Which postmenopausal women should be offered combined HRT?

EVIDENCE-BASED ANSWER

Recent studies have demonstrated a small but significant risk of adverse effects from combined hormone replacement therapy (HRT), including cardiovascular disease, thromboembolic disease, and breast cancer. Time-limited HRT will control intolerable menopausal symptoms and prevent risk of fractures in newly menopausal women. However, HRT achieves its maximum efficacy in 35 years, and the risk of adverse outcomes increases as time progresses. Women considering HRT, particularly those at higher risk for vascular disease and breast cancer, should be informed of the potential risks.

There is inadequate evidence to determine the extent of these risks in women who have had a hysterectomy and are taking unopposed estrogen (strength of recommendation: **A**, based on large randomized controlled trials).

EVIDENCE SUMMARY

The Women's Health Initiative (WHI),[1] the largest randomized trial of HRT, showed that long-term use of HRT poses more risks than benefits for healthy postmenopausal women. WHI studied the use of estrogen plus progestin for prevention of coronary heart disease in 16,608 postmenopausal women age 50–79 years. After 5 years of follow-up, this arm of the study was stopped because of the adverse effects of the intervention. The researchers found that HRT increases the risk of several events:

- coronary heart disease events (number needed to harm [NNH]=1428)
- invasive breast cancer (NNH=1250)
- stroke (NNH=1250)
- venous thromboembolic events (NNH=555)
- pulmonary embolism (NNH=1250).

An ongoing arm of WHI is studying estrogen alone in postmenopausal women who have had a hysterectomy.

The Heart and Estrogen/progestin Replacement Study (HERS)[2] examined the effects of HRT in postmenopausal women with coronary artery disease. HERS was a large randomized controlled trial of 2763 women with an average follow-up time of 4.1 years. It showed no statistically significant difference between the HRT (estrogen plus medroxyprogesterone) group compared with the placebo group in either the primary outcomes (nonfatal myocardial infarction or coronary heart disease death) or in the secondary outcomes (coronary revascularization, unstable angina, congestive heart failure, resuscitated cardiac arrest, stroke or transient ischemic attack, and peripheral arterial disease). The findings

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What is a Clinical Inquiry?

Clinical Inquiries answer real questions that family physicians submit to the Family Practice Inquiries Network (FPIN), a national, not-for-profit consortium of family practice departments, residency programs, academic health sciences libraries, primary care practice-based research networks, and individuals with particular expertise.

Questions chosen for Clinical Inquiries are those considered most important, according to results of web-based voting by family physicians across the U.S.

Answers are developed by a specific method:

- First, extensive literature searches are conducted by medical librarians.
- Clinicians then review the evidence and write the answers, which are then peer reviewed.
- Finally, a practicing family physician writes a commentary.

of the WHI and HERS trials have been summarized in a recent meta-analysis done for the United States Preventive Services Task Force.[3]

Both the WHI and HERS trials demonstrated some benefits for HRT. WHI found a reduced risk of colorectal cancer (number needed to treat [NNT]=1667) and a decreased risk of any osteoporotic fracture (NNT=228). The HERS group found that HRT improved the quality of life of women with postmenopausal symptoms, particularly flushing.

Evidence indicates that women who take HRT for 3 years and then stop achieve as much protection from osteoporotic fractures as women who continue their HRT beyond 3 years.[4]

Continuing HRT beyond 5 years dramatically increases the risk of coronary heart disease, stroke, thromboembolic events, breast cancer, and cholecystitis.[3]

RECOMMENDATIONS FROM OTHERS

The American College of Obstetricians and Gynecologists has convened a multispecialty panel of experts to draft new recommendations for HRT in light of the WHI findings.

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CLINICAL COMMENTARY

The WHI and HERS trials demonstrated that long-term use of HRT (>5 years) incurs significantly more risks than benefits for a postmenopausal woman who has not undergone hysterectomy. However, these trials did not evaluate postmenopausal symptoms or quality of life as primary endpoints.

Most women experience postmenopausal symptoms for more than 1 year but have resolution of symptoms within a few years after menopause. Since HRT remains the most effective therapy for hot flushes, short-term use of HRT (<5 years) may be offered to women experiencing postmenopausal symptoms.

Physicians may instruct women to attempt HRT discontinuation each year because the duration of symptoms can be variable. Discontinuation should be performed using gradual dose reductions to prevent rapid return of postmenopausal symptoms.

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Is pneumococcal vaccine effective in nursing home patients?

EVIDENCE-BASED ANSWER

Evidence from clinical trials supports the use of pneumococcal polysaccharide vaccine for prevention of pneumonia in nursing home patients (strength of recommendation: **B**, based on randomized, nonblinded clinical trials).

Case-control studies have consistently shown the efficacy of pneumococcal vaccine in preventing invasive pneumococcal disease and bacteremia for