Hormone Health NETWORK®

Postmenopausal Hormone Therapy: Current State of the Science

What is menopausal hormone therapy?

As you approach menopause, your ovaries gradually stop producing the female hormones estrogen and progesterone. With the drop in estrogen levels that comes with menopause, many women have disturbing symptoms such as hot flashes and vaginal dryness. Other effects on health, such as weakening bones and increases in "bad" cholesterol, have also been linked to lower levels of female hormones after menopause. Menopausal hormone therapy (MHT) is the use of female hormones to provide symptom relief and protect against long-term health effects of menopause.

New thinking about MHT

During the 1990s, MHT was widely prescribed to reduce the risk of heart disease, as well as to treat menopausal symptoms. The Women's Health Initiative (WHI), a research study involving thousands of women, was begun in 1991 to find out if MHT truly protected against heart disease, and whether or not it increased breast cancer risk. The first results were published in 2002. Surprisingly, instead of protecting against heart disease as suggested by other studies, WHI data showed that MHT increased the risk of heart attack, as well as breast cancer, stroke, and blood clots. Those results led to a sharp drop in MHT use.

In the following years, as scientists looked more closely at the WHI results, many began to question how the findings applied to women just entering menopause. The average age of the WHI participants was 63, many of whom had reached menopause 10 or more years before the study began. Less than four out of 100 women were aged 50–54 years, when women usually make a decision about starting MHT. (The average age of menopause in the United States is 51.) Since the WHI, many other studies have looked at the effects of MHT in the 50- to 55-year-old age group of women.

The Endocrine Society asked a panel of experts to prepare a Scientific Statement that would objectively examine current scientific evidence about the benefits and risks of MHT. Because it has recently been recognized that the effects of MHT differ in women just starting menopause, the Scientific Statement focused mainly on these women. The Statement also assumed women would take MHT for five years or less. This fact sheet provides an overview of the new or better-understood conclusions detailed in the Statement.

Types of MHT

The most widely used types of MHT are estrogen (E) alone and estrogen plus a progestin (E+P).

E and E+P can be taken by mouth or absorbed through a skin patch. This "systemic" MHT enters the bloodstream and circulates throughout the body. The choice between systemic E and E+P depends on whether you have had a hysterectomy (surgery to remove the uterus). If you have no uterus, you can take estrogen alone. You would need a combination of E+P if you have a uterus. Progestin protects the uterus from the cancer-promoting effects of estrogen.

E alone is also available as "local" therapy in the form of a vaginal cream, ring, or tablet. Local therapy provides low doses of estrogen that generally do not enter the body very much and circulate in the blood at very low levels. Local/vaginal estrogen can be safely used by women with a uterus.

Conclusions based on available data

The expert panel found that the overall conclusions from the WHI do not apply to most menopausal women starting MHT. The majority of women begin this treatment shortly after onset of menopause, and the WHI did not study this group. The Scientific Statement took into consideration the length of time between when a woman starts menopause and when she starts MHT.

Systemic MHT

Systemic MHT relieves symptoms such as hot flashes, mood swings, and sleep disturbance, and protects against bone loss. For some women, it also provides relief from vaginal dryness, urinary frequency, and pain with sex.

Benefits of systemic E or E+P

- Reduces hot flashes and vaginal dryness
- Improves bone density (strength) and reduces fractures
- Reduces the symptoms of overactive bladder (sudden urges to urinate that are hard to control, possibly causing leaks)
- Improves overall sense of physical and mental well-being
- Reduces the risk of developing type 2 diabetes
- Reduces the risk of developing colon cancer
- Significantly reduces the overall death rate
- Leads to less weight gain and/or abdominal fat

Additional benefits of E+P

- Lower than standard doses can reduce hot flashes

Benefits of E alone compared to E+P

- Reduces the risk of breast cancer in women starting MHT many years after the onset of menopause, and does not increase the risk in the first five years of use in those just entering menopause
- May reduce the risk of heart disease

Risks of systemic E or E+P

- Increases breast density (as seen in a mammogram); higher density has been linked to the risk of developing breast cancer
- Increases the risk of blood clots in the veins of the legs and in the lungs (pills forms only)
- Increases the risk of gallbladder disease
- Increases the risk of lung cancers in older smokers
- Increases the risk of stroke by a small amount in women just entering menopause but by a larger amount in older women.

Additional risks of E+P

- Increases the risk of breast cancer, particularly in women just entering menopause. When E+P is stopped, the risk of breast cancer returns to normal within three to five years.

Vaginal (local) estrogen

Vaginal estrogen provides relief from vaginal dryness, pain with sex, and recurrent urinary tract infections related to loss of estrogen.

Benefits of local/vaginal estrogen

- Relieves vaginal dryness and stops the loss of tissue lining the vagina
- Reduces the symptoms of overactive bladder (sudden urges to urinate that are hard to control, possibly causing leaks)
- Reduces the number of urinary tract infections in women who have them again and again

All forms (E, E+P, or vaginal E)

No effect

- No improvement in memory in women starting MHT shortly after menopause (women who start MHT later in life have an increase in dementia)
- No increase in risk of heart disease in women starting therapy shortly after menopause (the risk is increased in those starting at a later time)
- No effect on ability to think and reason in women starting just after menopause

What do these findings mean to recently menopausal women?

The current scientific evidence suggests that for symptomatic menopausal women younger than age 60 years or within 10 years of menopause, the benefits of MHT outweigh the risks in most instances, particularly for relief of symptoms due to low levels of estrogen. Decisions about MHT should grow out of a discussion between you and your provider about your treatment needs, your medical and family history, and the potential for risks. The dosage and delivery method of MHT must be individualized to your particular case. Current guidelines suggest use of MHT with the lowest effective dose and for the shortest possible length of time.

Resources

www.hormone.org/menopause
Hormone Health Network
Menopause Information

www.endocrine.org
Postmenopausal Hormone Therapy: An Endocrine Society Scientific Statement

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