





DETRUSOR WALL THICKNESS DOES NOT PREDICT A SUCCESSFUL TRIAL WITHOUT CATHETER AFTER ACUTE URINARY RETENTION IN PATIENTS ON MEDICAL TREATMENT FOR BENIGN PROSTATIC HYPERPLASIA

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<u>Aim</u>

Alpha-blockers are considered the standard treatment for the management of Acute Urinary Retention in patients with BPH.

No data are available on the predictors of a successful Trial Without Catheter (TWOC) in patients on treatment with alpha blocker +/- 5 alpha reductase inhibitors (5ARI).

Aim of our study to investigate predictors of a successful trial without catheter in these patients.

Materials & Methods

- Study time: 2017 2018
- 126 patients on treatment with

| SUCCESS | FAILURE | |
|---------|---------|--|
| 54% | 46% | |

- alpha blockers (AB) ± 5alpha reductase inhibitors (5 ARI) with AUR.
- Medical history, Uroflowmetry and IPSS (up to 6 months from AUR) were collected.
- Urinary Tract Ultrasound was performed at the AUR time to evaluate.
 - Hydronephrosis
 - Prostate Volume (TRUS)
 - Detrusor Wall Thickness (DWT)
 - Intravescical Prostatic Protrusion (IPP)
- TWOC was performed seven days after AUR

| AGE (years) | 72 (65/78) | 70 (60.5/77.5) | 0.545 |
|-----------------------------------|----------------|-------------------|-------|
| BMI (Kg/m²) | 25 (23/27) | 25 (24/26) | 0.845 |
| WAIST | 88 (80/92) | 90 (85/90) | 0.866 |
| IPSS | 16 (10/18) | 18 (12/26) | 0.008 |
| TRUS (ml) | 59 (52/74) | 99 (74/125) | 0.001 |
| DWT (mm) | 5 (4.8/5.2) | 5.2 (4.7/5.5) | 0,545 |
| IPP< 10mm | 85% | 47% | 0.01 |
| Hydronefrosis | 17% | 12,5% | 0,617 |
| Monotherapy (AB) | 73% | 77% | 0,682 |
| Combination Therapy (AB+ 5ARI) | 27% | 23% | 0,682 |

<u>Results</u>

Multivariate Analysis

| | Odds Ratio | р |
|------------|-----------------------|-------|
| Age | 1,03 (0,98 – 1,07) | 0,244 |
| IPSS | 0,93 (0,88 – 1,00) | 0.050 |
| IPP <10 mm | 0.17 (0,07 - 0,42) | 0.001 |
| DWT | 1,13 (0,51 – 2,52) | 0.755 |

Conclusion

- Patients with acute urinary retention on treatment with alpha blockers ± ARI still present a 54% probability of a successfull trial without catheter.
- Lower IPSS scores and an IPP <10 mm are predictors of success while DWT couldn't reach

the level of an indipendent predictor.

• Larger follow up should confirm our results and particularly the role of DWT on LUTS evaluation.