Irregular menstruation may predict increased risk of death from ovarian cancer

April 10 2014

(Medical Xpress)—Women with irregular menstrual cycles had a twofold increased risk of death from ovarian cancer, according to a large, prospective study presented here at the AACR Annual Meeting 2014, April 5-9.

"Among reproductive cancers, ovarian cancer is the most common cause of death, because it is usually diagnosed late in the disease process after it has spread," said Barbara A. Cohn, Ph.D., M.P.H., director of the Child Health and Development Studies at the Public Health Institute in Berkeley, Calif. "Unfortunately, there is no reliable method for early diagnosis or screening, and symptoms like abdominal pain and bloating often do not come to a woman's attention until the cancer has spread.

"In this large, prospective study, we found that those who had irregular menstrual cycles had a 2.4-fold increased risk of death due to ovarian cancer," Cohn added. "This information may help earlier diagnosis and perhaps lead to a strategy to prevent ovarian cancer by pointing toward how the cancer develops and spreads.

"It is notable that the 2.4-fold increase in risk of ovarian cancer death we observed for women with irregular/infrequent cycles in this study is close to the threefold increase in risk observed for women with a family history of ovarian cancer in a first-degree relative," explained Cohn. "Our study finding could lead to better understanding of the 90 percent of ovarian cancers that occur in women with no family history of ovarian cancer and with no known high-risk inherited mutations."
Between 1959 and 1967, the Child Health and Development Studies enrolled more than 15,000 pregnant women and followed them for more than 50 years to study factors impacting health during pregnancy. This report is based on 14,403 women who had a single live birth. Cohn and colleagues used medical reports and self-reported data from these women on their menstrual irregularity, including those whose cycles were longer than 35 days, and those who had anovulation. The researchers used this information as a proxy for polycystic ovarian syndrome (PCOS).

Of these women, 13 percent reported menstrual irregularities when they were about 26 years of age and 64 of them died from ovarian cancer, around 69 years of age.

The association between menstrual irregularities and ovarian cancer death was independent of age, race, parity, and weight, and this association was stronger after the women reached their mid-60s, about 40 years after they entered the study, according to Cohn. The researchers ruled out use of fertility drugs or contraceptives prior to pregnancy as an explanation for their findings. An advantage of the study was that infertility was ruled out as an explanation for findings since all women in the study had achieved a live birth, she added.

They also found that when the data were analyzed by ovarian cancer type, menstrual irregularities increased risk for serous-type cancers and for endometrioid-type cancers by nearly threefold and fourfold, respectively. The sample size for endometrioid-type ovarian cancer was small and needs further evaluation in a larger group of women, said Cohn.

The researchers also found that the incidence of late-stage ovarian cancer was twofold higher for women with irregular or infrequent menstrual cycles, and this finding was consistent with their higher risk
for death from ovarian cancer.

Findings from this study are contrary to the existing expectation that PCOS, which is characterized by less frequent ovulation and irregular or long menstrual cycles, would protect the ovary. But infrequent ovulation is not the only hallmark of PCOS, and there are a number of anatomical, hormonal, and metabolic abnormalities associated with PCOS that might explain the study findings, said Cohn.

Provided by American Association for Cancer Research


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.