





Perimenopause, menopause and pain

This factsheet is written by Dr Lucy Ward, Consultant in Pain Management, at the Royal Free Hospital in London with contributions from Dr Selina Dunn, GP, and Rowanne Eeles pain specialist physiotherapist.

Pain, muscle aches and stiffness in the joints are extremely common symptoms during the perimenopause, menopause and beyond, which can be due to the lack of hormones estrogen and testosterone.

This factsheet explains more about this and describes what can be done to improve these troublesome symptoms.

Perimenopause and menopause

Perimenopause describes the time of life when your periods begin to change and you start to have one or more menopausal symptoms. The hormone change is usually triggered by your ovaries slowing down and producing less hormones. Perimenopause is often characterised by significant fluctuations in your hormone levels, in particular estrogen, progesterone and testosterone and then, over time, a drop in hormone levels that stays low forever if no treatment is taken. The perimenopause can last for up to 10 years before your periods stop altogether and it most commonly occurs in a woman's 40s.

The menopause is medically determined when it has been 12 months since your last period. On average this happens at 51 years, but it can happen many years before this for many women, either naturally or induced by surgery or medical treatments.

Perimenopausal and menopausal symptoms

There are numerous changes that happen in your body during the perimenopause and menopause because of the reduction in estrogen and testosterone levels. There are receptors for these hormones in every cell throughout your body, meaning that a drop in levels can affect all systems in your body.

Everyone born with ovaries will go through the menopause at some point. 80% of women will have symptoms, and 25% will unfortunately have severe symptoms that have a negative impact on their life. It is therefore important that symptoms of the perimenopause and menopause are recognised and treated appropriately. Living with debilitating symptoms is not something you have to endure or just put up with as part of getting older.

Perimenopause, menopause and pain

Some of the common symptoms of the perimenopause and menopause are painful, and appear very similar to musculoskeletal pain or symptoms of fibromyalgia.

For example:

muscle and joint aches and pains reduced muscle strength

joint stiffness low stamina

joint swelling pins and needles

fatigue poor sleep

brain fog irritable bowel symptoms

anxiety and depression bladder problems

flat mood weight gain

loss of self confidence increased inflammation

increase in migraine attacks

If you already have a long term pain condition, the changes in hormone levels at the time of your perimenopause and menopause may also increase your sensitivity to pain. It may also worsen sleep, cause an increase in weight and lead to mood changes that can all be associated with a worse quality of life – especially if you are already living with chronic pain.

As well these symptoms, the menopause brings risk to your future health. A lack of estrogen contributes to a loss of bone density (strength) and the related disease osteoporosis. Research also shows there is an increased risk of heart disease, type 2 diabetes, autoimmune and inflammatory conditions, clinical depression and dementia after the menopause (if left untreated). Early and prompt treatment with hormones, in the form of HRT, can reduce the risk of these conditions occurring in the future.

Helping your perimenopause and menopause

During the perimenopause and menopause – as well as when suffering with long term pain – it is really important to look at your lifestyle and make healthier choices regarding your diet, activity levels, your sleeping habits and your stress levels. This can improve some of your menopausal symptoms and can also help with managing your pain.

Healthier choices include:

Eat a Mediterranean style diet with lots of plant-based foods: a wide variety of vegetables and fruit, wholegrains, nuts and seeds, beans and pulses and fermented foods, and reduce the amount of processed foods, meat, fish, dairy, eggs and sugar.

Keep as active as your pain allows and do exercise that you enjoy. An achievable regular amount of exercise is better than overdoing it and having to stop (see the 3 P's).

Reduce alcohol and smoking - these can actually make pain and menopausal symptoms worse.

Keep on top of stress levels, notice your triggers, use a few go-to breathing and relaxation techniques in the moment, and consider adopting some mindfulness and meditation into your daily routines – there are some great apps for this.

Stick to habits for good sleep: cool and dark bedroom, consistent times for going to bed and getting up, limiting screen use before bed, limiting caffeine in the afternoon and evening, avoid daytime naps, and spend time outdoors.

The 3 P's: pacing, planning, prioritise

As well as looking at your lifestyle and making some achievable changes where you know you need to, think about how you go about organising and structuring your day and your week. Common habits include 'pushing through' activities, which can cause a flare up in symptoms, possibly having to then cancel activities and miss out on important things. Some of your good progress can be undone by being overambitious and regretting it afterwards.

Pacing is a useful way to manage any activity you have to do. This means breaking an activity down into smaller more manageable chunks, and taking a rest in between rather than just trying to get it done all in one go.

Planning activities ahead of time is so important to understand and control your own limits rather than letting your symptoms dictate when it's time to stop because you simply can't carry on. Try to do the same amount of physical activity each day, and keep this consistent throughout your week, rather than having a few very busy days followed by 'rest' days.

Prioritise what matters to you to ensure you have the energy and symptom control to engage in whatever are the most enjoyable and meaningful activities to you.

Lifestyle factors to help your perimenopausal/menopausal symptoms and pain management have been outlined and these are important. In tandem with this, it is important to understand that there are safe and effective medical treatments for your symptoms due to low hormones in the form of replacement hormones.

Hormone Replacement Therapy (HRT)

The most effective way to treat symptoms during the perimenopause and menopause is to replace the hormones that are fluctuating and falling by taking hormone replacement therapy or 'HRT'. Some studies also show that taking HRT can reduce joint pain and stiffness, and possibly reduce the severity of osteoarthritis

HRT usually includes the hormones estrogen and progesterone, and sometimes testosterone:

Estrogen

The safest way to take this key hormone is through the skin (transdermal) by using either a patch (like a clear plaster) that you change twice a week, or a spray or gel that you rub into your skin every day. The type of estrogen in these methods has the same structure as your own estrogen and is termed 'body identical'.

Progesterone

If you still have your womb (uterus) you will usually need to also take the hormone progesterone to keep the lining of the womb thin, and the cells healthy, as taking estrogen can thicken the lining. The safest and body identical form of progesterone is called 'micronised progesterone' and is branded as Utrogestan in the UK. This is usually taken as an oral capsule. An alternative way to receive a type of progesterone is with the Mirena coil that is inserted into your womb and stays there for 5 years. It delivers the hormone directly to the lining of your womb and is also an effective contraceptive should you need that too.

Testosterone

This hormone is sometimes used in addition to estrogen for people who have a significant lack of libido (sex drive), and struggle with ongoing brain fog and fatigue. it is prescribed safely and effectively by menopause specialists to treat these symptoms.

Both estrogen and testosterone are anti-in flammatory in your body, including in your muscles and joints.

Benefits and risks with HRT

For most people the benefits of HRT outweigh the risks. HRT is the most effective treatment for the range of symptoms described that occur because of a lack of hormones in the perimenopause and menopause. Most women start to feel like their previous selves again after a few months of taking HRT.

Topping up your hormones levels by taking HRT can also have long term bene fits to your health as it can help reduce the risk of heart disease, osteoporosis, type 2 diabetes, bowel cancer, clinical depression and dementia.

The main things that worry people about HRT is the perceived risks of breast cancer and risk of blood clots. The research many years ago that swayed public and professional opinion against HRT was carried out on older types of HRT than the ones prescribed nowadays. When thinking about your own

risk, it depends on the type of estrogen and progesterone you take, but even more importantly depends on your overall health and other risk factors such as your weight and alcohol intake.

There are no proven associated risks of any disease if you take estrogen through the skin and micronised progesterone (Utrogestan). There may be a very small risk of breast cancer if you are over 50 and take estrogen and a synthetic progesterone (progestogen). However, if you smoke, drink a large glass of wine most evenings, or are overweight, these factors increase your risk to a much greater extent than taking HRT does. If you do not need progesterone (if you have had a hysterectomy) and take estrogen on its own, this has been shown to actually *reduce* your risk of breast cancer compared to a similar woman not taking HRT.

There is no increased risk of developing a blood clot or stroke when estrogen is delivered through the skin in a patch, gel or spray. (A small risk was associated with tablet forms of estrogen). It is therefore safe – even for people who have a higher risk of getting a blood clot or those who have liver problems or migraine – to have transdermal estrogen and micronised progesterone.

