Menopause and Hormone Replacement Therapy (HRT)

The menopause can cause various symptoms such as hot flushes and changes to your vagina and genital skin. Hormone replacement therapy (HRT) may ease your symptoms. If you are considering taking HRT, you should discuss the risks and benefits fully with your doctor. The lowest effective dose of HRT should be taken. You should have regular follow-up to decide whether you still need HRT. For most women who use HRT in the short term for the treatment of their menopausal symptoms, the benefits of treatment outweigh the risks.

What is the menopause?

Strictly speaking, the menopause is your last menstrual period. However, most women think of the menopause as the time of life leading up to, and after, their last period. In reality, your periods don't just stop. First they tend to become less frequent. It can take several years for a woman to go through the menopause completely. Women are said to have gone through the menopause (be postmenopausal) when they have not had a period at all for one year.

What causes the menopause?

A natural menopause occurs because as you age your ovaries stop producing eggs and make less oestrogen (the main female hormone). The average age of the menopause in the UK is 51. Your menopause is said to be early if it occurs before the age of 45 and it is called Premature Ovarian Insufficiency if it occurs before the age of 40 years.

There are certain things that may cause an early menopause - for example:

- If you have surgery to remove your ovaries for some reason, you are likely to develop menopausal symptoms straightaway.
- If you have radiotherapy to your pelvic area as a treatment for cancer.
- Some chemotherapy drugs that treat cancer may lead to an early menopause.
- If you have had your womb (uterus) removed (hysterectomy) before your menopause. Your ovaries will still make oestrogen. However, it is likely that the level of oestrogen will fall at an earlier age than average. As you do not have periods after a hysterectomy, it may not be clear when you are in 'the menopause'. However, you may develop some typical symptoms (see below) when your level of oestrogen falls.
- An early menopause can run in some families.
- In many women who have an early menopause, no cause can be found.

Early menopause and premature menopause are not discussed in detail in this leaflet.

What are the possible symptoms and problems of the menopause?

The menopause is a natural event. Every woman will go through it at some point. You may have no problems. However, it is common to develop one or more symptoms which are due to the low level of oestrogen. About 8 out of 10 women will develop menopausal symptoms at some point. Around a quarter of women have very severe symptoms.
Symptoms of the menopause can last much longer than most women realise. More than half of women actually have symptoms for more than seven years.

**Short-term symptoms**
These short-term symptoms only last for a few months in some women. However, for others they can continue for a few years after their last period:

- **Hot flushes** occur in about 3 in 4 women. A typical hot flush lasts a few minutes and causes flushing of your face, neck and chest. You may also sweat (perspire) during a hot flush. Some women become giddy, weak, or feel sick during a hot flush. Some women also develop a 'thumping heart' sensation (palpitations) and feelings of anxiety during the episode. The number of hot flushes can vary from every now and then, to fifteen or more a day. Hot flushes tend to start just before the menopause and can persist for several years.
- **Sweats** commonly occur when in bed at night. In some cases they are so severe that sleep is disturbed and you need to change your bedding and nightclothes.
- **Other symptoms** may develop, such as headaches, tiredness, being irritable, difficulty sleeping, depression, anxiety, aches and pains, loss of sex drive (libido), and feelings of not coping as well as before.
- **Changes to your periods.** The time between periods may shorten in some women around the menopause; in others, periods may become further apart, perhaps many months apart. It can also be common for your periods to become a little heavier around the time of the menopause.

**Longer-term changes and problems**

- **Skin and hair.** You tend to lose some skin protein (collagen) after the menopause. This can make your skin drier, thinner and more likely to itch.
- **Genital area.** Lack of oestrogen tends to cause the tissues in and around your vagina to become thinner and drier. These changes can take months or years to develop:
  - Your vagina may shrink a little and expand less easily during sex. You may experience some pain when you have sex.
  - Your vulva (the skin next to your vagina) may become thin, dry and itchy.
  - You may notice that you need to pass urine more frequently.
  - Some women develop problems with recurrent urine infections.

- **‘Thinning’ of the bones (osteoporosis).** As you become older, you gradually lose bone tissue. Your bones become less dense and less strong. The amount of bone loss can vary. If you have a lot of bone loss then you may develop osteoporosis. If you have osteoporosis, you have bones that will break (fracture) more easily than normal, especially if you have an injury such as a fall. Women lose bone tissue more rapidly than men lose it, especially after the menopause when the level of oestrogen falls. Oestrogen helps to protect against bone loss.
- **Cardiovascular disease.** Your risk of cardiovascular disease (disease of the heart and blood vessels), including heart disease and stroke, increases after the menopause. Again, this is because the protective effect of oestrogen is lost. Oestrogen is thought to help protect your blood vessels against atheroma. In atheroma, small fatty lumps develop within the inside lining of blood vessels. Atheroma is involved in the development of heart disease and stroke.

**Do I need any tests to see if I am going through the menopause?**
Your doctor can usually diagnose the menopause by your typical symptoms. Hormone blood tests are not usually needed to confirm that you are going through the menopause. However, they may be helpful in some cases - for example, in women aged under 45 years.

Other blood tests or scans may be undertaken in some women, especially if they do not have symptoms which are typical of the menopause.

It is important that you keep up to date with the national cervical screening programme and breast cancer screening programme, if appropriate.

**Do I need treatment for the menopause?**
Without treatment, the short-term symptoms discussed above last for several years in most women. HRT is available to ease the symptoms of the menopause. It has benefits and risks, which are discussed below.

There are treatments other than HRT for menopausal symptoms. As a rule, they are not as effective as HRT but may help relieve some symptoms. See separate leaflet called Menopause - Alternatives to HRT for more details.

What is hormone replacement therapy (HRT)?

All types of HRT contain an oestrogen hormone. If you take HRT it replaces the oestrogen that your ovaries no longer make after the menopause.

HRT is available as tablets, skin patches, gels, nasal spray or a vaginal ring. There are several brands for each of these types of HRT. All deliver a set dose of oestrogen into your bloodstream.

However, if you just take oestrogen then the lining of your womb (uterus) builds up. This increases your risk of developing cancer of the uterus. Therefore, the oestrogen in HRT is usually combined with a progestogen hormone. The risk of cancer of your uterus is completely reduced by adding in the progestogen. In many HRT products, the oestrogen and progestogen are combined in the same tablet; however, they can also be taken separately. If you have had a hysterectomy, you do not need a progestogen.

An option to ease symptoms just in the vaginal area is to use a cream, vaginal tablet, or vaginal ring that contains oestrogen. See separate leaflet called Atrophic Vaginitis (Vaginal Dryness) for more information.

How do I take hormone replacement therapy (HRT)?

Different women prefer different methods of taking HRT. For example, some women prefer to wear a patch rather than taking tablets. Your doctor or practice nurse can give you information about the pros and cons of the different types of HRT.

In general:

If you start HRT when you are still having periods, or have just finished periods

You will normally be advised to use a 'cyclical combined HRT' preparation:

- **Monthly cyclical HRT** - you take oestrogen every day but progestogen is added in for 14 days of each 28-day treatment cycle. This causes a regular bleed every 28 days, similar to a light period. (They are not 'true' periods, as HRT does not cause ovulation or restore fertility. The progestogen causes the lining of your womb (uterus) to build up. This is then shed as a 'withdrawal' bleed every 28 days when the progestogen part is stopped.) Monthly cyclical HRT is normally advised for women who have menopausal symptoms but are still having regular periods.

You may switch to a continuous combined HRT (see below) if:

- You have been taking cyclical combined HRT for at least one year; or
- It has been at least one year since your last menstrual period.

If you start HRT a year or more after your periods have stopped

If your periods have stopped for a year or more, you are considered to be postmenopausal. If this is the case, you will normally be advised to take a 'continuous combined HRT preparation'. This means that you take both an oestrogen and a progestogen every day. The dose and type of the oestrogen and progestogen are finely balanced so that they usually do not cause a monthly bleed. However, you may have some irregular bleeding in the first 3-6 months after starting this form of HRT. You should see your doctor if this bleeding continues for more than six months after starting HRT, or if you suddenly develop bleeding after some months with no bleeding.
If you have had a hysterectomy
You will only need to take HRT that contains oestrogen. The progestogen is only added in to other types of HRT so that the lining of the uterus does not build up and increase your risk of developing cancer of the uterus. So, if your uterus has been totally removed, progestogen is not needed.

If you mainly have genital symptoms - eg, vaginal dryness (atrophic vaginitis)
For atrophic vaginitis you may choose to try some vaginal oestrogen cream or a pessary to help your symptoms. This alone may be enough to relieve symptoms in some women who would prefer this option or who cannot take other forms of HRT for some reason. However, in around one in ten women, this treatment is not enough to improve symptoms and HRT is needed to be taken as well.

What are the benefits of hormone replacement therapy (HRT)?
HRT is a safe and effective treatment for most healthy women with symptoms, who are going through the menopause at the average age in the UK (about 51 years). The risks and benefits of HRT will vary according to your age and any other health problems you may have. Your doctor will be able to discuss any potential risks of HRT to you in detail.

Menopausal symptoms usually ease
This can make a big difference to quality of life in some women:

- HRT works to stop hot flushes and night sweats within a few weeks.
- HRT will reverse many of the changes around the vagina and vulva usually within 1-3 months. However, it can take up to a year of treatment in some cases.
- This means that HRT can:
  - Improve symptoms of vaginal dryness.
  - Improve discomfort during sexual intercourse as a result of this vaginal dryness.
  - Help to reduce recurrent urine infections.
  - Improve any increased frequency of passing urine.

- There is some evidence that HRT itself improves your mood and your sleep.
- HRT may also help to improve joint aches and pains.
- HRT improves symptoms of vaginal dryness and improves sexual function in many women.
- Many women notice that the texture of their hair and skin improves when taking HRT.

Reduced risk of 'thinning' of the bones (osteoporosis)
Women who take HRT have a reduced risk of osteoporosis and their risk of having fractures due to osteoporosis is also reduced. This risk reduces further the longer you take HRT.

Coronary heart disease
Coronary heart disease refers to disease of the coronary (heart) arteries. It is the usual cause of angina and heart attacks.

The evidence regarding HRT and cardiovascular disease is still controversial.

HRT does not increase the risk of heart disease when it is started in women aged under 60 years. In addition, it does not affect the risk of dying from heart disease.

There is some evidence that taking HRT, especially HRT with oestrogen alone, does reduce the incidence of cardiovascular disease in women.

Other possible benefits
Some studies have shown a reduced risk of Alzheimer's disease and other types of dementia in women who take HRT. However, other studies have not shown this, so more work needs to be done in this area.
Some trials have also shown a reduction in risk of bowel cancer in women who take HRT. However, the evidence for this is still not completely clear.

What are the risks in taking hormone replacement therapy (HRT)?

There has been a lot of media attention to the risks of taking HRT. This was after the results of some big studies about HRT were published between 2002 and 2004. These were the Women’s Health Initiative study in the USA and the Million Women Study in the UK. These studies raised concerns over the safety of HRT, particularly over a possible increased risk of breast cancer with HRT and also a possible increased risk of heart disease. However, it is important that the results of the studies be looked at carefully. HRT can increase your risk of developing certain problems but this increase in risk is very small in most cases.

The risks of taking HRT are discussed below.

Clots in the veins (venous thromboembolism)
This is a blood clot that can cause a deep vein thrombosis (DVT). In some cases the clot may travel to your lung and cause a pulmonary embolism (PE). Together, DVT and PE are known as venous thromboembolism.

Women who take combined HRT as tablets have an increased risk of developing a clot. You are more likely to develop a clot if you have other risk factors for a clot. These include being obese, having a clot in the past and being a smoker.

This risk of clot is not present for women who use patches or gel rather than tablets of HRT.

Note: you should see a doctor urgently if you develop a red, swollen or painful leg, or have shortness of breath and/or sharp pains in your chest.

Breast cancer
You may have a small increased risk of breast cancer if you take HRT. Combined (oestrogen and progestogen) HRT has a higher risk than oestrogen-only HRT. This risk increases the longer you have used HRT. When you stop taking HRT, you have the same risk of breast cancer as someone who has not taken HRT.

The actual risk of breast cancer with taking HRT is actually very small. It equates to around one extra case of breast cancer per 1,000 women each year. This risk is similar to the risk of breast cancer in women who are obese, those women who have never had children and also those women who drink two to three units of alcohol each day. There is no increased risk of dying from breast cancer though.

Most of the studies done in this area have not actually shown an increased risk of breast cancer in women who take HRT for five years or less. Some studies have shown that women who take oestrogen-only HRT do not have an increased risk of breast cancer and may even have a lower risk of breast cancer.

Women who take combined HRT have an increased risk of having an abnormal mammogram, as HRT increases the density of breast tissue. This is not the same as increasing the risk of breast cancer.

Note: There is no increased risk of breast cancer in women who take HRT under the age of 50 years.

Stroke
Some studies have shown that there is a small increased risk of stroke in women taking either oestrogen-only or combined HRT. However, there is no increased risk of stroke in women who use the patch (or gel) rather than tablets.

HRT containing lower doses of oestrogen seems to be associated with a lower risk of stroke compared to those containing higher doses.
Cancer of the womb (uterus)
There is an increased risk of uterine cancer due to the oestrogen part of HRT. However, by taking combined HRT containing oestrogen and progestogen, this risk reduces completely. This is the reason why progestogen is included in HRT. However, you should always see your doctor if you have any abnormal vaginal bleeding which develops after starting HRT. For example, heavy bleeding, irregular bleeding, or bleeding after having sex.

If you have had a total hysterectomy for whatever reason, you should only need to take oestrogen-only HRT.

Cancer of the ovary
It is thought there is a slightly increased risk of developing ovarian cancer if you use oestrogen-only HRT or combined HRT. This risk decreases after you stop HRT.

Other points about risks
Your risk of developing the diseases mentioned above can depend on a combination of many factors. For example, your family history, and lifestyle factors such as smoking, obesity, diet, etc, also affect your risk of these conditions.

You can greatly reduce your risk of developing heart disease, stroke and many cancers by not smoking and by taking regular exercise and eating a healthy diet. These conditions become more common anyway with advancing age.

Note: women who take HRT at a younger age (under the age of 51 years) do not have any risks of HRT as they are receiving hormones that their bodies would otherwise be producing.

What about side-effects when taking hormone replacement therapy (HRT)?
Side-effects are problems that are not serious but may occur in some women. They tend to go if you stop treatment. Side-effects with HRT are uncommon.

Side-effects may include the following:

- In the first few weeks some women may develop a slight feeling of sickness (nausea), some breast discomfort or leg cramps. These tend to go within a few months if you continue to use HRT.
- HRT skin patches may occasionally cause irritation of the skin.
- Some women have more headaches or migraines when they take HRT. This is usually reduced by using patches or gel rather than taking tablets.

A change to a different brand or type of HRT may help if side-effects occur. Various oestrogens and progestogens are used in the different brands. If you have a side-effect with one brand, it may not occur with a different one. Changing the delivery method of HRT (for example, from a tablet to a patch) may also help if you have side-effects.

So, should I take hormone replacement therapy (HRT), and for how long?
The benefits have to be balanced against the risks. Some of the risks associated with HRT increase the longer the time that you take HRT. You have to decide what is right for you, with advice from your doctor or nurse, depending on your circumstances.
As a general rule:

For short-term treatment of menopausal symptoms
If you are troubled with menopausal symptoms, the balance of risks and benefits is in favour of taking HRT (provided there are no reasons why you shouldn’t take HRT). You should take the lowest dose which keeps symptoms away. Many women find that after 1-3 years the worst of the flushing-type symptoms have gone and they no longer need HRT to prevent them. In some women, the symptoms can return for a short time after stopping HRT. If the genital symptoms such as vaginal dryness persist after stopping HRT, an option is to use, for example, an oestrogen cream or pessary in the vaginal area (see below).

If you mainly have genital symptoms such as a dry vagina
An option which may be advised by your doctor is to use, for example, a vaginal oestrogen cream or pessary. This gives the benefits of easing the symptoms but with less risk than using HRT tablets, patches, etc, as far less oestrogen gets into the bloodstream. In many women, this treatment may be needed long-term.

Some other points about hormone replacement therapy (HRT)

- HRT does not act as a contraceptive. Therefore, if you are still having periods when you start HRT, or have only recently stopped having periods, you should still use contraception. Your doctor will advise when you no longer need to use contraception. But, as a general rule: contraception should be used to prevent pregnancy for one year after your last period if you are older than 50, or for two years after your last period if you are less than 50.
- If you are taking HRT, you should have regular check-ups with your doctor. These are usually undertaken every year.
- At your review appointments, you should discuss your risks and benefits of taking HRT, as these may change over time. After some time, your doctor may also suggest stopping your HRT to see if you still need it.
- You should also be ‘breast aware’ and look out for any changes in your breasts. If you notice any lumps or problems that you are worried about, you should see your doctor. You should also attend your breast cancer screening mammogram when called.

What is tibolone?

Tibolone is a man-made hormone that can be used as an alternative to HRT. It has some oestrogen, progestogen and also some male hormone (androgen) effects. So, you just have to take this one tablet to have these hormone effects.

The following are some points about tibolone:

- It is effective in treating sweats and hot flushes.
- It reduces your risk of ‘thinning’ of the bones (osteoporosis).
- It may also improve your libido (sex drive).
- It is associated with a small increased risk of stroke.
- Most studies have shown a small increased risk of having womb (endometrial) cancer diagnosed in women who use tibolone.
- Tibolone may be associated with a small increased risk of breast cancer.

In younger women, the risks of taking tibolone are about the same as taking combined HRT. For women older than 60, the risks associated with taking tibolone may outweigh the benefits because of the small increased risk of stroke.

Further help & information

British Menopause Society
Web: www.thebms.org.uk

Daisy Network
Further reading & references

- **Menopause: diagnosis and management; NICE Guidelines (Nov 2015)**
- **Panay N et al; British Menopause Society & Women’s Health Concern recommendations on hormone replacement therapy, May 2013**

**Disclaimer:** This article is for information only and should not be used for the diagnosis or treatment of medical conditions. EMIS has used all reasonable care in compiling the information but makes no warranty as to its accuracy. Consult a doctor or other healthcare professional for diagnosis and treatment of medical conditions. For details see our conditions.

View this article online at: patient.info/health/menopause-and-hormone-replacement-therapy-hrt

Discuss Menopause and Hormone Replacement Therapy (HRT) and find more trusted resources at Patient.