Misinformation Surrounding Hormone Therapy

Menopause is a natural stage of life that represents the postreproductive phase and may last for one-third of a woman's lifespan or longer. Changes in the menstrual cycle signal the start of the menopause transition and ends 1 year after the final menstrual cycle at which time a woman is menopausal. Menopause is caused by the decreased production of ovarian hormones, including estrogen and progesterone. The timing of onset, duration, and symptoms experienced during the menopause transition vary from woman to woman.

The most common symptoms associated with the menopause transition include

Vasomotor symptoms (hot flashes and night sweats)	Changes in mood (feeling more depressed, irritable, or worried)	Vaginal dryness, irritation, burning, or itching
Sleep problems	Decreased sex drive	Pain or bleeding with sex
Muscle and joint aches	Weight gain	Changes to skin and hair
Difficulty remembering things	Recurrent urinary tract infections	Urinary frequency or urgency

Although some of the symptoms associated with menopause improve with hormone therapy (HT), many will not. The Menopause Society has published evidence-based position statements with guidance regarding use of HT. Outside of prevention of osteoporosis, there is no current evidence that HT should be prescribed for primary prevention or that HT should be used in those without symptoms. The purpose of this *MenoNote* is to help people understand when HT is appropriate and the associated risks and benefits.

Indications for the use of hormone therapy

Hormone therapy is indicated for the treatment of bothersome hot flashes and night sweats, vulvovaginal and bladder symptoms, premature menopause (menopause in someone aged younger than 40 years), and prevention of bone loss and reduction of fracture risk.

After menopause, the ovaries stop producing estrogen and progesterone. Testosterone production declines as a result of age rather than because of menopause. However, not everyone will have bothersome symptoms, so ovarian hormones (estrogen, progesterone, testosterone) do not need to be routinely "replaced" in women undergoing menopause at the average age. The term "hormone therapy" is preferred because "hormone replacement therapy" can be misleading.

There are two categories of HT:

1. **Systemic hormone therapy** (higher doses that are absorbed into the bloodstream) is used to treat hot flashes, night sweats, and premature menopause or to help reduce bone loss in those at risk for osteoporosis. If the uterus hasn't been removed with a hysterectomy, a progestogen or a selective estrogen receptor modulator is needed along with estrogen to protect against overgrowth of the uterine lining.

2. **Local vaginal estrogen therapy** (lower doses with negligible absorption into the bloodstream) is applied directly to the vulva and vagina to help with vulvovaginal and urinary symptoms.

Based on existing science and clinical evidence, HT should NOT be used for

- Prevention of heart disease or dementia in women who undergo menopause within the average range (≥45 y)
- Management of musculoskeletal conditions such as osteoarthritis, joint pain, frozen shoulder, etc
- Prevention of aging
- Management of other primarily age-related changes such as hair loss, skin changes, weight gain, etc

Testosterone therapy is used for treatment of low sexual desire in postmenopausal women who have been properly screened and diagnosed with hypoactive sexual desire disorder. Evidence does not support its use for

- Treatment or prevention of any age-related condition, including sarcopenia (loss of muscle mass) or osteoporosis
- Treatment of mood changes, decreased energy, or brain fog or for well-being or other symptoms or concerns

Risks and benefits of hormone therapy

In general, systemic HT is a safe and effective option for treating menopause-related hot flashes, night sweats, and genitourinary symptoms in healthy women when started before age 60 or within 10 years of the onset of menopause. There is also evidence that HT offers some protection against bone loss.

In those starting HT aged older than 60 years or more than 10 years past the onset of menopause, HT is associated with a greater absolute risk of heart attack, stroke, blood clot and dementia. In addition, the risks of HT use outweigh the benefits in those with a history of an estrogen-dependent cancer such as breast cancer and in those with a history of heart attack, stroke, blood clot, or severe liver disease. In rare circumstances, and with shared decision-making in collaboration with a woman's healthcare team, systemic HT may be used in women with a contraindication when nonhormone therapies have not alleviated symptoms.

However, low-dose vaginal estrogen therapy can be started at any time and used for as long as needed in most women.

The Menopause Society™

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