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Understanding the Women's Health Initiative Study of Using Estrogen Alone

For many years women and their doctors have had questions about the benefits and risks of menopausal hormone therapy. Conflicting results from a variety of research studies did not give them the answers they needed. Therefore, the Women's Health Initiative was designed to answer many of their questions.

In July 2002 the estrogen plus progestin part of the WHI Hormone Trial was stopped, and follow up began. The estrogen-alone part of the WHI continued until late February 2004, when the National Institutes of Health (NIH) told women taking part in that study to stop taking their study pills. Follow-up of women in the estrogen plus progestin and estrogen-alone trials is ongoing.

Why stop the estrogen-alone trial? NIH experts carefully looked at the study information and found an increased risk of stroke. They decided that the results would probably not change if this trial, which had continued for an average of nearly 7 years, went on to its planned end in 2005. They also felt that the results provided information about the overall risks and benefits of using estrogen alone in this trial and that women should have this information for making their own health decisions.

In April 2004, WHI scientists reported that women ages 50 to 79 using estrogen alone were more likely to have a stroke and were not protected against heart disease.* Women using this hormone were also less likely to break a bone, and estrogen alone did not cause breast cancer in women in the study. In June, scientists with the substudy known as the Women's Health Initiative Memory Study (WHIMS) reported that women age 65 and older using estrogen alone could have a small increase in the risk of dementia and had no reduction in their risk for cognitive loss.** See the box on the back to compare the results of the estrogen plus progestin and estrogen alone parts of the WHI and WHIMS trials.

Experts still don't have answers to some questions about menopausal hormone therapy such as:

- *Does using a different estrogen and/or progestin or another dose change the risks?*
- *Does giving the hormones as a patch or cream, rather than a pill, change the risks?*
- *Would taking the progestin for 10 to 14 days once a month or once every three months be better?*
- *Would starting hormones closer to the age of menopause give different results?*

At present, the Food and Drug Administration suggests that women who want to use menopausal hormone therapy to control the troublesome symptoms of menopause such as hot flashes and vaginal dryness use the lowest effective dose for the shortest time necessary.

In every 10,000 women each year, on average, using estrogen plus progestin (E+P) or estrogen alone (E) compared to placebo resulted in:

Health Problem	Cases per 10,000 women (hormone/placebo)	Difference in number of cases per 10,000 women	What the study showed
Heart disease – E+P	37 / 30	7 more	increased risk; not likely explained by chance decreased risk; might be explained by chance
-- E alone	49 / 54	5 fewer	
Stroke -- E+P	29 / 21	8 more	increased risk; not likely explained by chance
-- E alone	44 / 32	12 more	increased risk; not likely explained by chance
Blood Clots -- E+P	34 / 16	18 more	increased risk; not likely explained by chance
-- E alone	28 / 21	7 more	increased risk; might be explained by chance
Breast cancer -- E+P	38 / 30	8 more	increased risk; not likely explained by chance
-- E alone	26 / 33	7 fewer	decreased risk; might be explained by chance
Colorectal cancer – E+P	10 / 16	6 fewer	decreased risk; not likely explained by chance
-- E alone	17 / 16	1 more	no change
Hip fractures -- E+P	10 / 15	5 fewer	decreased risk; not likely explained by chance
-- E alone	11 / 17	6 fewer	decreased risk; not likely explained by chance
Dementia in women over age 65 -- E+P	45 / 22	23 more	increased risk; not likely explained by chance
-- E alone	37 / 25	12 more	increased risk; might be explained by chance

For more information: Menopause, the health issues that are part of that time in a woman's life, and the WHI studies are discussed in more detail in *Menopause: One Woman's Story, Every Woman's Story* and its *Companion, 2003*. Both are available online at www.niapublications.org/pubs/menopause/index.asp. Print copies may be ordered online at www.niapublications.org, or by calling 1-800-222-2225.

*The Women's Health Initiative Steering Committee. Effects of Conjugated Equine Estrogen in Postmenopausal Women with Hysterectomy: The Women's Health Initiative Randomized Controlled Trial. *JAMA*. 2004; 291: 1701-1712.

**Shumaker SA, Legault C, Kuller L, Rapp SR, Thal L, Lane DS, Fillit H, Stefanick ML, Hendrix S, Lewis CE, Masaki K, Coker LH. Conjugated Equine Estrogens and Incidence of Probable Dementia and Mild Cognitive Impairment in Postmenopausal Women: Women's Health Initiative Memory Study. *JAMA*. 2004; 291: 2947-2958.
Espeland MA, Rapp SR, Shumaker SA, Brunner R, Manson JE, Sherwin BB, Hsia J, Margolis KL, Hogen PE, Wallace R, Dailey M, Freeman R, Hays J for the Women's Health Initiative Memory Study. Conjugated Equine Estrogens and Global Cognitive Function in Postmenopausal Women: Women's Health Initiative Memory Study. *JAMA*. 2004; 291: 2959-2968.