Oestrogen Only Menopausal Hormone Therapy

Key Points:

- After hysterectomy MHT/HRT only needs to contain oestrogen.
- Oestrogens are available as tablets, skin patches, gels and vaginal creams and pessaries.
- The safety profile of the delivery methods differ and some women will be better advised to use a non-oral route of administration.
- Oestrogen reduces hot flushes, improves vaginal dryness and sleep and increases bone density.

Women generally undergo menopause between the ages of 45 and 55 years. Around the time of menopause many women may experience symptoms such as hot flushes, sweats, vaginal dryness, loss of libido, irritability, sleep disturbance, and muscle/joint pains. Oestrogen therapy is the most effective means of treating these symptoms. It will also prevent bone loss.

Oestrogen only therapy should be prescribed to women who have had a hysterectomy. There is no therapeutic advantage in prescribing progestogen (either a progestin or natural progesterone) for women who have had a hysterectomy, with the possible exception of women with residual intra-peritoneal endometriosis. In fact, there is a distinct disadvantage in terms of increased breast cancer and thrombotic risk and adverse changes in cardiovascular risk factors (1). The following advice does not apply to so-called 'bio-identical' individually compounded troche or transdermal products. There are inadequate safety or efficacy data for these products and they should be avoided.

Oestrogen formulations and modes of delivery

Oestrogens are available as tablets, skin patches and gels. These products contain different kinds of oestrogen (oestradiol, conjugated equine oestrogen or oestriol) which are all effective in treating menopausal symptoms. There is no clear consensus about which delivery method is best overall, although there are some circumstances where transdermal therapy is preferred.

Patches or gels are better for those who have high triglyceride concentrations, those with hypertension, those who may not absorb tablets adequately and those at increased risk of venous thromboembolic disease (VTE). This includes those women who are overweight or smokers (2) (See AMS Information Sheet *Menopausal Treatments and the Risk of Thrombosis/Thromboembolism*). Patch therapy may be better tolerated by women with migraine (3) (See AMS Information Sheet *Migraine headaches, menopause and MHT/HRT*).

Vaginal oestrogen in creams, pessaries or tablets is available for women with symptomatic vaginal dryness and can be used either alone or in combination with systemic therapy (4) (See AMS Information Vulvovaginal Symptoms).

The benefits of oestrogen- only MHT

- Oestrogen reduces the severity and frequency of hot flushes by around 85%.
- Oestrogen improves vaginal dryness.
- By reducing menopausal symptoms, oestrogen may improve sleep and quality of life.
- Oestrogen reduces the risk of post-menopausal bone fracture, including hip fracture (1).
- Oestrogen use is not associated with weight gain (5).
- Women who go through menopause before 45 years are advised to take oestrogen until the age of average menopause at 50 years. The decision to continue oestrogen beyond 50 should be reviewed annually by the woman in consultation with her doctor (see AMS Information Sheet *Spontaneous Premature Ovarian Insufficiency*).

Side-effects of oestrogen-only MHT

Common side-effects, which are usually temporary, include breast enlargement and tenderness, and nausea. This may be dose related. Oral oestrogen may be associated with exacerbation of hormonally-sensitive migraine headache.

The risks of oestrogen-only MHT

Oral oestrogen increases the risk of blood clots (venous thromboembolism). The risk increases with age and other risk factors such as obesity, previous thromboembolism, smoking and immobility. In women less than 60 years, the risk with oral oestrogen alone is 3 per 10,000 per year which is not significantly different from placebo.

- Oral oestrogen increases the risk of stroke and the risk increases with age. Stroke risk is not significantly increased in women younger than 60 years with normal blood pressure. The risk may be lower with lower doses and the use of transdermal oestrogen (6).

- Oral oestrogen is associated with an increased risk of gallbladder inflammation (cholecystitis). There are no data regarding gel or skin patches.
- Oestrogen alone does not appear to increase the risk of breast cancer. The risk of breast cancer is primarily associated with combined oestrogen/progestogen therapy and related to the duration of use. Oestrogen alone has not been shown to increase breast cancer risk in high quality randomized controlled trials (7). In a large observational study there was no significant increase in breast cancer with oestrogen only therapy for 20 years (8).
- Oestrogen alone commenced at the time of menopause does not increase the risk of coronary heart disease and may decrease the risk (9).
- For a fuller discussion of risk and benefit see the AMS Information Sheet *Risks and Benefits of Menopausal Hormone Therapy.*

Management and prescribing

- Individual benefits and risks of oestrogen should be discussed with the patient.
- Oestrogen should not be prescribed unless mammographic screening is up to date.
- Regular breast checks and screening mammograms should be performed in women over 50 years whether or not oestrogen therapy is used.
- The patient should be reviewed annually.
- If a woman using oestrogen develops breast cancer or symptoms suggesting a DVT or stroke. she should stop the oestrogen and discuss further management with the doctor (see AMS Information Sheet *Menopausal Treatments and the Risk of Thrombosis/Thromboembolism*).

Continuation or cessation of oestrogen only MHT

- The dose and duration of oestrogen therapy should be consistent with treatment goals, such as symptom relief, and should be individualized (6).
- Women who go through menopause before 45 years are advised to take oestrogen therapy until the average age of menopause, i.e. around 50 years. The discussion and decision to continue oestrogen therapy is then the same as it is for women are experiencing menopause at the usual age (See AMS Information Sheet *Spontaneous Premature Ovarian Insufficiency*).
- Cessation of MHT is associated with increased cardiovascular and cerebrovascular events and increased risk of fracture (10) (11).

This fact sheet is designed to be informative and educational. It is not intended to provide specific medical advice or replace advice from your health practitioner.

References

1. Manson JE, Chlebowski RT, Stefanick ML, Aragaki AK, Rossouw JE, Prentice RL, et al. Menopausal hormone therapy and health outcomes during the intervention and extended poststopping phases of the Women's Health Initiative randomized trials. JAMA. 2013 Oct 2;310(13):1353-68.

2. Canonico M, Plu-Bureau G, Lowe GDO, Scarabin P-Y. Hormone replacement therapy and risk of venous thromboembolism in postmenopausal women: systematic review and meta-analysis. BMJ. 2008 May 31;336(7655):1227-31.

3. Nappi RE, Cagnacci A, Granella F, Piccinini F, Polatti F, Facchinetti F. Course of primary headaches during hormone replacement therapy. Maturitas. [Clinical Trial

Randomized Controlled Trial]. 2001 Apr 20;38(2):157-63.

4. Suckling J, Lethaby A, Kennedy R. Local oestrogen for vaginal atrophy in postmenopausal women. Cochrane Database Syst Rev. 2006(4):CD001500.

5. Davis SR, Castelo-Branco C, Chedraui P, Lumsden MA, Nappi RE, Shah D, et al. Understanding weight gain at menopause. Climacteric. 2012 Oct;15(5):419-29.

6. Baber RJ, Panay N, Fenton A, Group IMSW. 2016 IMS Recommendations on women's midlife health and menopause hormone therapy. Climacteric. 2016;19(2):109-50.

7. Anderson GL, Chlebowski RT, Aragaki AK, Kuller LH, Manson JE, Gass M, et al. Conjugated equine oestrogen and breast cancer incidence and mortality in postmenopausal women with hysterectomy: extended follow-up of the Women's Health Initiative randomised placebo-controlled trial. Lancet Oncology. 2012;13(5):476-86.

8. Chen WY, Manson JE, Hankinson SE, Rosner B, Holmes MD, Willett WC, et al. Unopposed estrogen therapy and the risk of invasive breast cancer. Arch Intern Med. 2006;166(9):1027-32.

9. Boardman HM, Hartley L, Eisinga A, Main C, Roque I Figuls M, Bonfill Cosp X, et al. Hormone therapy for preventing cardiovascular disease in post-menopausal women. Cochrane Database Syst Rev. 2015;3:CD002229.

10. Mikkola TS, Tuomikoski P, Lyytinen H, Korhonen P, Hoti F, Vattulainen P, et al. Increased cardiovascular mortality risk in women discontinuing postmenopausal hormone therapy. J Clin Endocrinol Metab. 2015 Dec;100(12):4588-94.

11. Karim R, Dell RM, Greene DF, Mack WJ, Gallagher JC, Hodis HN. Hip fracture in postmenopausal women after cessation of hormone therapy: results from a prospective study in a large health management organization. Menopause. 2011 Nov;18(11):1172-7.

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