

IMPLANTATION OF AN URETHRAL ARTIFICIAL SPHINCTER IN A FEMALE PATIENT

Hypothesis / aims of study

Urinary stress incontinence is an important but understated quality of life issue. Although the treatment in females using tension free vaginal tape and transobturatoric tape moves toward the gold standard, it might not always be the curing treatment. For those patients where previous options have failed, an artificial sphincter is the last solution prior to urinary diversion. The surgical approach of implanting an artificial sphincter has changed significantly in recent years resulting in reduced operating time and improved patient outcome.

Study design, materials and methods

This method describes the feasibility of reliable implantation of an artificial sphincter system in a female patient with urinary stress incontinence. Prior to the implantation the following was obtained: medical history, stress test including cystoscopy, video urodynamics and uroflow with ultrasound to measure the residual urine. Radiotherapy is not a contraindication for the implantation of a artificial sphincter, however, these particular patients require vaginal oestrogen therapy for at least 2 weeks preoperatively. The presented technique demonstrates the retropubic extravescicle approach with the placement of the cuff around the urethra. The pump is placed into the labia majora and the reservoir right next to the bladder into the retropubic space. Computer animations underline important anatomical structures and steps with respect to implant handling.

Results

The retropubic implantation of an artificial sphincter for the female provides the opportunity to treat severe urinary stress incontinence with a very satisfying functional and cosmetic outcome. In our experience, the risk of infection is small because of the good accessibility of the urethra and visibility of the surgical field.

Interpretation of results & Concluding message

This approach minimizes the risk for infections or fistulas. The outcome is well appreciated by those patients who had several prior treatment failures. Before a urinary diversion is suggested, an artificial sphincter should be considered in this patient cohort.

<i>Specify source of funding or grant</i>	American Medical System for computer animations
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	the surgical technique is fda approved, informed consent by the patients was obtained
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes