

# Migraine and HRT

## What is the menopause?

In medical terms, 'menopause' is defined by a woman's last natural period. However, periods become irregular and hot flushes occur several years before this. Headaches are common during this time, affecting over 90% of women.

## What is likely to happen to migraine?

Migraine tends to worsen in the years leading up to the menopause, with attacks occurring more frequently and sometimes also lasting longer. Many women start to notice that the attacks are more likely to start a few days before or during their periods. These perimenstrual migraine attacks often last longer, are more severe, and are less responsive to treatment compared to attacks at other times of the cycle. Periods can become erratic and more frequent, which also means more migraine.

Following menopause, migraine becomes less of a problem, particularly in women who have noticed a strong link between migraine and hormonal triggers. It is not an immediate improvement as it takes a while after your last period for the hormones to settle.

## Why does it get worse?

The main reason for worsening migraine during menopause is the fluctuation of estrogen. This is also responsible for initial worsening of migraine at puberty, as it can take a few years for the hormones to reach the settled pattern of the menstrual cycle.

From late teens to mid 30s, most women have a regular pattern of menstrual cycle hormones. For some women, the natural drop in estrogen that occurs around menstruation and during the pill-free week of oral contraception, can trigger migraine. Others find that heavy, painful periods are linked to migraine.

From early 40s, the menstrual cycle can become more erratic, with much more variable fluctuation in estrogen levels. Periods themselves can be more troublesome, with more pain and heavier bleeding. All these factors can make migraine more likely.

As periods lessen, so the hormonal trigger for migraine lessens, which is why many women find migraine improves after the menopause.

## Can HRT help?

Many women notice that migraine is more likely to occur when they have bad hot flushes and night sweats. Since HRT is very effective at controlling these menopause symptoms, it may help reduce the likelihood of migraine but is not in itself an effective migraine treatment. Further, if started too early in the perimenopause when estrogen levels can fluctuate widely, the addition of HRT can worsen migraine.

The type of HRT is important as some forms of HRT can create more hormone fluctuations, triggering migraine. This is more likely to occur with oral HRT than with patches or gel. We generally recommend that women with migraine who need HRT should use estrogen patches, gel or spray, known as transdermal estrogen, as these provide more stable hormone levels than tablets.

This does not mean that women with migraine can't use HRT tablets. Every woman is different, and tablets may suit some women better than transdermal HRT. The best dose of estrogen is the lowest dose necessary to control flushes and sweats. There is no benefit in using higher doses as too much estrogen can cause headache and migraine. It can take 3 months before full benefit is achieved, so don't increase the dose too quickly.

Unless a woman has had a hysterectomy, she will also need progestogens to protect the lining of the womb from thickening in response to estrogen, which could otherwise result in womb cancer. Progestogen is available combined with estrogen in tablets and patches, or separately either as tablets or capsules. The hormonal intrauterine device (IUD) is another option, releasing progestogen directly into the womb. Micronised progesterone may have some advantage for migraine over synthetic progestogens as, if taken by mouth, it enhances the activity of the brain chemical GABA thought to be involved in migraine. However, research to confirm this potential benefit is lacking.

There is no research regarding the effects of testosterone gel on migraine.

### **I have migraine aura. Can I take HRT?**

Yes. Unlike combined oral contraception, which is contraindicated for women with migraine aura, HRT uses natural estrogen producing similar levels to the estrogen produced by your body during your menstrual cycle. Hence women with aura can take any form of HRT.

However, aura can worsen or occur for the first time after starting HRT. This is more likely to occur with oral estrogen than with transdermal estrogen. Consequently, if you have aura the recommended initial form of HRT is transdermal estrogen in the lowest effective dose to control flushes and sweats. This is because the transdermal route generally provides more stable hormone levels than taking estrogen by mouth.

### **Can I use a hormonal intrauterine device (IUD)?**

The hormonal IUD is a small T-shaped device placed into the womb which can be used for contraception, to control heavy/painful periods, and to act as the progestogen component of HRT. It is usually replaced after five years if used for HRT. By being placed within the womb, very little hormone reaches the rest of the body. This means that side-effects are generally very few.

Many women find that their periods become very light or stop completely while they are using a hormonal IUD. If migraine was linked to troublesome periods, reducing the bleeding with a hormonal IUD can help to prevent migraine at this time.

### **I'm still having periods. Should I take cyclical HRT?**

If you are still having natural periods, it is usually advisable to take cyclical HRT until menopause. Cyclical HRT aims to restore a regular monthly bleed with a combination of estrogen taken continuously and a progestogen taken for two out of every four weeks. A bleed usually occurs towards the end of the progestogen course, or a couple of days after finishing. Once your natural periods have stopped, you can switch to a period-free continuous combined regimen.

The reason for not using a continuous regimen before the menopause is that it can cause irregular bleeding, which might prompt unnecessary investigations. However, some women with migraine are sensitive to the hormone fluctuations of cyclical combined HRT and it may be appropriate for them to use a continuous combined HRT, taking progestogen continuously. Because HRT does not override your natural menstrual cycle, your periods will still occur until the natural menopause. An option is to use an intrauterine system. This has the advantage of controlling menstrual bleeding which can itself benefit migraine.

### **My periods stopped four years ago. Why do I still get migraine?**

Even though your periods have stopped, it can take a few years for the hormone fluctuations to completely settle. This means that you can still have hormonal migraine for several years after your last menstrual period. In most cases this is just a couple of years, although some women find that they still get hot flushes and migraine ten or more years after the menopause.

.....  
This fact sheet has been prepared by Women's Health Concern and reviewed by the medical advisory council of the British Menopause Society. It is for your information and advice and should be used in consultation with your own medical practitioner.

Once hormonal triggers have settled, non-hormonal triggers will still be present and may even increase post menopause. Chronic medical conditions, while not directly triggering migraine, will make migraine more likely to occur as they generally lower the migraine threshold. Maintaining good migraine 'habits' – regular meals, regular exercise, a good sleep routine, balancing triggers and looking after your general health – are all as important after the menopause as before.

### Should I have a hysterectomy?

It is reasonable to think that removing the ovaries could resolve the hormone trigger for migraine. However, the natural menstrual cycle is complex and it is controlled by an organ in the brain, the hypothalamus, which regulates the production of the hormones estrogen and progesterone by the ovaries. The hypothalamus also has a predominant role in generating migraine attacks.

The published data all suggest that hysterectomy, with or without removal of the ovaries, can worsen migraine. If the womb and ovaries are removed, the hormone cycle is disrupted, and the brain hormones initially go into 'overdrive' as they are not prepared for this early menopause. This can result in initial worsening migraine, although this usually settles over the subsequent couple of years of its own accord.

For women with migraine needing surgery for other gynaecological conditions, this effect can be mitigated with estrogen replacement, particularly if the ovaries have been removed.

### What if I can't take estrogen?

If you are overweight, weight loss and regular exercise benefit both migraine and menopause symptoms.

Non-hormonal alternatives include escitalopram and venlafaxine. These drugs act on the chemical messenger serotonin, which is implicated in both migraine and hot flushes.

### What about vaginal estrogen?

Vaginal estrogen is 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 estrogens may cause a temporary increase in migraine during the first couple of weeks but this quickly settles. There is no evidence that vaginal estrogens are a trigger for migraine with long-term use.

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

REVIEWED: NOVEMBER 2023  
NEXT REVIEW DATE: NOVEMBER 2026



**Women's Health Concern is the patient arm of the BMS.**  
We provide an independent service to advise, reassure and educate women of all ages about their health, wellbeing and lifestyle concerns.

Go to [www.womens-health-concern.org](http://www.womens-health-concern.org)

