Surgery for stress urinary incontinence doesn't cause pelvic cancer

9 April 2021

Women undergoing surgery to treat stress urinary incontinence (SUI) are not at increased risk of developing pelvic cancers, according to a large-scale, population-based study in *The Journal of Urology*, Official Journal of the American Urological Association (AUA).

"In a very large population with extended follow-up, we found no increase in the risk of any pelvic malignancy in women who underwent stress urinary incontinence surgery," comments lead author Humberto R. Vigil, MD, MSc, of University of Ottawa, Ont., Canada. "The vast majority of stress urinary incontinence procedures performed included transvaginal mesh."

No increase in cancers after SUI surgery—with or without transvaginal mesh

Using Ontario health data, the researchers identified nearly 75,000 women who underwent SUI surgery between 2002 and 2015. Follow-up data (median 8.5 years) were used to assess for the development of pelvic cancers, such as bladder, cervical and ovarian cancer. A time to event analysis was used to determine the risk of pelvic cancer in SUI surgery patients compared to more than 5.5 million women who did not undergo SUI surgery.

On analysis of more than 40,000 pelvic cancers, there was no significant difference between groups. The event rate for pelvic malignancies was 0.90 per 1,000 person-years of follow-up in women undergoing SUI surgery, compared to 0.85 per 1,000 person-years in controls who did not have surgery.

After adjustment for multiple factors, there was a lower risk of pelvic cancers in women who underwent SUI surgery. While that may seem like a paradoxical finding, Dr. Vigil and colleagues suggest a couple of possible explanations: women opting for an elective procedure such as SUI surgery may be relatively healthier (selection bias), or cancers might be detected during assessment before SUI surgery. The study confirmed some known risk factors for pelvic cancers, including obesity and no history of childbirth.

Importantly, there was no evidence of increased cancer risk in women undergoing SUI surgery with implanted transvaginal mesh. A midurethral sling procedure using polypropylene mesh is the most commonly performed surgery for SUI.

Over the past decade, there have been public health concerns regarding complications and safety issues related to surgical mesh—particularly related to a condition called pelvic organ prolapse (POP), but also for SUI. These issues have led to some individuals being hesitant to move forward with mesh-based procedures. In the study data, more than 85 percent of women undergoing SUI surgery had a mesh-based procedure.

The new analysis may help to alleviate some patient concerns. "Our population-based study finds no evidence of increased risk of pelvic cancers following SUI surgery, with or without the use of transvaginal mesh," Dr. Vigil comments. "Providers can confidently reassure women regarding the lack of association."


Provided by Wolters Kluwer Health