

Menopause: What are the effects of longterm hormone therapy?



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Many women take hormones for one or two years in the menopause. These are usually oestrogen (estrogen) or a combination of oestrogen and a progestogen (such as progesterone or progestin). Oestrogen alone is usual for women who do not have a uterus, but combination therapy is usual for others.

Hormones can help relieve the hot flashes and sweats that commonly happen as the body adjusts to the changes of the menopause. In the past some also believed that that longer term use of hormone therapy might be able to protect women against chronic diseases.

Researchers from the Cochrane Collaboration put this theory to test by analysing all the trials in which women took hormone therapy daily for several years. They found 15 trials involving over 35,000 women.

Most of the women - about 27,000 - had participated in one trial. This was the big US trial called the "Women's Health Initiative Study (WHI)".

In that trial women took either oestrogen alone (so-called conjugated oestrogen) or a combination of oestrogen and gestagen (a progesterone). Oestrogen alone is often called unopposed oestrogen therapy.

The Cochrane systematic review showed that both forms of hormone therapy led over time to an increase in a variety of illnesses. Outcomes were worse for the combined hormone therapy than for oestrogen alone. The progesterone is necessary, though, to protect the uterus.

These illnesses can of course also affect women who are not taking any hormone therapy at all. However, women were more likely to be affected if they took hormone therapy. The following figures show only the additional women who became sick while taking combined oestrogen-gestagen therapy.

After one year of combined therapy, the risks for heart attack and thromboembolism (a clot that blocks a blood vessel) increased. For every 1,000 women, about 4 extra

women got blood clots in the legs or lungs. In addition, about an extra 2 out of the 1,000 women had a heart attack. After more than five years, though, the overall risk of having had a heart attack had not increased. However the risk for a thromboembolism kept increasing, so that overall, 5 extra women out of 1,000 had blood clots.

After three years there was also an increase in the risk of stroke. About 3 extra women out of 1,000 had a stroke. After about five years of taking combined hormone therapy an increase in breast cancer also became apparent. At that point, the trial was stopped. This means we do not know what the consequences of even longer term use of hormone therapy might be.

Further, the women taking combined hormone therapy were more likely to need gallstone operations. The risk of dementia in women over the age of 65 was also increased.

Longterm use of combined hormone therapy did have some health benefits. The risk of bowel (or colorectal) cancer and hip fractures reduced. This meant that about 3 fewer women out of 1,000 were affected by these conditions.

Altogether, though, the negative effects outweighed the health benefits of longer term combined hormone therapy use. This is why it is often recommended that hormone therapy be used for as short a time as possible. You can read more about hormone therapy and other options for the menopause in our article (URL: <http://www.informedhealthonline.org/index.161.en.html>) and fact sheet. (URL: <http://www.informedhealthonline.org/index.159.en.html>)

Glossary

hormones

“Hormones” is the collective term for different types of messenger substances in the body. They are produced in different organs or tissues and released into the blood or the lymphatic system to be distributed throughout the body. Hormones only have an effect on those parts of the organism that have a corresponding docking site. This is how hormones can have such specific effects. Insulin, estrogens, vasopressin and thyroxine are some well-known hormones. Many medical ingredients imitate the effect of hormones.

Cochrane Collaboration

The Cochrane Collaboration is an international network of thousands of researchers and others. They work together in teams called Cochrane Review Groups to answer questions about health care by doing systematic reviews of evidence. To achieve this, the members of the Collaboration have developed systems and methods for systematically finding and analysing the results of trials of health care interventions. The goal of the Cochrane Collaboration is to help patients, health care practitioners and others make more informed decisions about health care. You can read more about the Cochrane Collaboration at their website.

systematic review

Systematic reviews pull together the evidence on a specific question. A systematic review sets out to find all the trials that have put that particular question to the test. The quality of the trials are then evaluated and then results analyzed and explained. Often, the results of trials can then be summarized together through a statistical method called meta-analysis.

Sources

Farquhar CM, Marjoribanks J, Lethaby A, Lamberts Q, Suckling JA, the Cochrane HT Study Group. Long term hormone therapy for perimenopausal and postmenopausal women. *Cochrane Database of Systematic Reviews*, Issue 3 of 2005. (Cochrane Database) (URL: <http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD004143/frame.html>)

The German Institute for Quality and Efficiency in Health Care (IQWiG)

The German Institute for Quality and Efficiency in Health Care (IQWiG) was established by legislation to provide evaluations of the effectiveness, quality and efficiency of healthcare services. This includes the assessment of medicines as well as the publication of health information for consumers and patients.

Evidence basis of our health information

Our information is based primarily on systematic reviews of the effects of health care. Systematic reviews are necessary to gain an objective picture of health care. In order to do this, a clear question is formulated. Researchers then find all the relevant studies that could answer this question. They then evaluate those studies.

You can find a list of the evidence and other scientific literature on which this information is based at **www.informedhealthonline.org**

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