

737

Peyronnet B¹, Vincendeau S¹, Grison P¹, Hascoet J¹, Senal N¹, Kerdraon J¹, Manunta A¹

1. Rennes University Hospital

ROBOT-ASSISTED PERIPROSTATIC ARTIFICIAL URINARY SPHINCTER IMPLANTATION IN MALE PATIENT WITH NEUROGENIC STRESS URINARY INCONTINENCE

Introduction

In men with urinary incontinence due to neurogenic intrinsic sphincter insufficiency, it is recommended to place artificial urinary sphincter (AUS) cuff around the bladder neck to spare antegrade ejaculation, to avoid the risk of pressure ulcers at the perineal incision site and to limit the risk of cuff erosion due to clean-intermittent-self-catheterization (CISC). The objective of this study was to describe a surgical technique of periprostatic AUS implantation in neurogenic male patients.

Design

The technique of periprostatic AUS implantation in men is described in this video. We present the case of a 50 year-old male with a past medical history of cauda equina syndrome and stress urinary incontinence due to neurogenic intrinsic sphincter deficiency. The patient performed 5 to 6 CISC per day due to underactive bladder. The urethral closure pressure was 33 cm H₂O on urodynamics and the amount of urine leakage was 350 g/24 hour according to the pad test.

Results

The procedure is performed under general anesthesia. The patient is placed in a 23° Trendelenburg position. A laparoscopic transperitoneal approach is performed and five ports are placed in total, including three ports for the robotic arms and one 12 mm-port for the assistant surgeon to allow the insertion of the AUS cuff. First, the peritoneum is opened just above the seminal vesicles. The space between the posterior part of the prostate and the seminal vesicles is dissected. The bladder is then released down and the Retzius space is dissected. The lateral sides of the prostate are dissected and the endopelvic fascia is opened on both sides. A Prograsp forceps is used to open the angle between seminal vesicles and bladder on both sides from inside to outside. A measurement tape is then passed around the bladder neck and the AUS cuff is inserted through the 12-mm port. The balloon is implanted in the Retzius space through a 3 cm suprapubic incision and the pump is placed in the scrotum by a subcutaneous passage made from the suprapubic incision

Conclusion

This video report the feasibility of robot-assisted periprostatic AUS implantation in male patient with neurogenic stress urinary incontinence. The benefits of positioning the AUS cuff around the bladder neck (vs. bulbar urethra) and of the robot-assisted approach to perform this periprostatic implantation (vs. open or laparoscopic approaches) remain to be proven by clinical research studies.

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** video, retrospective **Helsinki:** Yes **Informed Consent:** Yes