Bilateral Oophorectomy Could Increase a Woman’s Risk for Dementia

New study helps to explain why dementia disproportionately affects women

CLEVELAND, Ohio (Feb 2, 2022)—Despite the advantage of an oophorectomy reducing the threat of ovarian cancer, it is not without risk. Removing the ovaries causes premature menopause and hormone disruption that can lead to heart disease, osteoporosis, depression, and other problems. A new study adds to the literature and shows an increased risk of dementia with oophorectomy. Study results are published online today in Menopause, the journal of The North American Menopause Society (NAMS).

Women are disproportionately affected by dementia, with a 55% higher risk from age 65 years onward, compared with men. This sex difference is not fully explained by the fact that women, on average, live longer than men.

Estrogen has been consistently identified as a potential mechanism underlying higher rates of dementia in women. That’s why common interventions that permanently alter sex steroid exposure, such as oophorectomy, are suspected of representing a female-specific risk factor of dementia. Bilateral oophorectomy (the removal of both ovaries) is sometimes performed in conjunction with hysterectomy to help prevent ovarian cancer in women with a high inherited risk.

Several earlier studies investigated the association between bilateral oophorectomy and dementia but showed inconsistent findings. In this new study involving nearly 25,000 women, the goal was not to simply investigate the prospective association between oophorectomy and the rate of incident dementia but also to determine whether the risk was affected by age at the time of surgery, hysterectomy, or use of hormone therapy.

On the basis of their results, the researchers concluded that bilateral, but not unilateral, oophorectomy was associated with an increased risk of dementia. However, they were not able to show whether this association was conditional with hysterectomy or hormone therapy use.

Study results are published in the article “Oophorectomy and rate of dementia: a prospective cohort study.”

“These results are consistent with findings of prior studies showing a link between oophorectomy and dementia. The statistical power of the study was limited, which may explain the lack of effect of age or hormone therapy use on this association. Given the robust body of evidence suggesting potential long-term adverse effects associated with oophorectomy before the average age of menopause, risk-reducing oophorectomy should be limited to those women with an inherited high risk for cancer,” says Dr. Stephanie Faubion, NAMS medical director.
For more information about menopause and healthy aging, visit www.menopause.org.

Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit www.menopause.org.