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The menopause is a normal life event for women — it is not an illness or a medical condition. The life expectancy of women has increased over the past century, this means that on average, women spend over a third of their lives being postmenopausal.

Many women suffer in silence and do not realise how effective hormone replacement therapy (HRT) can be at dramatically improving not only their symptoms but also their quality of life and their future health.

Managing symptoms

It is estimated that around 75% of menopausal women experience symptoms and around 25% of women experience severe symptoms that have a negative effect on their lives, often affecting their family and performance at work. The vasomotor symptoms of the menopause are the ones that are most obvious when thinking about menopause, but these are not the symptoms that affect women the most. It is the symptoms of low mood, anxiety, reduced self-esteem, poor memory and concentration, reduced libido, joint pains and vaginal dryness that affect women the most.

Managing women with symptoms of the menopause is a very rewarding aspect of clinical practice. There are now excellent guidelines available, both national and international, for healthcare professionals on the management of the menopause ¹⁻³. However, these guidelines have not been read by many healthcare professionals which means that many women are being denied evidence-based treatment. All the guidelines and evidence support the notion that the benefits of taking HRT outweigh any risks for the vast majority of women.

Benefits and risks of HRT

There are numerous potential benefits to be gained by women taking HRT. Symptoms of the menopause such as hot flushes, mood swings, night sweats, and reduced libido improve. In addition, taking HRT has also been shown to reduce future risk of cardiovascular disease, osteoporosis, type 2 diabetes, osteoarthritis and dementia ⁴⁻⁶. Most benefit is afforded when women start HRT within 10 years of their menopause.

The type of HRT also affects a woman's benefits and risks. HRT containing micronised progesterone is associated with a lower risk of breast cancer, cardiovascular disease, and thromboembolic events compared with synthetic progestogens ⁷⁻⁸.

In addition, the mode of delivery of estrogen is also important because, in contrast with oral estrogen, transdermal estrogen is not associated with an increased risk of venous thromboembolism (VTE).

Most women and healthcare professionals are concerned about the possible risks of breast cancer in women taking HRT. However, the risk is far lower than many realise. Women who take estrogen-only HRT (women who have had a hysterectomy) have a lower future risk of breast cancer¹⁰. Women who take estrogen and a progestogen who are over 51-years-old may have a small increased risk of breast cancer. However, this increased risk is a similar magnitude to the risk of breast cancer for women who are overweight or drinking a glass or two of wine each night. Telling them this often really helps to put this risk into perspective.

Studies have shown that women who take micronised progesterone have an even lower risk of breast cancer than other women who take other progestogens.

Women with a history of cancer can still take HRT safely, in most cases. Many cancers are not hormone dependent, including cancers of the cervix, vagina, vulva, malignant melanoma and bowel. Most types of endometrial and ovarian cancer are also not hormone dependent. Women with a family history of cancer — including breast cancer — can still take HRT.

There is no good evidence regarding giving HRT to women with a history of an estrogen receptor positive cancer. Some women with a history of these cancers choose to take HRT for the health benefits and improvements to the quality of their lives.

How to prescribe HRT Firstly - keep it simple

There is robust evidence demonstrating that transdermal estrogen in association with micronised progesterone represents the optimal HRT regimen, particularly in women at risk of cardiovascular events¹¹. This combination should ideally be initiated by healthcare professionals at a primary care level.

Considerations when prescribing combination products:

- There is less flexibility if you want to alter the estrogen dose
- They all contain older progestogens.

Considerations when prescribing oral estrogen first line:

- There is VTE risk with oral estrogen
- Oral estrogen increases sex hormone binding globulin (SHBG) so reducing free androgen index (lowers libido even more)
- There is less reliable absorption
- There are more contraindications (for example obesity, diabetes, gallbladder disease, migraine and so on).

1. The most important hormone in HRT is estrogen – best as 17 beta-estradiol

The optimal dose for each woman should be given to improve symptoms and also to optimise bone and heart health. Women can continue taking HRT for as long as the benefits outweigh any risks. They should have an annual review.

It is NOT about lower dose and shortest length of time anymore!

The optimal dose for each woman should be given to improve symptoms and also to optimise bone and heart health.

Women can usually take HRT for ever.

Transdermal estrogen has no clot risk associated with it. It can be given to women with a history of clot and women with an increased risk of clot or stroke including women with migraines.

It can also be given to women with hypertension and cardiovascular disease.

Patches - pros:

- Usually stick well and easy to use
- Can swim, shower, bath, swim with them on
- Constant level given so can be better in women with migraines
- Can use more than one which is useful for women with early menopause / primary ovarian insufficiency (POI) who may need higher doses.

Gel – pros:

- Easy to alter dose so women have more control
- Usually absorb really easily
- Can be used with patches to 'top up'
- Women with cyclical symptoms (including PMS) can use more on the days with worse symptoms.

Spray – pros:

- Light preparation and small volume
- Is absorbed easily
- Can be used with patches to 'top up'
- Women with cyclical symptoms (including PMS) can use more on the days with worse symptoms

Patches – cons:

- Some women do not like to have something stuck to their skin
- Can lead to local irritation
- Some women find they do not stick on well or they crinkle (therefore reduced absorption)
- Some women find they have high absorption in hot climates
- Plaster mark on bottom can be removed with baby oil and dry flannel!

Gel - cons:

- Young women needing higher doses need to use large quantities
- Harder to remember as needed once or twice a day
- Sachets can be hard to open.

Spray – cons:

- Young women needing higher doses need to use large quantities
- Harder to remember as needed once or twice a day

These are the transdermal preparations commonly prescribed at Newson Health:

- Evorel 25 / 50 / 75 / 100mcg patches, twice a week
- Estradot 25 / 50 / 75 / 100mcg patches, twice a week
- Elleste 40 / 80mcg patch, twice a week
- Oestrogel 2-4 pumps a day / Sandrena gel 0.5 / 1mg sachets
- Lenzetto spray, 1-3 sprays a day

Some women may choose an oral preparation or some women may not absorb transdermal estrogen adequately. The safest progestogen with respect to breast cancer and clot risk is dydrogesterone.

The following are the available preparations containing dydrogestodene:

- Femoston 1/10 (1mg estradiol and 10mg dydrogesterone) cyclical preparation
- Femoston 2/10 (2mg estradiol and 10mg dydrogesterone) cyclical preparation
- Femoston Conti 0.5/2.5 (0.5mg estradiol and 2.5mg dydrogesterone) continuous preparation
- Femoston Conti 1/5 (1mg estradiol and 2.5mg dydrogesterone) continuous preparation

Dose Equivalents of Various Preparations

Patch	Half a 25 microgram patch	25 micrograms	50 micrograms	75 - 100 micrograms
Gel - pump	1/2 pump	1 pump	2 pumps	3 - 4 pumps
Gel - sachet	1/2 of a 0.5mg sachet	0.5mg sachet	1mg	1 - 2mg
Spray		1 spray	2 sprays	3 sprays

2.

Women with a uterus need a progestogen too

A few tips:

- Give cyclical HRT for first 6 12 months if they are having periods
- Continuous progestogens are better for endometrial protection
- Any age woman can take continuous HRT but it may cause erratic bleeding if given too early

The evidence supports the use of micronised progesterone (Utrogestan) as the most favourable progestogen. Can be prescribed cyclically, 200mg each evening, for 2 out of 4 weeks OR continuously, 100mg each evening:

Pros:

- Fewer side effects so better tolerated
- Can improve cardiovascular risk / lipids
- Neutral effect on BP / may reduce BP
- No VTE risk
- No breast cancer risk for first 5 years of taking it (in women over 51 years old)
- Studies have shown some positive effect on bone strength
- Can often reduce anxiety
- Can be used vaginally (off license) at half the oral dose in women who cannot tolerate oral progesterone.
- Can be used as a contraceptive if taken continuously and no periods

Cons:

- Can result in more breakthrough bleeding than synthetic progestogens
- Can cause some sedation is taken at night time (though many women like this side effect)
- Needs to be taken on an empty stomach (eating food increases absorption)
- Not licensed as a contraceptive

If Utrogestan is not available or not tolerated then consider:

Evorel Conti / Evorel Sequi (50mcg estradiol)

Many women need addition estradiol which can be given as an additional estradiol patch or as the gel or spray

Mirena Coil (IUS)

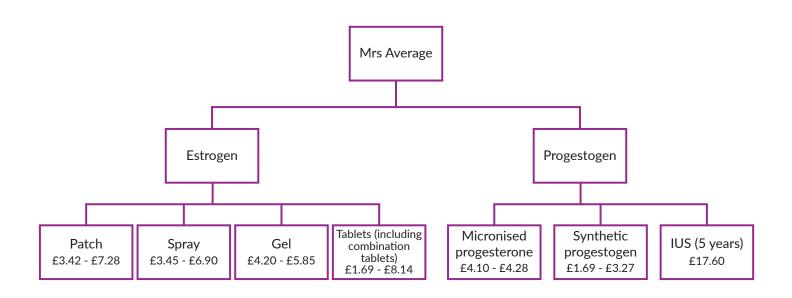
Pros:

- Contraception
- Less risk of bleeding
- Can be safely used for 5 years as endometrial protection as recommended by FSRH¹² (actually licensed for 4 years)

Cons:

- Systemic side effects in some women (especially first 3-6/12)
- Spotting and irregular bleeding can occur in first 3-6/12
- Not every woman's choice
- Sometimes difficult to access because of local commissioning arrangements

Using estrogen as a patch or gel and micronised progesterone is cheap for the NHS (price per month):



Clearly HRT is only one part of the management of perimenopausal and menopausal women. Lifestyle recommendations regarding diet, exercise, smoking cessation, and safe levels of alcohol consumption should be encouraged.

Testosterone is often beneficial

Adding testosterone to HRT can improve sexual function and general wellbeing. Testosterone can improve libido¹³. In addition, testosterone can improve mood, energy, stamina and concentration. Many women notice that their brain fog and memory improve.

A significant problem with prescribing testosterone is that there are currently no available licensed preparations for women in the UK. GMC guidance on the prescription of unlicensed medication should be consulted when prescribing. It is important to ensure that women are adequately estrogenised before adding in testosterone; this is usually the case when they are no longer experiencing vasomotor symptoms.

Blood results are a guide and are not a reliable way of assessing need for testosterone.

It can sometimes take several weeks, even months for a woman to notice the beneficial effects of testosterone. If they have not noticed an improvement after six months, then it is unlikely to be beneficial. Clinical improvement in symptoms is more important than aiming for a specific level on treatment.

- Baseline blood tests are optional as most women will have low testosterone and FAI treatment is based on symptoms
- Measure total testosterone and SHBG levels. FAI should usually be <2 before initiating testosterone
- Ensure no other cause for her symptoms
- Ensure the woman does not have a specific treatable cause for her low FAI (e.g. oral estrogens)

Commonly used testosterone replacement for women:

- Testogel ® (1% testosterone gel in 5g sachets, containing 50mg testosterone): Starting dose 1/10 of a sachet/day = 5mg/day i.e. each sachet should last 10 days.
- Testim ® (1% testosterone gel in 5g tubes, containing 50mg testosterone): Starting dose 1/10 of a tube/day = 5mg/day i.e. each tube should last 10 days.
- AndroFeme ® (1% testosterone cream in 50ml tubes with screw cap, only available privately): Starting dose 0.5ml/day = 5mg /day i.e. each tube should last 100 days.

Vaginal estrogens

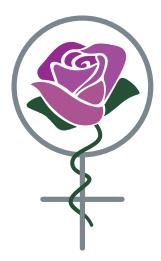
Although vaginal estrogen is not actually HRT it is important to know the following:

- Vaginal estrogen is safe to give with HRT (about 20% of women need both).
- Vaginal estrogen can be given as a pessary, cream, gel or vaginal ring.
- Vaginal estrogen should be prescribed in the long term (i.e. on repeat prescriptions).
- The dose of vaginal estrogen is very low (using 10mcg estrogen pessaries regularly for one year is an equivalent dose to just one 1mg estradiol HRT tablet).
- Women with a history of any type of cancer, including an estrogen-receptor-positive cancer, can still safely use vaginal estrogen and continue using this in the long term¹⁴.
- Evidence does not show an increased risk of cancer recurrence among women currently undergoing treatment for breast cancer, or those with a personal history of breast cancer, who use vaginal estrogen to relieve urogenital symptoms.
- GPs and primary care healthcare professionals can safely prescribe vaginal estrogen to these women.
- Theoretically, women taking aromatase inhibitors should not use vaginal estrogen preparations but many oncologists and menopause specialists still give these preparations to these women and they can really have a beneficial effect on their localised symptoms.
- Many women using vaginal estrogen should also be recommended to use vaginal moisturisers and lubricants too.

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Dr Louise Newson is a GP and menopause specialist in Stratford-upon-Avon, UK. She has written and developed the website www.menopausedoctor.co.uk and is the founder of the 'balance' menopause app and The Menopause Charity.

The website and app contain evidence-based, non-biased information about the perimenopause and the menopause. She created both platforms to empower women with information about their perimenopause and menopause and to inform them about the treatments available.

Her aim is for women to acquire more knowledge and confidence to approach their own GP to ask for help and advice.

The team at Newson Health are passionate about improving awareness of safe prescribing of HRT to ladies at all stages of the perimenopause and menopause and also offering holistic treatments for the perimenopause and menopause.

Louise is also the director of the not-for-profit company Newson Health Research and Education.

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