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Review

Meshology: a fast-growing field involving mesh and/or tape removal procedures and their outcomes

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Abstract

Stress urinary incontinence and pelvic organ prolapse are two of the commonest conditions affecting women today. It is associated with significant compromise to quality of life. Through the years, there has been an evolution of technique and graft material to augment repairs for durability. Transvaginal placements of synthetic mid-urethral slings and vaginal meshes have largely superseded traditional tissue repairs in the current era because of presumed efficacy and ease of implant with device ‘kits’. The use of synthetic material has generated novel complications, including mesh extrusion, pelvic and vaginal pain and mesh contraction. In this review, our aim is to discuss the management and outcomes associated with mesh removal. In addition, we will briefly review the safety communications issued by the US FDA on transvaginal

mesh placement and a new classification system for complications arising from the use of synthetic graft endorsed by both the International Continence Society and International Urogynecological Association.

Keywords:

complications | US FDA | mid-urethral slings | outcomes | pelvic organ prolapse | stress urinary incontinence | vaginal mesh

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Key issues

- Management of mesh complications in the treatment of pelvic organ prolapse has become a rapidly growing field and should be dealt with by female pelvic medicine and reconstructive surgery specialists.
- As recommended by the US FDA, full disclosure of risks and benefits to the patient, as well as surgeon’ s personal level of experience with a given mesh product is essential before consenting a patient for mesh surgery.
- An office-based outcome tool to uniformly report on the multidimensional outcomes associated with revision surgeries is required.
- Despite maximal mesh excision, chronic pelvic pain and/or dyspareunia may persist in a subset of women and be responsible for life-altering changes.

- Tightening of the FDA-approval process in the licensing of new transvaginal mesh surgical devices may have to be considered.
- Basic research will continue to evaluate the biomechanics properties of mesh with a focus on more biologically compatible materials.
- A National mesh registry should be established to provide adequate reporting of mesh/tape-related complications.

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