

The Use of Materials in Pelvic Floor Surgery in Women

Background on meshes for prolapse

Pelvic organs in women, such as the uterus, bladder or bowel, may protrude into the vagina due to weakness in the tissues that normally support them, this is called pelvic organ prolapse. Pelvic Organ Prolapse (POP) and/or Stress Urinary Incontinence (the accidental loss of urine with exertion) (SUI) will occur in thirty to fifty per cent of all women in the world at some time throughout their lives. It is estimated that by the age of 80 between fifteen to twenty per cent of all women will have required some sort of pelvic surgery for either incontinence or prolapse. Thirty to forty per cent of this group of women will require additional procedures because of recurrence of the problem.

Meshes for prolapse

Vaginal meshes were initially used to improve anatomical outcomes and decrease the need for re-operation for recurrent **prolapse**. Preliminary studies found significant short term benefits with few complications, which led to its widespread adoption. However, initial enthusiasm for mesh has been tempered by the U.S. Food and Drug Administration Advisory concerning mesh prolapse repair complications, which may include erosion of the mesh into surrounding tissues, mesh contraction, pain and dyspareunia (pain on sexual intercourse), bleeding, infection, chronic pain and even fistula (for example, a hole between the bladder and the vagina) formation. (1.) **Meshes used for incontinence have not been implicated.**

In a recent “ Three- Year Outcomes of Vaginal Mesh for Prolapse: A Randomized Controlled Trial “, there was no difference in three-year cure rates when comparing patients undergoing traditional vaginal prolapse surgery without mesh with those undergoing a repair with mesh. (2.)



A Canadian Continence Foundation Position Paper

References

1. U.S. Food and Drug Administration. Public health notification: serious complications associated with trans-vaginal placement of surgical mesh in repair of pelvic organ prolapse and stress urinary incontinence issued October 20, 2008. Available at: [Http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/PublicHealthNotifications/ucm061976.htm](http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/PublicHealthNotifications/ucm061976.htm). Retrieved December 5, 2012.
2. Gutman RE, Nosti PA, Sokol AI, Sokol ER, Peterson JL, Wang H, and Iglesia CB. Three-Year Outcomes of Vaginal Mesh for Prolapse: A Randomized Controlled Trial. *Obstetrics & Gynecology*, Vol. 122, No. 4, October 2013, P.770-777
3. Maher C, Baessler K, Glazener CM, Adams EJ, Hagen S. Surgical management of pelvic organ prolapse in women. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Ar. No. : CD004014.

Meshes for incontinence

A recent position statement on Mesh Mid-urethral Slings for Stress Urinary Incontinence approved by the AUGS (American Urogynecological Society) Board of Directors and the SUFU (Society of Urodynamics Female Pelvic Medicine & Urogenital Reconstruction) Board of Directors dated January 3, 2014 stated that the polypropylene **mesh mid-urethral sling** (used for **stress incontinence**) is the **recognized worldwide standard** of care for the surgical treatment of stress urinary incontinence. The procedure is safe, effective, and has improved the quality of life for millions of women. That is not to say that other incontinence procedures, such as the traditional sling procedure are not as equally effective for treating primary and recurrent SUI.

Conclusion

There is no level 1 evidence, (research results addressing clinical outcomes and meeting an extensive set of quality criteria which minimizes bias), to support the use of vaginal polypropylene mesh for apical or posterior compartment prolapse. (3.), especially in primary surgical repairs. Women contemplating reconstructive pelvic surgery for **prolapse with or without incontinence** should **discuss the risks and benefits** of any proposed surgery with their **surgeon** and have all other potential treatment options, explained to them prior to their making a final decision.