

THE MANAGEMENT OF MEN WITH HIGH PRESSURE VOIDING [P_{det}>100 CM'S H₂O] BEFORE/AFTER DOUBLE THERAPY

Hypothesis / aims of study

Management of BPH without non-obstructive urinary retention has for over 20 years been successfully managed with alpha and/or 5 alpha-reductase blockers. What is the success of double therapy with patients with a Maximum detrusor pressure exceeding 100 cm H₂O?

Study design, materials and methods

Observational, retrospective single cohort study. Between September 2001 and February 2016, 102/138 were evaluated with both multichannel urodynamics and transrectal ultrasound for prostate volume. All patients had Maximum P_{det} over 100 cm H₂O, maximum Flow rates <15mls/sec and PVR's <100 mls. All were started on Tamsulosin 0.4 mg and Finasteride 5 mg both daily and at one-year they underwent repeat multichannel urodynamics and transrectal ultrasound

Results

Mean Pre-and-Post-Treatment P_{det} were 146.3±48.2 cm H₂O [range 102.3-268.9] and 124.8±37.6 cm H₂O [range 82.1-238.6 cm H₂O [p<0.09]. Mean Pre-and-Post-Treatment Maximum Flow rate [mls/sec] 14.2±7.3 and 15.8±5.3 [p<0.11]. Mean Pre-and-Post-Treatment PVR was 79.2±35.4 mls and 61.8±28.9 mls [p<0.18]. Mean pre/post treatment IPSS Q8 was improved from 25.7± 9.3 to 17.8± 7.3 [p<0.01]. Mean pre/post treatment prostate size was 63.9± 23.7 cc and 48.3±16.4 cc [p<0.03] Mean percent of pre-and post-treatment detrusor overactivity was 45.7 percent versus 39.8 percent [p<0.11]. Eighty-three percent of patients demonstrated a P_{det} >100 cm H₂O at one-year double therapy anniversary underwent laser TURP requiring neuromodulation while 10/18 [55%] who declined, went into retention during follow-up and required TURP/neuromodulation [p<0.001].

Interpretation of results

With normal P_{det} between 40-60 cm H₂O in males, high pressure voiders present a selective group were most after double therapy still void above 100 cm H₂O or more than twice normal P_{det} [1,2]. This can significantly contribute to urinary retention.

Concluding message

We recommend all patients with a P_{det} >100 be recommended to undergo TURP in lieu of the insignificant drop in mean P_{det} [↓20-25 cm H₂O] with double therapy.

References

1. Rodrigues P, Hering F, Meller A, D'Imperio M. Outline of 3,830 male patients referred to urodynamic evaluation for lower urinary tract symptoms: how common is intravesical outlet obstruction? *Urol Int* 2009;83(4):4004-409.
2. Liao L, Schaefer W. Quantitative quality control during urodynamic studies with TVRs for cytometry in men with lower urinary tract symptoms suggestive of benign prostatic hyperplasia. *Int Urol Nephrol* 2014 46(7):1301-1308.

Disclosures

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