WILEY

A novel study shows women who undergo **surgical treatment for endometriosis** have a **lower risk of developing ovarian cancer**. According to results published in *Acta Obstetricia et Gynecologica Scandinavica*, a journal of the Nordic Federation of Societies of Obstetrics and Gynecology, hormonal treatments for endometriosis did not lower ovarian cancer risk.

Endometriosis is a common, and often painful, gynecological disease where tissue normally found inside the uterus, grows elsewhere in the body. According to the World Health Organization this estrogen-dependent disease affects roughly 14% of women of childbearing age. The National Institutes of Health (NIH) estimates that more than 5.5 million women in North America have endometriosis, and if left untreated can cause infertility in up to 40% of women who are unable to conceive.

Prior research shows an increased risk of several cancers, including ovarian cancer, in women with endometriosis. Some studies have found a

protective effect against ovarian cancer with surgical interventions, such as hysterectomy or tubal ligation. Lead author, Dr. Anna-Sofia Melin from the Karolinska Institute and Karolinska University Hospital in Stockholm, Sweden explains, “Patients with endometriosis are typically treated with hormones, or in more severe cases, with surgery. We wanted to expand understanding of ovarian cancer risk in women with endometriosis who had some type of surgery or hormone therapy.”

Using the National Swedish Patient Register, the team identified women diagnosed with endometriosis between 1969 and 2007. The National Swedish Cancer Register was then used to link women who were diagnosed with epithelial ovarian cancer at least one year following a diagnosis of endometriosis. Information on hormonal and surgical treatments was taken from medical records of the 220 women with endometriosis and ovarian cancer (cases) and 416 women with endometriosis only (controls).

Findings indicate a significant association between the surgical removal of an ovary (oophorectomy) and ovarian cancer risk. A significant link between ovarian cancer risk and radical removal of all visible endometriosis was also found. “Our study suggests that surgical removal of an ovary and removal of visible endometriosis protects women from developing ovarian cancer at a later point,” concludes Dr. Melin. “For women with endometriosis, the role of hormonal treatment and future ovarian cancer risk remains unclear and further investigation is warranted.”