OVER THE WIRE ULTRASOUND GUIDED PROACT IMPANT

Introduction
Stress urinary incontinence following radical prostatectomy remains a significant problem for both patients and urologists, with an incidence of 5-20%. A recent surgical treatment option includes pro adjustable continence therapy (ProACT). As long as the efficacy of implants is strictly related to the right position beside the membranous urethra, we tried to achieve a better placement control using over the wire stepper-guided transrectal ultrasonography (TRUS). This video shows a new experimental way to place proACT performed in a single Patient after informed consent has been obtained.

Design
After positioning the ultrasound probe in place a pre-planning of positioning was made. Distance from the ideal location to the pubic symphisis, ischiopubic rami, urethra and probe in the transversal view and distance to the skin in the longitudinal view have been recorded. The measurements are then reported on the skin and on the trocar. A Chiba needle is then used to verify the path of the trocar based on measurements previously taken. Subsequently a guide-wire was inserted in the Chiba needle and an appositely modified trocar (furnished of an internal channel of 0.38 Ch) was inserted over the wire, followed by ultrasound to the ideal position. Finally the device was inserted through the trocar’s sheath. Balloons were inflated with 1 milliliter of iso-osmotic contrast solution.

Results
Surgery time was 20 minutes. Blood loss was less than 20 centiliters. The balloon volume required to reach a good results seems to be slightly lower than the usual one maybe decreasing the risk of erosion over time.

Conclusion
Our study demonstrated that the correct positioning of ProACT® implants benefits from the use of over the wire stepper-guided technique which permits to achieve a greater precision in reaching the desired location thus reducing wrong placements of balloons that frequently are the cause of the persistence of stress urinary incontinence.

Specify source of funding or grant
Dr. Crivellaro and Prof. Frea are Uromedica consultants.

Is this a clinical trial?
No

What were the subjects in the study?
HUMAN

Was this study approved by an ethics committee?
Yes

Specify Name of Ethics Committee
Udine’s Ethics Committee

Was the Declaration of Helsinki followed?
Yes

Was informed consent obtained from the patients?
Yes