Top Tips

- Epilepsy can be affected by hormone changes during perimenopause.
- Maintaining a healthy lifestyle with regular exercise and a balanced diet is essential for managing epilepsy and menopause.
- Try to avoid triggers that can provoke seizures, such as not getting enough sleep and drinking large amounts of alcohol.
- You can take HRT if you have epilepsy, but your epilepsy should be monitored when you start or make changes to your HRT, in case your antiepileptic drugs need to be adjusted.
- Women with epilepsy are recommended to use estrogen delivered through the skin (as a patch, gel or spray) rather than tablets. This gives steadier levels of estrogen in the body.
- Unless you have had a hysterectomy, you also need to take progestogen. Body identical progesterone, available as a capsule taken by mouth, might have specific benefits for epilepsy but more research is needed.
- Be wary of trying over-the-counter herbal treatments or supplements to manage menopause symptoms as some of them can interact with epilepsy medication.

What is epilepsy?
Epilepsy is a condition that affects the brain, causing repeated seizures. Epilepsy can start at any age and there are lots of different types. Many people never find out the cause of their epilepsy, but some known causes include: a head injury, brain damage at birth or your genes. Certain things can make seizures more likely for some people with epilepsy. These are often called ‘triggers’. Triggers for seizures are different for each person but the most common ones reported are stress, lack of sleep, and tiredness.

Around 40% of women with epilepsy have more seizures at certain times in their monthly period cycle, particularly just before or during the first days of their menstrual bleed. This is known as ‘catamenial’ epilepsy. It is thought that different levels of hormones in the body at certain times of the month are responsible for this.

What is menopause?
The menopause is a normal phase in a woman’s life when a woman stops having natural periods, marking the end of her reproductive years. In the UK, most women reach the menopause between the ages of 45 and 55 years, with the average age being 51. During the perimenopause, which is the transitional phase leading up to menopause, you may notice changes in your monthly cycle, with periods initially becoming more frequent and heavier. As you get closer to the menopause your periods may happen less often.

Perimenopause can cause many troubling symptoms, such as hot flushes, night sweats, anxiety, trouble sleeping and more frequent migraine. These symptoms usually settle a few years after the menopause.

Following menopause, the protection that estrogen gives to keep the heart healthy and bones strong is lost, increasing the chances of heart attacks, strokes and fractures.
Does epilepsy affect the menopause?
Research suggests that women with frequent seizures reach menopause around 3-5 years earlier than average. An early menopause increases the risk of heart disease and fractures, compared with women going through menopause at the average age. Some epilepsy medicines can also weaken bones which further increases the chance of fractures. A bone density scan (DEXA) can check the strength of your bones.

You can improve heart and bone health with exercise and a healthy diet. Your bones also need safe exposure to sunlight to boost Vitamin D and keep them healthy. Correcting vitamin D deficiency is particularly important for women with epilepsy since some antiepileptic drugs can interfere with how the body processes vitamin D. If you are not already taking a supplement, speak to your healthcare professional about having your vitamin D levels checked. Dietary calcium is also necessary for healthy bones so if your diet is low in calcium you may need to take a supplement. Further information on bone health is available on the Royal Osteoporosis Society website.

Does the menopause affect epilepsy?
For many women with epilepsy, perimenopause and menopause appear to have no significant effect on seizure patterns. However, women with catamenial epilepsy often have more seizures during perimenopause with gradual improvement over time as they reach the post menopause phase.

Maintaining a healthy lifestyle is essential for managing both epilepsy and menopause. Regular exercise, trying to reduce your stress levels, getting enough sleep, and having a balanced diet can all help with your overall well-being and avoiding seizure triggers.

What is hormone replacement therapy (HRT)?
HRT is a hormone treatment prescribed to control menopause symptoms.

HRT comes in many different forms. If you have had an operation to remove your womb (hysterectomy), you can take estrogen on its own. The estrogen is structurally the same as the estrogen produced by the ovaries (body identical). It is available as a daily tablet, taken by mouth, but can be given through the skin in the form of a gel or spray used daily or as a patch replaced once or twice a week. This is known as transdermal estrogen, and it mimics the natural delivery of estrogen from the ovaries.

Estrogen replacement causes the lining of the womb to thicken. Unless you have had a hysterectomy, you will need to take progestogen, to keep the womb lining thin.

Most HRT uses synthetic progestogen as tablets to be taken in conjunction with estrogen, combined with estrogen in a single tablet, or in a skin patch, changed once or twice weekly. Progestogen is also available in the form of a small T-shaped device that is placed directly into the womb, known as a hormonal IUD. The hormonal IUD has advantages for women during the perimenopause as it can treat heavy periods and provide effective contraception, as well as keeping the womb lining thin and protecting against womb cancer. Body identical progesterone is also an option, available as a capsule taken by mouth or combined in a tablet with estrogen. For further information see the WHC factsheet HRT: Types, doses and regimens.

Why take HRT?
Some women take HRT just for a few years when menopause symptoms are troublesome. HRT can also benefit heart and bone health, reducing the risk of fractures in later life. This is particularly important if you have an early menopause or are taking anti-seizure medications that are known to affect bone health.
Weight gain and menopause

In all cases, the benefits of taking HRT must be balanced against any potential risks such as breast cancer, which will be different for each person. For further information see the WHC factsheet *HRT: Benefits and risks*.

**Does HRT affect epilepsy?**

Very little research has been undertaken on HRT in women with epilepsy. The only information from clinical trials was with older types of HRT. The trials used tablets of conjugated equine estrogen that is rarely prescribed now, together with tablets containing a synthetic progestogen, medroxyprogesterone acetate. The results suggested that this older type of HRT increased seizure frequency.

HRT prescribed nowadays is very different, containing body identical estrogen and progestogen. It is likely that these newer types of HRT have less effect on seizures from the old types of HRT, but we need research to confirm this.

Whether the increase in seizure frequency is the effect of the estrogen, or the effect of the progestogen, is unclear as there is so little research. In general, estrogen is considered to increase the risk of seizures. In contrast, studies suggest that body identical progesterone may have antiseizure effects by increasing the effects of the brain chemical gamma-aminobutyric acid (GABA). This has a calming effect on the brain.

**Does HRT interact with my epilepsy medicines?**

Certain antiepileptic drugs can interact with HRT, reducing the level of hormones which makes the HRT less effective in the usual doses. You can still take HRT, but you may need a slightly higher dose of HRT to relieve your menopause symptoms.

Drugs that can reduce the effects of HRT include carbamazepine, cenobamate, eslicarbazepine, fosphenytoin, oxcarbazepine, perampanel, phenobarbital, phenytoin, primidone, rufinamide and topiramate. This effect is more likely with oral HRT than transdermal.

Antiepileptic drugs that do not affect HRT include brivacetam, clonazepam, ethosuximide, fenfluramine, gabapentin, lacosamide, lamotrigine, levetiracetam, pregabalin, tiagabine, sodium valproate, stiripentol, vigabatrin and zonisamide.

This list is not exhaustive, and you should check with your healthcare professional about potential interactions between HRT and your antiepileptic medication.

**A note about lamotrigine**

Although lamotrigine does not affect the levels of HRT, HRT can decrease blood levels of lamotrigine. This is important if you are already taking lamotrigine when you start HRT, as it may result in poorer epilepsy control. This does not mean that you can’t take HRT if you are taking lamotrigine – a small adjustment to the lamotrigine dose is all that is needed. There is no problem starting lamotrigine if you are already taking HRT as the dose of lamotrigine will be adjusted to provide the best seizure control. In both cases, if you stop HRT, the lamotrigine dose may need to be slightly reduced.

**So, can I take HRT if I have epilepsy?**

If you have menopause symptoms that might benefit from HRT, epilepsy is not a reason to avoid HRT. To minimise any potential adverse effects of HRT on epilepsy, transdermal estrogen is recommended, together with body identical progesterone. You should start with a low dose and increase the dose until you reach the lowest dose that controls your menopause symptoms. Your epilepsy doctor will need to know that you are starting HRT in order to monitor your seizures and manage any changes in your medication.

**What if I can’t take HRT?**

HRT isn’t right for every woman. Some women choose not to take HRT and some women living with breast cancer or other hormone dependent cancers are advised not to take HRT. Neither do all women need HRT and some can manage their symptoms with diet and lifestyle changes. Weight bearing exercise and making sure you have enough calcium and vitamin D3 are particularly important for...
women with epilepsy at increased risk of osteoporosis. Be wary of trying over-the-counter herbal treatments or supplements to manage menopause symptoms as some of them can interact with epilepsy medication.

Non-medical management options such as cognitive behavioural therapy can be effective for menopause symptoms, and non-hormonal drugs are available on prescription. For further information see the WHC factsheet Complementary & alternative therapies – Non hormonal treatments for menopause symptoms and Cognitive Behaviour Therapy (CBT) for Menopause Symptoms.

What about vaginal hormones?
Vaginal hormones are useful to help control vaginal and urinary symptoms related to menopause, irrespective of whether women are using HRT. Symptoms include vaginal dryness and pain as well as urinary urgency and recurrent urinary infections. Vaginal preparations are available as vaginal tablets, pessaries, creams or gels. Most of them contain estrogen. They act locally in the womb with minimal amounts of hormone reaching the blood stream. Many women who cannot take HRT, or who only have vaginal symptoms, can use vaginal hormones without affecting seizures. For further information see the WHC factsheet Vaginal dryness.

Please note, this fact sheet is for information purposes only and should not replace professional medical advice. You should consult your healthcare professional for personalised guidance and recommendations regarding epilepsy and menopause management.

Resources
Epilepsy Action
www.epilepsy.org.uk

Women’s Health Concern factsheets
www.womens-health-concern.org/help-and-advice/factsheets/
HRT: Types, doses and regimens
HRT: Benefits and risks
Complementary and alternative therapies
Cognitive Behaviour Therapy (CBT) for Menopause Symptoms
Vaginal dryness

Royal Osteoporosis Society
theros.org.uk

Driving and epilepsy
www.gov.uk/epilepsy-and-driving

Author: Professor Anne MacGregor in collaboration with the medical advisory council of the British Menopause Society

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