

This study found that women undertaking oophorectomy before age 50 and not using HRT “one additional death would be expected for every nine oophorectomies performed.”

Ovarian Conservation at the Time of Hysterectomy and Long-Term Health Outcomes in the Nurses' Health Study

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OBJECTIVE: To report long-term health outcomes and mortality after oophorectomy or ovarian conservation.

METHODS: We conducted a prospective, observational study of 29,380 women participants of the Nurses' Health Study who had a hysterectomy for benign disease; 16,345 (55.6%) had hysterectomy with bilateral oophorectomy, and 13,035 (44.4%) had hysterectomy with ovarian conservation. We evaluated incident events or death due to coronary heart disease (CHD), stroke, breast cancer, ovarian cancer, lung cancer, colorectal cancer, total cancers, hip fracture, pulmonary embolus, and death from all causes.

RESULTS:

- ∂ Over 24 years of follow-up, for women with hysterectomy and bilateral oophorectomy compared with ovarian conservation, the multivariable hazard ratios (HRs) were 1.12 (95% confidence interval [CI] 1.03-1.21) for total mortality, 1.17 (95% CI 1.02-1.35) for fatal plus nonfatal CHD, and 1.14 (95% CI 0.98-1.33) for stroke.
- ∂ Although the risks of breast (HR 0.75, 95% CI 0.68-0.84), ovarian (HR 0.04, 95% CI 0.01-0.09, number needed to treat=220), and total cancers (HR 0.90, 95% CI 0.84-0.96) decreased after oophorectomy, lung cancer incidence (HR=1.26, 95% CI 1.02-1.56, number needed to harm=190), and total cancer mortality (HR=1.17, 95% CI 1.04-1.32) increased.
- ∂ For those never having used estrogen therapy, bilateral oophorectomy before age 50 years was associated with an increased risk of all-cause mortality, CHD, and stroke. With an approximate 35-year life span after surgery, one additional death would be expected for every nine oophorectomies performed.

CONCLUSION: Compared with ovarian conservation, bilateral oophorectomy at the time of hysterectomy for benign disease is associated with a decreased risk of breast and ovarian cancer but an increased risk of all-cause mortality, fatal and nonfatal coronary heart disease, and lung cancer. In no analysis or age group was oophorectomy associated with increased survival.

LEVEL OF EVIDENCE: II

SUGGESTED READING:

Research Info #2 on Efficacy of Surgery (*Insight Endometriosis – available on website*)
Research Info #4 and #5 also on Oophorectomy (*Insight Endometriosis – available on website*)

For more information:
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