
SECOND PRIMARY OVARIAN CANCER AMONG WOMEN WITH CANCER

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PURPOSE: Some studies suggest women with certain types of cancers are at increased risk for ovarian cancer. This study assessed the risk of second primary ovarian cancer among U.S. women who have cancer by anatomic site, age, race, and time since diagnosis of the first primary cancer.

METHODS: We analyzed data from SEER cancer registries for women diagnosed with invasive cancer between 1973 and 1996. Person-years were accumulated from 2 months after initial cancer diagnosis to date of ovarian cancer diagnosis, death, loss to follow-up, or end of follow-up, December 31, 1996. The expected number of cases was obtained by multiplying 5-year age and calendar year interval specific ovarian cancer rates by the accumulated person-years at risk. We calculated the risk (observed [O]/expected numbers [E]) of second primary ovarian cancer by cancer site and age (<50 years, ≥50 years), race (all, white, black), and time since first cancer (0-4, 5-9, 10-14, 15-24 years). Statistical tests and 95% confidence intervals (CI) were based on the assumption of a Poisson distribution.

RESULTS: A significant increased risk of ovarian cancer was found for women aged <50 years at time of diagnosis with melanoma (O/E = 3.5, 95% CI = 2.1-5.5) and cancer of the breast (O/E = 6.0, 95% CI = 4.9-7.2), cervix (O/E = 4.2, 95% CI = 2.6-6.3), corpus uteri (O/E = 11.91, 95% CI = 7.3-18.4), colon (O/E = 17.9, 95% CI = 11.1-27.3), and ovary (O/E = 4.9, 95% CI = 2.7-8.2); no increased risk was found for women aged ≥50 years. Ovarian cancer risk remained elevated following all of these first primary cancers 5-9 years after diagnosis; for women with breast and colon cancer, risk remained elevated 15-24 years after diagnosis. A significant increased risk was found for all of these cancers among white women <50 years at diagnosis; risk was increased among black women <50 years with cancer of the breast, cervix, and colon.

CONCLUSIONS: We found an ovarian cancer risk higher than expected for women with certain types of cancer; however, the risk was limited to women <50 years of age.

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COMPLEX OVARIAN CYSTS IN POSTMENOPAUSAL WOMEN ARE NOT ASSOCIATED WITH OVARIAN CANCER RISK FACTORS: PRELIMINARY DATA FROM THE PLCO CANCER SCREENING TRIAL

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PURPOSE: We assessed whether ovarian abnormalities detected on ultrasound in postmenopausal women are precursors to ovarian cancer.

METHODS: We compared the transvaginal ultrasound findings from the initial examination of twenty thousand postmenopausal women enrolled to date in an ongoing randomized trial of cancer screening to data on the established risk factors for ovarian cancer obtained from self-administered questionnaires. We distinguished cysts with the suspicious characteristics of a septum, solid component, irregular or thick wall ("complex cysts") from simple sonolucent cysts with none of those features.

RESULTS: High parity, protective for cancer, was negatively associated with complex cysts (Odds Ratio ["OR"] for five or more births versus no births = 0.72, 95% CI = 0.53-0.97), but long-term oral contraceptive use was not (OR = 0.96, 95% CI = 0.76-1.20). A family history of ovarian cancer or multiple breast cancers, a strong risk factor for cancer, was not associated with complex cysts (OR = 0.99, 95% CI = 0.68-1.44). Other abnormalities found on ultrasound (including simple cysts, bilateral cysts, or all abnormalities combined) also did not share the established risk factors for ovarian malignancy. We formed no combination of features of abnormalities (septum, echogenicity, size, or papillary projection) with the cancer risk factor profile.

CONCLUSIONS: Although a very small proportion of the clinically silent ovarian abnormalities found on ultrasound are found to be ovarian cancers, the remaining complex cysts and other clinically suspicious abnormalities do not appear to be the immediate precursors of ovarian cancer.

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USE OF HORMONE REPLACEMENT THERAPY (HRT) AND DETECTION OF HUMAN PAPILLOMAVIRUS (HPV) DNA IN POSTMENOPAUSAL WOMEN

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PURPOSE: This study investigated the association between detection of HPV DNA among current and past HRT users compared to never HRT users, duration of HRT use, and type of HRT (estrogen, estrogen/progestin).

METHODS: Postmenopausal women (n = 390) were recruited from a university hospital and completed a questionnaire regarding 1) HRT use, duration, and type, 2) reproductive and sexual history, 3) smoking and alcohol use, and 4) HPV-related diseases. Cervical specimens were obtained for Pap smears, and for the presence of HPV using PCR/dot blot and DNA sequencing, and Southern blot or SSCP. Age-adjusted odds ratios (OR), 95% confidence intervals (CI), and logistic regression examined the association between HRT use and risk of HPV detection.

RESULTS: The frequency of HPV was 10%, with 2.8% oncogenic types. Compared to Never Users, Current (adj. OR = 1.50, 95% CI = 0.55, 4.07) and Past (OR = 1.96, CI = 0.56, 6.86) HRT users had an elevated risk of HPV detection. Although HRT duration among Current Users was not statistically significant (OR = 1.01, 95% CI = 0.95, 1.07), duration among Past Users was significantly associated with an increased risk of HPV detection (OR = 1.30, CI = 1.06, 1.61). In addition, Past Users of estrogen/