

WHAT IS MENOPAUSE?

Menopause is a natural transition marking the end of reproductive life.

'Menopause' literally refers to the last normal menstrual period that a woman experiences. The process of menopause is usually gradual. Although symptoms may persist for a number of years, menopause is said to have taken place when a woman has not had a period for twelve months.

As we age, the number of 'eggs' in our ovaries reduces until they are finally depleted. Normally, the developing egg produces oestrogen, a naturally occurring hormone in our body that keeps many tissues and organs young and vital. The falling levels of oestrogen can cause unpleasant symptoms. **For most women, menopausal symptoms are mild and transient, but for some, they can be severe.**

The menopause usually occurs between the ages of 45 and 55, with the average age being 51. It can occur earlier due to surgery, illness, cancer treatment, or other reasons. Most women (95%) experience menopause after the age of 45. Historically, women did not live far beyond 50, but, nowadays, due to longer life expectancy, **women spend approximately 30% of their lives in an oestrogen-depleted state.** It is important to recognise that menopause affects all biological women, regardless of race, sexual identity, or social background.

The timing of menopause can be difficult to determine following hysterectomy, a progesterone containing IUD, endometrial ablation, or women using the combined oral contraceptive pill.

DIAGNOSIS

The transition to menopause is usually accompanied by menopausal symptoms. Generally, periods start to become closer together and the flow heavier. Eventually, periods space out, until there has not been a period for one year. Bleeding after that time is referred to as 'postmenopausal bleeding' and is usually investigated. Blood tests are not necessarily required to diagnose the menopause. The combination of menopausal symptoms and the cessation of periods is usually adequate. Once you have not had a period for one year, you are considered to be menopausal.

If you are experiencing symptoms that interfere with your quality of life or wellbeing, such as heavy bleeding, hot flushes, and/or disturbed sleep, speak to your doctor.

Your doctor may recommend blood tests to check the following:

Follicle-stimulating hormone (FSH) and oestrogen (estradiol):

FSH and LH are produced by the pituitary, a small endocrine gland located at the base of the brain. Each month, FSH and LH are involved in the production of an egg from our ovaries.

As the number of eggs diminishes with ageing, the brain produces increasing levels of FSH and LH to encourage the ovaries to keep ovulating. Therefore, these levels can be raised before the last period occurs, which means it's not a reliable test for the diagnosis of menopause. Raised levels of FSH and LH are in keeping with perimenopause. During the menstrual cycle, FSH levels rise and then fall; therefore, the test needs to be done at a certain stage of the cycle, usually at the start of your period (days 2-4).

Thyroid-stimulating hormone (TSH):

The thyroid is an endocrine gland located at the front of your neck, below the voice box. The thyroid produces hormones that regulate metabolism and other biological functions. It also influences nearly every organ in the body, including the reproductive system. At times, the thyroid can produce too many or too few hormones. An underactive thyroid (hypothyroidism) can cause symptoms similar to those of perimenopause, such as abnormal uterine bleeding and irritability. It is common and affects nearly 5% of women.

When this happens, the pituitary gland in the brain floods the bloodstream with thyroid stimulating hormone to stimulate the thyroid gland to produce more thyroid hormones to meet the body's needs to regulate systems such as body temperature, metabolism, and heart rate. Low oestrogen affects the thyroid gland's ability to produce enough triiodothyronine (T3) and thyroxine (T4) to meet the body's needs to regulate things such as your body's temperature, metabolism, and heart rate. As well as the effect of declining oestrogen levels on the thyroid, the function of the thyroid itself declines as we age, albeit slowly. High TSH is indicative of an 'underactive' thyroid. Moodiness, forgetfulness, depression, abnormal uterine bleeding, and weight gain are all associated with both hypothyroidism and the perimenopause. That said, hyperthyroidism (i.e., an overactive thyroid gland) also produces similar symptoms such as disturbed sleep, palpitations, sleep intolerance, and hot flushes.

Given the overlap of symptoms of hypothyroidism and perimenopause, blood tests to assess thyroid function may be necessary. If the thyroid gland is underactive, your GP will prescribe thyroid replacement therapy.

WHY TREAT MENOPAUSE?

Menopausal symptoms can negatively impact a woman's ability to carry out daily activities. The menopause can affect many parts of your body, including temperature regulation, weight management, mental health, bones, and connective tissues. Women most commonly seek treatment for vasomotor symptoms (VMS) such as night sweats and hot flushes. Menopausal hormone therapy (MHT) is the most effective way to counteract these symptoms. However, there are non-hormonal therapies that can replace or be used alongside MHT.

Recent evidence reports that the risks of MHT are small and are usually outweighed by the benefits. MHT focuses on relieving symptoms and preventing long-term conditions such as heart disease and osteoporosis.



WHAT IS MENOPAUSE?

Seeking help for the relief of menopausal symptoms is usually the main reason why women consult with their doctor. This also provides a major opportunity for your doctor to identify risks and initiate prevention strategies to mitigate the development of reduced bone mineral density and heart conditions. MHT is mainly indicated for the relief of troublesome symptoms that impact your quality of life, but not everyone needs it.

WHY DOES MENOPAUSE HAPPEN?

The menarche (onset of periods) and the menopause mark the beginning or end of fertility in a woman. After the onset of puberty and before menopause, the ovary produces an oocyte (egg) each month under the control of the 'hypothalamic-pituitary-ovarian' (HPO) axis. As the egg develops, the amount of oestrogen produced by the ovary increases until ovulation, when the 'sac' that the egg grew in, prior to ovulation, produces progesterone in the second half of the cycle. These hormonal changes ensure the lining of the uterus (endometrium) is ready for the implantation of the fertilised egg.

As we age, the number of eggs in the ovaries declines. Furthermore, egg quality also declines, which leads to a decline in the level of oestrogen in the body. Oestrogen depletion is the reason we experience menopausal symptoms.

Usually in your late 40s, your periods start to get closer together with a heavier flow before they start to space out. Your ovaries will eventually stop releasing eggs, causing your periods to stop completely.

Surgical menopause:

Surgical menopause occurs when both ovaries are surgically removed. This may be part of treatment for severe endometriosis, chronic pelvic inflammatory disease, or cancer. Women who carry particular gene faults that put them at an increased risk of ovarian cancer will also be advised to undergo surgical menopause between the ages of 35 and 40.

Removal of the ovaries causes an abrupt menopause, with women often experiencing more severe menopausal symptoms than if they were to experience menopause naturally. It is advisable to discuss treatment options pre-surgery if possible. In the absence of contraindications, Menopause hormone therapy (MHT) should be considered, particularly if under 45 years of age.

Chemotherapy and radiation:

Certain chemotherapy drugs can result in early or premature menopause in many women. The likelihood of spontaneous ovarian recovery depends on the type of chemotherapy used, the woman's age, and the number of eggs remaining in the ovary prior to chemotherapy.

Primary ovarian insufficiency:

Primary ovarian insufficiency occurs when the ovaries stop functioning as they should before age 40. When this happens, your ovaries don't release eggs regularly, resulting in a decline in oestrogen. Women with ovarian insufficiency can have irregular or occasional periods for years and may fall pregnant if not using contraception.

Menopause hormone therapy (MHT) should be offered to women with POI (unless contraindicated), as there are significant long-term health benefits (bone and heart health).

Early menopause:

Early menopause is when a woman under 45 goes through menopause, while premature menopause (or premature ovarian failure) occurs in women under 40. It can negatively impact a woman's ability to fall pregnant.

If you want to have children, ask your doctor to refer you to a fertility specialist. There may be ways to preserve or enhance your fertility.

ADDITIONAL INFORMATION:

- [Perimenopause](#)
- [Primary Ovarian Insufficiency](#)
- [Early Menopause](#)
- [Surgical Menopause](#)
- [Menopause Symptoms](#)
- [Symptoms Checklist](#)
- [Hormones what happens to them](#)
- [Long-term health impacts of menopause](#)
- [Menopause myths and facts](#)