

Multiple Sclerosis, the Perimenopause and Menopause



Multiple Sclerosis

The Perimenopause and Menopause

This booklet has been written by

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for women living with multiple sclerosis (MS)

who are experiencing or preparing for the
perimenopause or menopause.



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About multiple sclerosis (MS)

About 130,000 people in the UK are living with MS, and it affects three times as many women as men.¹

What is multiple sclerosis (MS)?

MS is a condition that affects the nerves in your brain and spinal cord.

Your nerves carry instructions between the brain and other parts of your body, telling it what to do.

A covering called myelin coats your nerves to protect them and helps these messages travel quickly and smoothly.

When you have MS, your immune system attacks the myelin, stripping it from your nerves, and leaving scarring.

The scarring causes problems for the signals trying to travel along your nerves and messages can be slowed, distorted, or not be able to travel at all.

MS is a condition you have for life, usually diagnosed when you are in your 20s and 30s.

It can cause a wide variety of symptoms, including eyesight problems, fatigue, balance problems, altered sensations and cognitive issues.

Your bladder can be affected, and you may experience fatigue, pain, muscle spasm and stiffness. It can lead to permanent and progressive disability.

However, your experience of MS is individual to you, with no two people having exactly the same range and severity of symptoms.

Good to know:

No-one should have to manage MS alone. There are a number of charities and organisations who can support you – please see the further information section at the back of this booklet.

What is the menopause?

The menopause is when your ovaries stop producing eggs and levels of the hormones estrogen, progesterone and testosterone fall. The definition of menopause is when a woman has not had a period for 12 months.

Estrogen protects every system in your body, including your brain, skin, bones, heart, urinary functions and the genital area. Low levels of estrogen can affect all these parts of your body, including the nervous system.

Estradiol, the main form of estrogen in your body during your reproductive years, plays a role in fine motor control, coordination, memory and mood. Estradiol has an anti-inflammatory effect and helps reduce levels of TH17 cells, which are associated with various autoimmune diseases, including MS, psoriasis and rheumatoid arthritis.²

Testosterone helps to maintain muscle and bone strength, sex drive and many women find that it can improve mood and stamina, as well as reducing brain fog and improving memory. Testosterone has also been shown to produce myelin.³

What is perimenopause?

The perimenopause is the time before the menopause when you can experience menopausal symptoms but are still having periods.

The hormones estrogen and progesterone work together to regulate your menstrual cycle and the production of eggs.

During your perimenopause, the levels of these hormones fluctuate, and it is often the imbalance of these hormones which leads to your symptoms occurring.

Periods start to change and may occur further apart or closer together, they can be more irregular and heavier or lighter in flow.

Your perimenopause, like your MS, is individual to you. You may have symptoms, which can include hot flushes, night sweats and erratic periods, for only a few months or they can last for years. You may have no symptoms at all.

When does the menopause happen?

The average age of the menopause in the UK is 51 years⁴, and symptoms of the perimenopause often start at around 45 years of age.

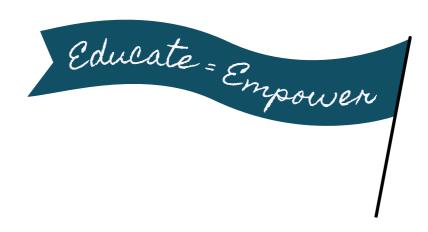
However, it's really important to state that it doesn't just happen in mid-life: menopause before 45 is known as an early menopause, while menopause before the age of 40 is known

as premature ovarian insufficiency (POI).

POI is a lot more common than most people think: it affects about 1 in 100 women under the age of 40, and 1 in 1,000 women under 30.5

Early menopause or POI can sometimes be because of surgery, such as removal of the ovaries, or medical treatment.

A spontaneous (natural) early menopause affects approximately 5% of the population before the age of 45.6



How might my MS be affected by the menopause and perimenopause?

MS symptoms often first appear when you are in your 20s and 30s.⁷

This means you are likely to be balancing your MS and perimenopause and menopause at some point.

It can also be difficult to work out what is caused by your perimenopause and what is caused by your MS, as the symptoms of both can overlap. This can be particularly difficult with sex drive, bladder problems and fatigue, which are very common in both.⁸

MS relapses can be triggered by times of hormonal change, including after childbirth and during the perimenopause and menopause.

Unfortunately, this can mean your symptoms of MS worsen during the menopause, and particularly so if you have an early menopause due to surgery or POI.

MS symptoms that you may notice get more severe with menopause include urinary symptoms, poor sleep, cognitive impairment, mood changes, fatigue, numbness, and pins and needles.⁹

Some women find that hot flushes can worsen MS symptoms, including fatigue and bladder problems.

Many people with MS find that their symptoms get worse when they are hot, and researchers suggest worsening symptoms linked to hot flushes may be temporary.¹⁰

In addition, some research suggests that the menopause can bring about a more rapid decline in your health, but the results are quite mixed.

Managing your menopausal symptoms can help you maximise your health and wellbeing.

Why may the perimenopause and menopause affect my MS?

Estrogen is known to protect the nervous system. There is evidence this hormone promotes the survival of your nerves and increases the health of their protective myelin sheath.¹¹

Estrogen can lower inflammation, and high levels of estradiol and another type of estrogen called estriol have been shown to reduce the frequency of relapses in people with relapsing-remitting MS. Progesterone may also have a role in reducing inflammation.

Testosterone has been shown to help repair the myelin sheath that has been damaged by MS^{12}

Both these hormones decline during the perimenopause and stop after the menopause.

Living well through the perimenopause and menopause

There's lots you can do to help manage the impact of the perimenopause and menopause, including eating healthily, avoiding too much alcohol and caffeine, staying active, managing stress levels, sleeping well and doing things you enjoy regularly.

Finding time to do things that help you relax and having strong social and emotional connections with others can also help your menopause journey.

There is more information on lifestyle changes in the booklet titled Living well through your perimenopause and menopause on www.balance-menopause.com, plus information on the balance app.



Treatments for the menopause

The most effective treatment for symptoms of the perimenopause and menopause is to replace the hormones your body no longer produces.

Hormone replacement therapy (HRT) contains estrogen, a progestogen (or progesterone) if it is needed, and in some cases, testosterone.

HRT also protects your future health from the bone weakening disease known as osteoporosis, and heart disease, type 2 diabetes and bowel cancer. There is also evidence that use of HRT is associated with significantly reduced risk for all combined neurodegenerative diseases including Alzheimer's disease and dementia.¹³

Research into the impact of HRT on MS is still lacking, but the evidence suggests that considering HRT in the management of your menopause might give you a number of benefits. A study in 2016 found that the majority of women with MS who took HRT reported an improvement rather than a deterioration in their condition.¹⁴

This is supported by more recent research which illustrates that women see a decrease in MS activity during pregnancy, and that men have a faster progression in their symptoms and are seen to have more severe symptoms of MS than women. Both estrogens and testosterone are seen to have an anti-inflammatory effect in protecting neurons and the central nervous system.¹⁵

Given that loss of bone density can be a problem as you age with MS, the beneficial effect of HRT in reducing your risk of osteoporosis should be taken into account.

For most women the benefits of taking HRT outweigh any risks.

How do I take HRT?

HRT is the first line treatment for the management of menopausal symptoms.¹⁶

The type of hormones you need and the doses you are given are personalised to your needs.

HRT can come as a tablet, gel to be rubbed into your skin or a patch.

Estrogen

All types of HRT contain estrogen to replace the hormone that declines during your perimenopause and menopause

Progesterone

If you still have your womb, you will also need to take a form of progesterone, which is usually given as a patch, tablet or via the Mirena coil. This is to protect your womb lining.

If you are still having periods when you take HRT, the type of HRT you will usually be given will lead to you having regular periods (known as sequential or cyclical HRT).

If it has been more than a year since your last period, or you have been taking HRT for a year, then the type of HRT can be changed to one where you will not have periods (known as continuous HRT).

Testosterone

Testosterone is another hormone which falls during the perimenopause and menopause. This can give you symptoms such as poor concentration, low energy, and reduced sex drive.

If you are experiencing low sex drive and HRT alone is not helping, testosterone can often be beneficial (in addition to the estrogen). In our clinical experience, testosterone can also help with other symptoms, such as fatigue, brain fog and low energy.

Testosterone is usually given as a cream or gel which you use every day.

Vaginal estrogen

This is a localised hormone treatment that can be used directly in your vagina and vulval area to manage urinary and genital symptoms that are caused by a lack of estrogen to this area.

This is known as local or topical estrogen and it is different from the estrogen you take as part of your HRT. Vaginal estrogen treatments can be taken safely for a long time, with no associated risks.

Your healthcare professional should speak to you about the benefits and risks of HRT for you, which will vary according to your age and any other health condition you may have.

Can I take HRT with my MS medication?

The good news is there is unlikely to be any reason not to take HRT if you are taking MS medication.

Vaginal estrogens can be used safely as the doses of hormone contained in them are so low.

How should I prepare to speak to my clinician about HRT?

If you feel you would like to discuss your perimenopause or menopause with your healthcare professional, it can be useful to plan ahead and consider the following tips:

- Do your own research to prepare for the consultation so you can have a well-informed discussion with your healthcare professional. The balance app and website has many resources that can help you
- Track your symptoms and keep a diary. This can help you illustrate the symptoms you
 have been experiencing effectively in a consultation that might be time limited. The
 balance app has an easy-to-use symptom tracker and enables you to create a health
 report that you could share in the consultation
- Write down any questions you have to prompt yourself in the consultation
- You may also want to consider discussing your menopause with more than one healthcare professional involved in your care, for example your GP and your MS specialist.
- Don't be afraid to ask for a follow-up consultation or seek a second opinion if you feel
 that there is more that you would like to discuss before coming to a decision.

Further information

MS Society MS Trust

NICE menopause guidance

References

- 1 The MS Trust (2022), 'What is MS?' https://mstrust.org.uk/information-support/about-ms/what-is-ms#facts-about-ms
- 2 Murgia, F. et al. (2022), 'Sex hormones as key modulators of the immune response in multiple sclerosis: a review', Biomedicines, 10 (12) 3107. doi:10.3390/biomedicines10123107
- 3 Bielecki, B. et al. (2016), 'Unexpected central role of the androgen receptor in the spontaneous regeneration of myelin', Proceedings of the National Academy of Sciences of the United States of America, 113 (51): 14829–14834, doi:10.1073/pnas.1614826113
- 4 NHS Inform (2022), 'Menopause', www.nhsinform.scot/healthy-living/womens-health/later-years-around-50-years-and-over/menopause-and-post-menopause-health/menopause
- 5 Daisy Network, 'What is POI?', www.daisynetwork.org/about-poi/what-is-poi/
- 6 Daisy Network, 'What is POI?', www.daisynetwork.org/about-poi/what-is-poi/
- 7 The MS Trust (2022), 'What is MS?' https://mstrust.org.uk/information-support/about-ms/what-is-ms#facts-about-ms
- 8 MS Society (2022), 'Menopause and MS', www.mssociety.org.uk/about-ms/what-is-ms/womenand-ms/menopause-and-ms
- 9 Bove, R. et al. (2021), 'Effects of menopause in women with multiple sclerosis: an evidence-based review, Frontiers in Neurology, 12, 554375. doi.org/10.3389/fneur.2021.554375
- 10 Bove R., Vaughan T., Chitnis T., Wicks P., De Jager P.L., (2016), 'Women's experiences of menopause in an online MS cohort: A case series', Mult Scler Relat Disord, Sep;9:56-9. doi: 10.1016/j.msard.2016.06.015
- 11 Bove, R. et al. (2021), 'Effects of menopause in women with multiple sclerosis: an evidence-based review', Frontiers in Neurology, 12, 554375. doi.org/10.3389/fneur.2021.554375
- 12 Schumacher, M. et al. (2021), 'Testosterone and myelin regeneration in the central nervous system', Androgens: Clinical Research and Therapeutics, 2 (1), pp.231–51. doi.org/10.1089/andro.2021.0023
- 13 Kim, Y.J. et al. (2021), 'Association between menopausal hormone therapy and risk of neurodegenerative diseases: Implications for precision hormone therapy, Alzheimer's and Dementia, 7(1) e12174. doi:10.1002/trc2.12174
- Bove R., White C.C., Fitzgerald K.C., Chitnis T., Chibnik L., Ascherio A., Munger K.L., (2016), 'Hormone therapy use and physical quality of life in postmenopausal women with multiple sclerosis', Neurology, 4;87(14):1457–1463. doi: 10.1212/WNL.00000000003176
- 15 Collongues N. (2018), 'Testosterone and estrogen in multiple sclerosis: from pathophysiology to therapeutics', Expert Review of Neurotherapeutics, 18 (6), pp.515-22. doi:10.1080/14737175.2018.1481390
- 16 NICE (2015), 'Menopause: diagnosis and management', www.nice.org.uk/guidance/ng23

This booklet has been reviewed by healthcare professionals from Newson Health Group.

Booklet last reviewed: January 2023.

Balance Menopause Support

www.balance-menopause.com

Balance Menopause Support App

Understand more about your menopause with personalised content

Keep a track of your symptoms and health

Learn from the experts and find support in the community

Available to download for free from Google Play and App Store.



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The Menopause Charity

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