Large-scale Finnish study discovers link between premature menopause and mortality risk

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Women who enter menopause before the age of 40 are more likely to die young, but may lower their risk with hormone therapy, according to research presented at the 26th European Congress of Endocrinology in Stockholm. This long-term Finnish study is the largest carried out on the association between premature menopause and mortality, which highlights the importance of regular medical checkups and appropriate hormone therapy use in these women.

Most women experience menopause between the ages of 45 and 55. However, about 1% of women go through menopause before the age of 40 years, known as premature menopause or premature ovarian insufficiency (POI), and are at a higher risk of long-term health problems such as heart disease.

The cause is largely unknown but can be brought on spontaneously or by some medical treatments such as chemotherapy or by surgically removing the ovaries. Hormone replacement therapy (HRT) is the most common treatment but the majority of women with premature menopause do not take these drugs in accordance with the recommendations.

In this study, researchers from the University of Oulu and Oulu University Hospital examined 5,817 women who were diagnosed with spontaneous or surgical premature ovarian insufficiency in Finland, between 1988 and 2017.

They compared these women with 22,859 women without POI and found that women with spontaneous premature ovarian insufficiency were more than twice as likely to die of any cause or of heart disease, and more than four times as likely to die of cancer. However, the risk of all-cause and cancer mortality about halved in women who used

hormone replacement therapy for more than six months. Women with premature menopause from surgery did not have any added mortality risk.

Previous studies have also shown that women with premature menopause have a higher risk of early death. However, this association has never been studied in women on such a large scale before and followed for up to 30 years.

"To our knowledge, this is the largest study performed on the linkage between premature ovarian insufficiency and mortality risk," said Hilla Haapakoski, a Ph.D. student at the University of Oulu, who led the study.

She added, "Our study is one of the first to explore both surgical and spontaneous premature ovarian insufficiency in women's all-cause, cardiovascular and cancer-related mortality, and examine whether hormone replacement therapy for over six months may reduce mortality risk. Our findings suggest specific attention should be paid to the health of women with spontaneous premature ovarian insufficiency to decrease excess mortality."

The team will next assess whether women with premature menopause are more likely to have other illnesses or conditions, such as cancer or heart disease, and whether long-term use of hormone therapy affects these conditions.

"Various health risks of women with premature ovarian insufficiency have not been well recognized and the use of HRT is often neglected. We hope to improve the health of these women by increasing awareness of the risks among health care professionals and the women themselves," said Haapakoski.

More information: The study "Mortality among women with POI, nationwide register based case-control study" was presented at 14:50 CET on Sunday 12 May 2024 at the European Congress of Endocrinology at the Stockholm International Fairs (Stockholmsmässan) in Stockholm, Sweden.

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