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# FUNCTIONAL CHANGES DURING THE VOIDING PHASE IN MALES WITH NON-NEUROGENIC DETRUSOR UNDERACTIVITY UNDERGOING BLADDER CATHETERIZATION

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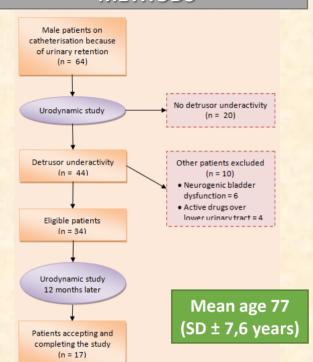
## **HYPOTHESIS / AIMS OF STUDY**

Benign Prostatic Hyperplasia is the most frequent cause of voiding dysfunction in men above 50 years. Nevertheless, there is not unusual that some of these patients have detrusor underactivity (DU) alone or coexisting with Bladder outlet obstruction (BOO).

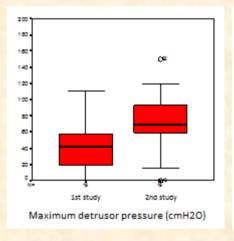
Up to now there is no treatment for DU. However, Hamman et al (1). have shown that temporarily suprapubic bladder catheterization decreases post-void residual urine and increases urinary flow.

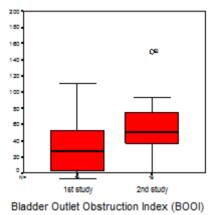
We hypothesize that **bladder catheterization** is not only a mean to overcome urinary retention, but that **it may improve bladder contractility**. Therefore, our aim is to **investigate urodynamic changes during the voiding phase** of male with DU undergoing bladder catheterization for urinary retention in a prospective study.

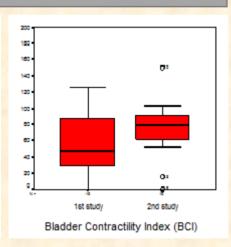
#### **METHODS**



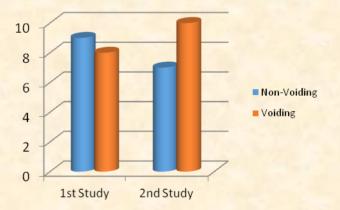
### **RESULTS**







The second urodynamic study showed a significant increase in maximum detrusor pressure (PdetMax), maximum flow rate, BOOI and BCI. We also observed a significantly increase (p= 0.049) in the number of patients who urinated during the second study.



#### CONCLUSIONS

- ✓ Bladder catheterization in men with DU significantly improves bladder contractility.
- ✓ Catheterization may reveal BOO that was masked by insufficient detrusor pressure in relationship to DU of these patients.
- ✓These findings could have diagnostic as well as prognostic and therapeutic applications.

#### REFERENCES

1. Hamann MF, van der Horst C, Naumann CM, et al. [Functional results after temporary continuous drainage of the hypocontractile bladder. The potential rehabilitation of the detrusor]. Funktionelle Ergebnisse nach temporärer Dauerableitung der hypokontraktilen Blase. Urologe A. 2008;47(8):988-93 [Article in German].

