**Menopausal hormone therapy (MHT)**

**Hormone replacement therapy (HRT)**

**Guideline for practitioner**

**Menopause-**

* permanent secession of monthly menstruation for at least 12 months
* at the end of reproductive life
* due to loss of ovarian function.
* Average age of menopause is 51 years (range between 45 to 55 years).

**MHT / HRT-** is sometimes used to treat the symptoms of menopause due to estrogen deficiency.

**Indications of MHT-**

* **Relieving menopause symptoms-** it's effective at relieving most perimenopause and menopause symptoms, such as: hot flushes, night sweats, sleep problems, anxiety and low mood
* **Preventing osteoporosis-** Oestrogen is needed for healthy bones and reduce fracture,
* **Coronary heart diseases-** Decreased risk in women <60, within 10 years of menopause
* **Genitourinary syndrome of menopause (GSM)-** Vaginal oestrogen helps with vaginal dryness, and dyspareunia.
* **Maintaining muscle strength**

**Introduction-** This guideline covers identifying and managing menopause, including in people with premature ovarian insufficiency. It aims to improve the consistency of support and information provided to people experiencing menopause.

* Who is it for? - Healthcare professionals who care for women and people with menopause-associated symptoms.
* Individualized care- Approach should be tailored to the person at all times when identifying, discussing, investigating and managing menopause, and adapt the approach if symptoms change over time. NICE's guideline [2015]
* discuss symptom management plans with patient, including how to communicate risks, benefits and consequences. NICE's guideline [2024]
* Offer psychological support to people who are experiencing early menopause (between ages of 40 and 44) and are distressed by their diagnosis or its consequences.

**Discussing management options with people aged 40 or over- HRT/ MHT-**

Before prescribing HRT need to know the benefits and risks associated with:

• combined versus oestrogen-only HRT

• transdermal versus oral HRT

• types of oestrogen and progestogen

• sequential versus continuous combined HRT

• dose and duration. [2024]

**If a person chooses to take HRT:**

• discuss the possible duration of treatment at the outset

• at every review, rediscuss the benefits and risks of continuing treatment

• explain that symptoms may return when HRT is stopped

• discuss the option of restarting treatment after stopped HRT if necessary.

**Managing symptoms associated with menopause in people aged 40 or over-**

* **Vasomotor symptoms-** offer HRT
* **Genitourinary symptoms-** Offer vaginal oestrogen (including those using systemic HRT):

• serious adverse effects are very rare • symptoms often return when vaginal oestrogen is stopped but treatment can be restarted if necessary • vaginal oestrogen is absorbed locally – a minimal amount is absorbed into the bloodstream (when compared with systemic HRT), but this is unlikely to have a significant effect throughout the body. [2024] • Consider vaginal progesterone for genitourinary symptoms if vaginal oestrogen, or non-hormonal moisturisers or lubricants have been ineffective or are not tolerated.

* **Depressive symptoms**- Consider HRT
* **Altered sexual function-** Consider testosterone supplementation for people with low sexual desire associated with menopause if HRT alone is not effective. [2015]

**Preparations for MHT-**

● **Estrogen preparations-**

* Estrogen is the most effective treatment available to relieve bothersome symptoms of menopause.
* It is available in many forms: oral, transdermal, topical gels, emulsions and lotions, intravaginal creams and tablets, and vaginal rings. In some countries, estrogen can also be given as a subcutaneous implant.
* All types and routes of estrogen are equally effective for hot flashes, but transdermal preparations are associated with a lower risk of venous thromboembolism and stroke.
* For hot flashes require systemic estrogen, but only for "genitourinary syndrome of menopause" (GSM) low-dose vaginal estrogen is cream acts better.
* If woman is having estrogen and she has not had hysterectomy, progesterone need to be added.

**Oestrogen-only HRT** This recommendation is for people who have had a total hysterectomy. In people with a uterus, endometrial cancer risk increases with oestrogen-only HRT. In people with ovaries, ovarian cancer risk increases very slightly after 5 years of using oestrogen-only HRT and this risk increases with duration of use. Mortality from cardiovascular disease does not increase with oestrogen-only HRT.

● **Progestin preparations** –

* Endometrial hyperplasia and cancer can occur after use of unopposed estrogen therapy; as a result, a progestin should be added in women who have not had a hysterectomy.
* For women unable to tolerate standard oral progestins, alternative approaches include a levonorgestrel-releasing intrauterine system (LNG-IUS) or the combination conjugated estrogen-bazedoxifene regimen (T SEC).

●**Other hormone preparations** –

**Tibolone-**

* a drug that has been widely used in Europe and other countries for many years for hot flashes, is a synthetic steroid whose metabolites have estrogenic, androgenic, and progestogenic properties.
* Tibolone reduces vasomotor symptoms (although less so than estrogen), improves bone density, and may have a modest effect on symptoms of sexual dysfunction.
* Tibolone increases the risk of recurrence in women with a history of breast cancer, and it may increase the risk of stroke in women over age 60. So, before prescribing tibolone careful history taking need to be done to assess the risk.

**Androgens** —

* Exogenous testosterone therapy has been shown to improve some aspects of female sexual function who are suffering from decrease libido.

● **Dosing and administration**–

* "Standard" doses of estrogen given daily, such as 17-beta estradiol (oral 1 mg/day or transdermal 0.05 mg/day) are adequate for symptom relief in the majority of women. An exception is younger women after bilateral oophorectomy. They often require higher doses (eg, 2 mg oral estradiol or 0.1 mg transdermal estradiol or their equivalent).
* **Conjugate equine estrogen (CEE)** 0.625mg can be start and better to start with a lower dose. The current approach is to start with lower doses, such as transdermal estradiol (0.025 mg) or oral estradiol (0.5 mg/day), and titrate up to relieve symptoms. And does need to be increase if symptoms doesn’t relief.

**Medical history- before offering treatment for menopause associated symptoms**

* In women with Type 2 diabetes- Consider HRT
* Individual with Increased risk of venous thromboembolism or with a body mass index (BMI) over 30 kg/m2. [2015] - Consider transdermal rather than oral HRT. Consider referring them to a haematologist for assessment before considering HRT. [2015]
* For women with a personal history of coronary heart disease or stroke, ensure that combined or oestrogen-only HRT is discussed with and offered, if appropriate, by a healthcare professional with expertise in menopause. [2024]
* HRT is contraindicated in women with a history of breast cancer. [March 2025]

**Effects of HRT on specific health outcomes in people aged 45 or over- Combined HRT is recommended for people with a uterus-**

When talking about combined HRT as a treatment option: • discuss different combined HRT options to identify the one that best balances benefits and risks for the person

* **Overall life expectancy** is unlikely to change with the use of combined HRT. [2024]
* **Breast cancer** risk increases with combined HRT
* **Endometrial cancer** risk decreases with continuous combined HRT
* In people with ovaries, there is a very slight increase in **ovarian cancer risk** with combined HRT
* **Coronary heart disease** risk does not increase with combined HRT
* **Dementia** risk might increase with combined HRT if it is started at 65 or over
* **Fragility fracture** risk is decreased while taking HRT
* **Stroke** risk is unlikely to increase with the use of combined HRT
* The risk of developing **type 2 diabetes** does not increase with HRT. [2015]
* **VTE** risk is increased with oral HRT.

**Starting and stopping hormone replacement therapy for anyone-**

* For people who wish to take HRT for symptoms associated with menopause:
  + • offer combined HRT to people with a uterus
  + • offer oestrogen-only HRT to people who have had a total hysterectomy.
* Because oestrogen alone, if given to people with an intact uterus, can lead to an increased risk of endometrial hyperplasia and potentially, endometrial cancer. Adding progestogen to the HRT regimen helps protect the endometrium by counteracting the stimulating effects of oestrogen, and so reduces the risk of endometrial hyperplasia and cancer.
* For people with a condition that may be affected by HRT, consider seeking advice on the choice of HRT from a healthcare professional with specialist knowledge of that condition. [2024]
* If a person chooses to take HRT, use the lowest effective dosage. [2024]
* Explain to people with a uterus that vaginal bleeding is a common side effect of systemic HRT within the first 3 months of treatment, and they will be asked about this during their 3-month review. Advise them to seek medical help promptly if they experience vaginal bleeding after 3 months. [2015]

**Stopping HRT-**

* Offer people who are stopping HRT a choice of gradually reducing or immediately stopping treatment. [2015]
* Explain to people that:
  + gradually reducing HRT may limit recurrence of symptoms in the short term
  + gradually reducing or immediately stopping HRT makes no difference to their symptoms in the longer term. [2015]
* A personal history of cancer is a contraindication to systemic HRT because it has been shown that systemic HRT can lead to cancer progression or recurrence.
* Stop systemic HRT in people who are diagnosed with breast cancer in line with the recommendations on menopause symptoms in NICE's guideline on early and locally advanced breast cancer. [2024]

**Reviewing treatment for anyone-**

* Review each treatment for symptoms associated with menopause:
  + At 3 months to assess efficacy and tolerability
  + Annually thereafter, unless there are clinical indications for an earlier review (such as treatment ineffectiveness, side effects or adverse events). [2015]
* Referral to (or seeking advice from) a specialist menopause service should be considered where menopause specialist input is required if:
  + Treatments do not improve menopausal symptoms
  + Ongoing troublesome side effects with treatment
  + Women who have contraindications to HRT
  + Where there is uncertainty about the most suitable treatment options for a woman’s menopausal symptoms.
* The initiation of MHT to be a safe option for apparently healthy, symptomatic women who are within 10 years of menopause or younger than age 60 years and who do not have contraindications to MHT.
* MHT should not be recommended without a clear indication for its use.
* For women with vaginal atrophy symptoms only, vaginal estrogen is superior.
* MHT is effective for the treatment of menopausal hot flashes and vaginal atrophy caused by hypoestrogenism. It also prevents bone loss. However, it is not recommended for the prevention of chronic disease such as prevention of cardiovascular or osteoporosis.
* Treatment of postmenopausal women with estrogen alone increases the risk of endometrial hyperplasia and carcinoma. So, women must get progesterone with estrogen if she is having uterus in situ.
* **Recurrent urinary tract infection** — Estrogen therapy, in particular, vaginal estrogen, is effective for the symptoms of vaginal atrophy. Estrogen may also be beneficial for reducing the frequency of recurrent urinary tract infections in postmenopausal women.
* Transdermal rather than oral HRT should be considered in menopausal women who are at increased risk of VTE, including those with increased BMI.
* Women with Premature Ovarian Insufficiency (POI) and early menopause should be advised to continue HRT until at least the age of the natural menopause.