Harmful and Helpful Effect of the Mesh in the Treatment of Stress Urinary Incontinence and Pelvic Organ Prolapse

Introduction and Objectives: Meshes were used increasingly during recent years in the surgery of stress urinary incontinence (SUI) and pelvic organ prolapse (POP). It was a result of the constant pressure of the pharmaceutical industry as well as the fact that surgery with natural tissues was more complicated, and frequently unsuccessful. Polypropylene midurethral slings are established as a gold standard in the treatment of stress urinary incontinence. There are less evidence-based results regarding exact role of the meshes in the surgery of POP. Numerous reports indicate superior anatomical success and possible disastrous complications of the mesh.

Material and Methods: In this video we describe catastrophic complication of the gynecological operation-vaginal hysterectomy and subsequent mesh surgery (Prolift®) - development of vesicovaginal fistula. Combined multistage treatment was necessary. Fistula closure was not enough for the successful treatment of both POP and SUI after removal of Prolift®. Natural fascia sling gave no result. Mesh surgery was performed again and a good anatomical and functional result was achieved.

Results: Vesicovaginal fistula was closed during the second attempt of Martius flap transvaginal fistula closure. The key points for the success of fistula surgery were tension-free suture, layers separation, careful flap creation and overlay, and suppression of infection, as well. Urethral incompetence became evident after fistula closure and fascial sling on the bladder neck was performed with the temporary success. Patient experienced exaggeration of POP and total incontinence soon. Complete anatomical restoration of the pelvic floor was achieved with two Prolifts M® (anterior and posterior) and one sling (with central widening) more tightly placed miduretharlly via the suprapubic route. Anatomical result six months after the surgery shows, almost asymptomatic patient, POP grade I-II, full continence, and only minimal exposition of the mesh (<0.5cm²).

Conclusion: Meshes could be potentially harmful. However appropriate use of the soft semi resorbable mesh (Prolift M®) together with the middle weight quadriaxial sling gave a good anatomical support and possibility to cure a demanding case. It is very important to make a good choice about indications and avoid unnecessary mesh missing, as well as, overuse of the mesh.

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