What is the menopause?

Menopause is the time in a woman's life when her periods stop as a result of the reduction and loss of *'ovarian reproductive function'*. Ovaries include the hormones oestrogen, progesterone and testosterone. When a woman approaches the menopause, less oestrogen is produced causing her body to behave differently. This process is usually a gradual one that progresses over several years. Oestrogen also plays an important role in maintaining bone and heart health as well as brain function during the reproductive years.

The menopause usually occurs between 45 and 55 years of age. The average age in the UK is 51. It is defined as when a woman has had no periods for one year or more. Before then a woman will experience *'early peri-menopause'* and *'late peri-menopause'*.

Early peri-menopause Women initially experience a change in menstrual cycle pattern when periods become infrequent and the cycles become slightly longer, e.g. 6-7 weeks apart. This phase is called the *'early peri-menopause'*. The average age it occurs is 47 and it is when women may start experiencing menopausal symptoms.

Late peri-menopause Subsequently, many women experience worsening of their menopausal symptoms. Menstrual cycles become less frequent, with periods a few months apart. This is called the 'late peri-menopause' and the average age it occurs is 49.

What do women experience when they go through the menopause?

All women experience the menopause at some stage in their life. It is estimated that more than 80% of women will be menopausal by the age of 54. Whilst not all women will experience menopausal symptoms when they go through the menopause, up to 80-90% will have some symptoms, with 25% describing them as severe and debilitating. Clearly this has significant implications for women at work.

Symptoms The most common symptoms are hot flushes and night sweats (vasomotor symptoms), experienced by 70-80% of women. Other symptoms include disturbed sleep and insomnia, low energy levels, low mood, anxiety, low libido and low sexual drive, impaired memory and concentration, a sensation of 'brain fog', joint aches, headaches, palpitations and vaginal dryness and urinary symptoms.

Menopausal symptoms last on average for more than 7 years and it is estimated that more than a third of women experience long-term menopausal symptoms which may continue for a number of years beyond that.

Long-term health When the ovaries have stopped producing oestrogen, this fall in hormone levels may have an effect on long-term health. Most commonly these changes affect the strength and density of bones, increasing the risk of the bone-thinning disease osteoporosis. The bones of the female skeleton depend on oestrogen to maintain their strength and resistance to fracture. However, whilst a hot flush or vaginal dryness are obvious, there are no obvious symptoms of osteoporosis – the first sign may be a fracture of a bone. In addition, oestrogen deficiency after the menopause has also been shown to result in an increase in the risk of heart disease in women.

What is the menopause?

How do you diagnose the menopause?

The diagnosis of the menopause should be made by assessing the clinical picture and based on a combination of menopausal symptoms and change in menstrual cycle pattern in women beyond the age of 45. Hormonal testing (Follicle Stimulating Hormone – FSH) is not helpful in diagnosing the menopause as the level of the hormone can fluctuate from one month to another and may not give an accurate assessment.

What interventions are available to women going through the menopause?

The menopause transition can have a considerable impact on many women. The majority of women will experience menopausal symptoms, and for a significant proportion troublesome symptoms may continue long-term. All women should be able to access advice on how they can optimise their menopause transition. There should be a holistic and individualised approach in advising women, with particular reference to lifestyle advice and diet modification. This should be an opportunity to discuss the advantages and disadvantages of their management options including Hormone Replacement Therapy (HRT) and alternative therapies.

Hormone Replacement Therapy (HRT)

HRT is the most commonly used treatment for managing menopausal symptoms and HRT has been shown to be the most effective intervention for managing menopausal symptoms. The main component of HRT is the hormone oestrogen that is effective in controlling menopausal symptoms.

Oestrogen can be given in the form of oral tablets or delivered through the skin (transdermally) in the form of patches, gel or spray. Giving oestrogen through the skin has a very neutral effect on the way the body breaks down the hormones and does not increase the risk of blood clots compared to that in women who are not taking HRT. Giving oestrogen through the skin should therefore be the preferred way of giving oestrogen in women at increased risk of blood clots such as in women who are overweight or women who have an increased background risk for blood clots.

When HRT is started, there may be a need to adjust the dose of oestrogen replacement until the optimal replacement dose is achieved as there may be varied absorption between different individuals. The three questions that need to be assessed to determine the optimal HRT dose would therefore be:

- How much oestrogen are we giving?
- How much of this oestrogen is being absorbed?
- And how much oestrogen does the woman need for optimal symptom control?

Progestogen should also be given to women (who have not had a hysterectomy) to protect the lining of the womb from the effect of oestrogen. This can be given in a way that results in a monthly bleed (if the women is peri-menopausal and is still having periods or in a continuous way that does not result in a monthly bleed in women who are menopausal.

Progestogens are available in the form of natural micronised progesterone tablets or as synthetic progestogens. Micronised progesterone is plant derived and is similar to the chemical structure of progesterone produced by the human ovaries (bioidentical). Micronised (natural) progesterone has some advantages over synthetic progestogens as it has a neutral effect on the risk of blood clots and a slightly lower risk of breast cancer compared to synthetic progestogens.

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Synthetic progestogens are available in the form of oral tablets, patches or in the form of the intrauterine progestogen releasing system.

Testosterone replacement in female replacement doses is effective in improving symptoms of low libido and low sexual drive and is likely to have a beneficial effect in improving mood and low energy levels. Replacement of testosterone in female physiological doses is unlikely to result in adverse side-effects and can be considered if replacement of oestrogen does not help improve these symptoms.

At present there are no testosterone preparations available that are licensed for female use in the UK. The previously available licensed testosterone preparations have been withdrawn for commercial (not medical) reasons. As a result, gel preparations licensed for use in men are used in female replacement doses (given in female replacement dose of 5 mg a day). This at present is common practice in the UK, given the lack of alternative options and this practice is backed by the International Global Consensus Statement on Testosterone replacement and by the British Menopause Society.

What are the benefits of HRT?
HRT is the most effective treatment for the management of menopausal symptoms and has been shown to result in significant improvement in menopausal symptoms control and quality of life. In addition, HRT has been shown to result in significant improvement in bone density and protecting against osteoporosis and osteoporosis related fractures. HRT started in women under the age of 60 or within 10 years of the menopause has also been shown to result in significant reduction in the risk of heart disease and cardiovascular mortality.

What is the risk of breast cancer with HRT?
Combined HRT containing oestrogen and progestogen is associated with a small increase in the risk of breast cancer. This risk is low in both medical and statistical terms, particularly compared to other lifestyle risk factors such as obesity and alcohol intake.

Oestrogen only HRT (in women who had a hysterectomy) has been shown to result in little or no increase in the risk of breast cancer.
Women are often concerned that if they have a member in their family who has had breast cancer that they should not take HRT. Having a family member who has had breast cancer may increase a woman's background risk for developing breast cancer but this would not be a reason for the woman not to take HRT.

The risk of breast cancer with HRT should also be considered in relation to the risk of breast cancer with other lifestyle factors. For example the risk of breast cancer with drinking two units of alcohol a night is higher than that associated with taking HRT.

Further, the risk of breast cancer with being overweight is significantly higher that the risk of breast cancer with taking HRT.

The decision whether to take HRT and the duration of its use should be made on an individualised basis after discussing the benefits and risks with each woman. It should be considered in the context of the overall benefits obtained from using HRT including symptom control and improving quality of life as well as considering the bone and cardiovascular benefits associated with HRT use.

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For most women, the benefits in quality of life improvement, reduction in osteoporosis risk and reduction in risk of heart disease would outweigh the small increase in the risk of breast cancer. Women who take HRT have a reduced mortality compared to women who do not take HRT.

What are bioidentical hormones? Should I consider them?
Bioidentical hormones refer to hormones that have a similar chemical structure to those produced by the human ovary. These have advantages over non bioidentical or synthetic alternatives in that they have a more neutral effect on the risk of blood clots and a lower risk of breast cancer. Regulated bioidentical hormones are available through the NHS as prescribed medications and can be obtained by a prescription through your GP.

These should be distinguished from compounded custom-made bioidentical hormones which are not as stringently regulated and as a result there may be concerns about their purity and safety.

Women should be informed that if they wish to take bioidentical hormones to do so through a prescription from their GP which will allow them to have regulated bioidentical hormones which are safe and effective and should avoid compounded bioidentical hormones.

Lifestyle factors
A healthy lifestyle including exercise, diet modification and reducing alcohol intake can improve menopausal symptoms in addition to improving heart and bone health.

The menopause transition should be seen as an opportunity to review and optimise lifestyle, dietary intake and exercise uptake. This should include:

- Advice on healthy diet, such as including a diet that is low in saturated fat and salt to reduce blood pressure, and a diet that is rich in calcium and vitamin D to strengthen bones. Dietary supplements may be considered if dietary intake is not sufficiently balanced.
- Regular exercise, as this helps to relieve stress and lowers the risk of heart disease. Regular, varied exercise may include cycling, swimming, running or aerobics.
- Stopping smoking, as smoking has been shown to increase the risk of an earlier menopause and trigger hot flushes. If women smoke they also run a higher risk of developing osteoporosis and heart disease, which is the most common cause of death in women.
- Drinking moderately, as alcohol increases hot flushes and is associated with an increased risk of breast cancer. Women should try not to drink more than 2 to 3 units of alcohol per day, and keep at least one day a week alcohol-free.
- Relaxation techniques such as meditation and yoga can reduce stress levels and help cope with anxiety.

Complementary & alternative therapies
A number of complementary & alternative therapies such as acupuncture, aromatherapy, herbal treatments, homeopathy, yoga and reflexology may sometimes help with troublesome menopausal symptoms. These would be an option for women who do not wish to take HRT although most alternative therapies are less effective than HRT in controlling menopausal symptoms.

It is relevant to note that many herbal or natural remedies may contain hormonal ingredients that have oestrogen like properties so would not be suitable for women who have a contraindication to taking HRT.

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Complementary and alternative therapies are unlikely to have a significant impact on bone strength or heart health.

Cognitive Behavioural Therapy (CBT)
CBT is also an effective option in improving hot flushes, nights sweats and other menopausal symptoms and can be considered in women who do not wish to take HRT or are unable to take HRT.

Conclusion

Women experience the menopause in different ways. Some women experience minimal or no symptoms going through the menopause. However, many women experience menopausal symptoms that can significantly impact their quality of life.

There should be an individualised approach in assessing women going through the menopause, with particular reference to lifestyle advice, diet modification as well as discussing of the role of HRT. Women should be aware that help and support is available and should consult their GP for advice.

All women should be able to access advice on how they can optimise their menopause transition and be aware of what options they have to manage their symptoms.

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