Higher Incidence of Carpal Tunnel Syndrome After Bilateral Oophorectomy

New study suggests the risk of severe carpal tunnel syndrome increases for women after surgery to remove the fallopian tubes and ovaries

CLEVELAND, Ohio (May 26, 2021)—Carpal tunnel syndrome (CTS), which causes tingling and numbness in the hand, more commonly affects women than men and tends to peak around the age of menopause. A new study suggests the risk of severe CTS increases in women who underwent bilateral oophorectomy before menopause, and estrogen therapy didn’t provide a protective effect. Study results are published online today in Menopause, the journal of The North American Menopause Society (NAMS).

Carpal tunnel syndrome is the most common nerve disorder in the upper body. Although predominately idiopathic in nature, an association with sex hormones has been suggested because of a higher incidence in women compared with men at all ages. The peak frequency for women is around the age of menopause, which is 50 to 59 years, but for men the peak is 70 to 79 years. In addition, estrogen therapy has been shown in other clinical trials to reduce the risk of CTS in postmenopausal women.

In this study, 1,653 premenopausal women who underwent bilateral oophorectomy between 1988 and 2007 were compared with a sample of 1,653 age-matched women who did not undergo the same surgery. Both groups were assessed for CTS in subsequent years using diagnostic codes.

This study is one of the first to demonstrate an increased long-term risk of de novo severe CTS in women who underwent bilateral oophorectomy before menopause. The risk was greater in women with lower body mass index, women who had never given birth to a child or carried a pregnancy, and in those with a benign ovarian indication for oophorectomy. The study did not find a protective effect of estrogen therapy after the surgery.

It remains unclear whether oophorectomy increases the risk of CTS because it causes abrupt estrogen deficiency because of another endocrine disruption or because of some confounding mechanism such as shared risk factors or a lower threshold to pain.
Results are published in the article “Risk of de novo severe carpal tunnel syndrome after bilateral oophorectomy: a population-based cohort study.”

“This study highlights yet another risk associated with bilateral oophorectomy before natural menopause. Together, the findings of this study and others showing increased risk for disease outcomes, such as heart disease and dementia, should prompt reassessment of bilateral oophorectomy before menopause in women who are not at high risk for ovarian 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.