The Challenge

Incontinence and prolapse are both common conditions affecting many women, substantially affecting their quality of life. Stress urinary incontinence is the most common form of incontinence and happens with increased pressure on the bladder during coughing, sneezing or exercise. It can be caused by weak pelvic floor muscles which sometimes occurs after childbirth. In pelvic organ prolapse, the uterus, vagina, bowel or bladder bulge down into and sometimes out of the vagina, causing problems such as pain, difficulty going to the toilet, and sexual difficulties. Surgical mesh can be implanted to treat both of these conditions by strengthening the bladder outlet or walls of the vagina, however concerns have been raised about the safety of the procedure and the complications women suffer afterwards.

The Research

A research team in Scotland investigated the safety and effectiveness of this treatment by looking into the complications that women experienced with mesh implant surgery, compared with other procedures. The team used a national hospital admissions database to identify women in Scotland aged 20 years or older who had undergone a first, single procedure for incontinence or prolapse between 1997 and 2016 and any subsequent readmissions for complications or further surgery. Once the patient information was made anonymous, complications and further surgery in mesh implant patients and those who had other procedures were compared.

The Results

The study showed that between 1997 and 2016, 16,660 women underwent a first, single procedure for incontinence, 13,133 (79%) of whom received mesh implants. Mesh procedures showed a lower risk than other treatments of immediate complications after surgery and further prolapse surgery, and a similar risk of later complications and further incontinence surgery. During the same time period, 18,986 women underwent a first, single procedure for prolapse, 1,279 (7%) of whom received a mesh implant. Of the patients with prolapse of the bladder into the vagina (anterior compartment), mesh and non-mesh procedures were associated with a similar risk of immediate complications, but mesh implants showed increased risks of further incontinence and prolapse surgery, and later complications. When used to treat prolapse of the rectum into the vagina (posterior compartment), mesh repair was associated similar increased risks (compared to non-mesh repair) for further prolapse surgery and later complications. No difference in outcome was found between mesh repairs and other treatments for prolapse of the top of the vagina (vaginal vault).

The Impact

The study supports the use of mesh implant surgery as a treatment for incontinence, showing that patients are at lower risk compared to other procedures, although further research into longer term outcomes would provide a broader picture. It also shows that mesh implants should not be recommended to treat first-time prolapse of the bladder (anterior compartment) or rectum (posterior compartment) into the vagina, due to higher risks than traditional, non mesh, procedures. No recommendation could be made between mesh repair and other treatments for repair of prolapse of the top of the vagina (vaginal vault). By analysing data, researchers have provided valuable information that policy makers and hospitals can use to recommend the safest and most effective treatments to their patients.

For information and support on transvaginal mesh implants visit www.nhsinform.scot/tests-and-treatments/non-surgical-procedures/transvaginal-mesh-implants

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