

ePoster 598 : Complications of Endoscopic Botulinum Toxin Injection in Patients with AMS 800 Artificial Urinary Sphincter

C.Gutiérrez, C Errando, P. Arañó, H. Villavicencio
 Female and Functional Urology Unit
 Fundació Puigvert. Barcelona, Spain



Hypothesis / aims of study

- The rate of detrusor overactivity (DO) and sphincter deficiency in incontinent patients following prostate surgery is estimated in up to 45%.
- DO may persist after implantation of an artificial urinary sphincter (AUS).
- Treatment with Botulinum Toxin (BoNT) is a useful alternative treatment in DO refractory to oral drugs. However urethral manipulation and endoscopic manoeuvres are risk factors for AMS 800 AUS cuff erosion and subsequent infection.
- Up to our knowledge there is no study in the literature reporting the safety of BoNT injection in patients with AMS800 AUS placed in bulbar urethra. There fore, the objective of the present study is to evaluate the complications of endoscopic injection with BoNT in patients with AMS 800 AUS in place. Secondly we evaluated the clinical outcome.

Study design, materials and methods

We retrospectively evaluated 304 patients treated with AUS from 1990 to 2015 at our institution.

Among them, 13 patients presented clinically significant DO, refractory to oral treatment, who accepted BoNT injection.

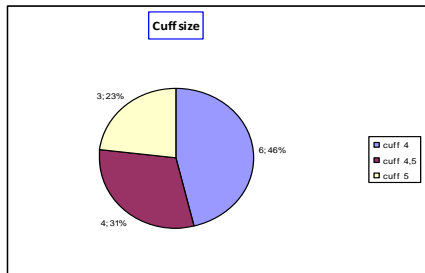
The procedure was performed trough a 16 Ch flexible cystoscope by using a 35 cm BoNee® (Coloplast®) needle (5 Fr).

Previous to the injection the cuff was voided and the AUS deactivated.

The presence of immediate and late complications, device survival, reoperations and risk factors for erosion were evaluated.

Results

- 13 patients presented clinically significant DO, refractory to oral treatment , after AUS implantation, diagnosed by Urodynamics.
- All cuffs had been placed at the bulbar urethra around the bulbospongiosus muscle through perineal approach.



Risk Factors	Patients n:13
Radiotherapy	5 (30%)
Diabetes Mellitus	2 (15%)
Cardiovascular illness	1 (7 %)
Previous Surgery (Cuff Replacement)	2 (30%)

- After a mean follow-up of 37 months (7-65), there were no device explantations (Device survival is 100%).
- There have been no erosions or AUS infections secondary to transurethral manipulation.
- 1 UTI treated with oral antibiotics (Clavien- Dindo I).
- 1 acute urinary retention managed by bladder catheter placement (Clavien-Dindo II).

Functional outcomes	Baseline	After BoNT A	
DO (Urodynamics)	13 patients (100%)	4 patients (30%)	p<0.004 Exact Binomial test
Cistometric Capacity: mean (Sd)	191 ml (43)	274 ml (98)	Mean difference (95% IC) 87 ML (19-154) P=0.01 Student's t test
PVR	28 ml	45ml	NS Wilcoxon rank test
Number of Pads	3/24h	1/24h	NS Wilcoxon rank test

Conclusions

- BoNT injection by using a small needle through flexible instruments is a reliable technique for the treatment of DO in patients with AMS 800 AUS in place.
- The technique is feasible even when a small cuff (minimal size of 4 cm in this series) is placed.
- There is a low risk of complications due to this approach, even in patients with associated risk factors such as Radiotherapy.

Disclosure statement: Ipsen (Scientific Trial), Boston Scientific (speaker honorarium)