

Putting Prevention into Practice

An Evidence-Based Approach

Menopausal Hormone Therapy for the Primary Prevention of Chronic Conditions

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► See related U.S. Preventive Services Task Force Recommendation Statement at <http://www.aafp.org/afp/2013/0315/od1.html>. Access to the statement is free and unrestricted.



This clinical content conforms to AAFP criteria for evidence-based continuing medical education (EB CME). See CME Quiz on page 404.

The case study and answers to the questions are based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), an independent panel of experts in primary care and prevention that systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. More information is available in the USPSTF Recommendation Statement and the evidence synthesis at <http://www.uspreventiveservicestaskforce.org>. The practice recommendations in this activity are available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspsspnh.htm>.

A collection of Putting Prevention into Practice quizzes published in *AFP* is available at <http://www.aafp.org/afp/ppip>.

Case Study

A 59-year-old healthy, postmenopausal woman presents for a routine health maintenance visit. She has an intact uterus and no history of skeletal fractures. She asks if menopausal hormone therapy would help prevent chronic illness, specifically stroke and dementia.

Case Study Questions

1. You are using the electronic Preventive Services Selector (<http://epss.ahrq.gov/PDA/index.jsp>) to review potential prevention services for the patient, and you see the recent U.S. Preventive Services Task Force (USPSTF) recommendation on menopausal hormone therapy. Which of the following statements about the USPSTF recommendation are correct?

- A. The recommendation applies only to menopausal hormone therapy for preventing chronic conditions, not to treat menopausal symptoms, such as hot flashes.
- B. There are potential benefits of combined estrogen and progestin therapy, and the patient should begin preventive therapy to avoid developing chronic illness.
- C. The economic costs of preventive hormone therapy are not justified by the small health benefits.
- D. Despite the potential benefits, there is high certainty that the harms of preventive hormone therapy outweigh the benefits in asymptomatic women.

2. The patient states that her husband had a stroke, affecting his cognition, and she is now most concerned about preventing stroke and dementia. What does the recommendation say about these conditions?

- A. A family history of stroke would change the current recommendation on the use of hormone therapy.
- B. Increased risk of dementia and stroke are potential harms of combined estrogen and progestin therapy.
- C. Stroke and dementia are not associated with hormone therapy.
- D. Combined estrogen and progestin therapy can help prevent dementia.

3. If this patient had a hysterectomy, would your recommendation change?

- A. No, menopausal hormone therapy is not recommended for average-risk women, regardless of whether they have an intact uterus.
- B. Yes, you would recommend combined estrogen and progestin therapy.
- C. Yes, you would recommend estrogen-only therapy.
- D. No, estrogen-only therapy would increase her risk of breast cancer.

Answers appear on the following page.

Answers

1. The correct answers are A and D. Although the USPSTF found potential benefits for combined estrogen and progestin therapy for the prevention of osteoporosis, it concluded with high certainty that the increased risk of dementia, gallbladder disease, stroke, urinary incontinence, invasive breast cancer, deep venous thrombosis, and pulmonary embolism outweighed the potential benefits. Therefore, the USPSTF recommends against the use of menopausal hormone therapy for the prevention of chronic disease in asymptomatic patients. It did not review the use of menopausal hormone therapy to treat menopausal symptoms, such as hot flashes and vaginal dryness; therefore, the recommendation does not apply to women seeking relief of such symptoms. It also does not apply to women younger than 50 years who have had surgical menopause. The USPSTF is an independent group of experts in prevention and primary care that does not make recommendations regarding monetary costs. Rather, the USPSTF considers the balance of the harms and benefits of a preventive service in an asymptomatic primary care population.

2. The correct answer is B. The USPSTF considers an average-risk population when making its recommendations, but risk factors and individual characteristics can affect the balance between benefits and harms. Therefore, in cases where a patient has an increased risk of osteoporosis, for example, the net balance may be different than it is for the average population. In this scenario, however, the patient is concerned about diseases for which preventive therapy increases her risk of harm, providing another reason to follow the USPSTF recommendation and not pursue hormone therapy. If she had a family history of stroke, this would further support the recommendation.

3. The correct answer is A. It is always important to recognize the specific population identified by a USPSTF recommendation. In this case, the recommendation on postmenopausal hormone therapy addresses both women with an intact uterus and those who have had a hysterectomy. Although patients without a uterus are not at risk of endometrial cancer, the USPSTF recommends against the use of estrogen alone in this population. The USPSTF identified some benefits to unopposed estrogen therapy, such as reduced risk of osteoporosis, invasive breast cancer, and breast cancer death. However, the harms of unopposed estrogen therapy are significant, and include increased risk of stroke, urinary incontinence, gallbladder disease, and deep venous thrombosis. There is moderate certainty that the balance of harms and benefits is unfavorable in women who have had a hysterectomy. A table showing the event rates for the conditions referenced here is available at <http://www.uspreventiveservicestaskforce.org/uspstf12/menohrt/menohrtfinalrstab1-2.htm#tab2>.

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SOURCES

U.S. Preventive Services Task Force. Menopausal hormone therapy for the primary prevention of chronic conditions: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2013;158(1):47-54.

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