiepileptic drugs (in particular lamotrigine, oxcarbazepine, topiramate and levetiracetam) is modified during pregnancy and blood concentrations may be lower even with the same dose, thereby reducing antiepileptic protection. Your neurologist may then advise a dose increase, based on the results of the assays.

This dose increase does not correspond to a real increase in the dose reaching the brain or fetus, but is designed to counteract the greater "consumption" that takes place during pregnancy.
After pregnancy, if drug dose increases have been made, your neurologist will establish how to return to the doses taken before pregnancy, usually based on plasma drug monitoring, but also on your clinical and general status.

Will I have to carry out special tests during pregnancy?

Because some antiepileptic drugs undergo a change in metabolism during pregnancy, frequent plasma drug monitoring may be suggested to allow dose adjustments to be made based on any blood level changes.
Given the slightly increased risk of congenital defects in children exposed to antiepileptic drugs in utero, a second level "morphological" ultrasound examination is recommended between the 19th and 21st weeks of gestation. This is a more detailed scan undertaken in specialized centers by experienced staff.

Does the risk of epileptic seizures increase during pregnancy?

In most cases, seizures do not change their frequency during pregnancy and, in about 20% of cases, they may even decrease in frequency. However, seizure frequency may increase in between 15% and 20% of women. Sometimes the clinical worsening may be due to reduced antiepileptic drug blood levels. This is why your neurologist may increase the dose for preventive purposes even if no seizures occur.

Is there an increased risk of seizures during delivery?

Labor is not linked to an increased risk of seizures. However, a planned cesarean section may be recommended for women who have frequent seizures impairing awareness in the last month of pregnancy, because in rare cases, if a seizure occurs in labor, this can compromise your ability to collaborate and make an urgent cesarean section necessary. In order to avoid a seizure, it is essential that your drug is taken on the day of delivery as usual, even if a cesarean section is scheduled.

Must I have a cesarean section or will I be able to give birth naturally?

In most cases, natural delivery is recommended, preferably with epidural analgesia to reduce the stress of labor, if this is what the pregnant woman wants. Cesarean delivery is indicated only in those situations in which frequent seizures occur in the last month of pregnancy and could put the patient's collaboration at risk if they arise during labor.

In case of cesarean delivery, will I be able to have epidural anesthesia?

There are no specific indications for the type of anesthesia in case of cesarean section, nor contraindications to epidural anesthesia, which is therefore preferable to general anesthesia.

Will I be able to breastfeed my baby even if I am taking antiepileptic drugs?

Breastfeeding offers important benefits even for the babies of women taking antiepileptic drugs. There are rare cases of acute side-effects from exposure to medicines in breast milk, in particular drowsiness and difficulty attaching to the breast. Only in these cases, is it recommended to switch to mixed feeding, and, only if the problem persists, to artificial feeding.

Can the lack of sleep in the first months of the baby's life facilitate the occurrence of a seizure?

Yes. For this reason, after childbirth it is very important to have help from your family to feed the baby at night to make sure you can rest. Using a breast pump to store your milk in the fridge for night-time feeding, which can then be managed by your partner, can be a good strategy. It is also useful to have help during the day to be able to take a nap.

Will I be able to take care of the baby on my own during the day?

In general, yes. However, in the first months, especially if you do not sleep much and seizures occur, it is a good idea to avoid situations in which a loss of consciousness could put the child at risk. It is therefore advisable to bathe the baby in the company of another adult, change its diaper on low shelves or on the floor, use a pram rather than a baby carrier or support band. It is also good not to share a bed with the baby.

Will I have to have frequent neurological check-ups even after giving birth?

Normally this is not necessary, but your neurologist may require blood concentrations of antiepileptic drugs to be monitored if the dose was changed during pregnancy, to guide a return to previous values.

Will I transmit epilepsy to my child?

The probability of the children of a parent with epilepsy transmitting in disorder varies widely, as do the causes of epilepsy. For this reason an estimate is not always possible, but must be considered on a case-by-case basis. In general, the children of parents with epilepsy have a slightly increased risk of having epilepsy during their lifetime (4-6% more than the general population).

Menopause

During the menopause, will the seizure trend change?

The effects of menopause on seizures are not always predictable and seizures may increase, decrease or remain unchanged. Women who have always had a tendency to have seizures during their menstrual period may have an increase in seizures in the pre-menopausal phase, and then usually experience a reduction once the menopause has finally established itself.

I would like to take hormone replacement therapy, are there any contraindications?

There are no absolute contraindications to hormone replacement therapy (HRT), but it may be associated with a worsening of seizures in some circumstances, especially with high-dose formulations. In addition, blood levels of lamotrigine could be reduced by HRT, with the potential risk of seizure worsening. On the other hand, drugs such as carbamazepine, oxcarbazepine, phenobarbital and phenytoin can lower the concentration of hormones used, reducing their effectiveness. In any case, HRT should be carefully considered and any specific indication given by both your gynecologist and neurologist, working together.

Is there a higher risk of osteoporosis because of the disease or the drugs I take?

The risk of osteoporosis is two-threefold increased in people with epilepsy, possibly also in relation to the use of certain drugs.

Are there any special recommendations for bone health in people with epilepsy?

In general, the recommendations are those that apply to everyone: a balanced diet rich in calcium and vitamin D, ideal weight maintenance, regular physical activity, possibly outdoors, avoiding alcohol and smoking. If you take certain medications, such as carbamazepine, oxcarbazepine, phenytoin or phenobarbital, which may interact with vitamin D, your neurologist may recommend periodic checks of calcium, vitamin D, alkaline phosphatase, osteocalcin and bone densitometry after the menopause.

Woman and Epilepsy

Report of the
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