

Persistent Storage Dysfunction After MIST for BPH: Evidence of a Pathophysiological Dissociation Between Obstruction and OAB

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Hypothesis/Aim of Study

MIST, including Water Vapor Thermal Therapy (WVTT) and Prostatic Urethral Lift (PUL), is expected to reduce LUTS-related medication burden. However, the postoperative trajectories of BPH and OAB medication use may differ.

We evaluated temporal changes in LUTS-related medication use after MIST and investigated factors associated with OAB medication use at 6 months.

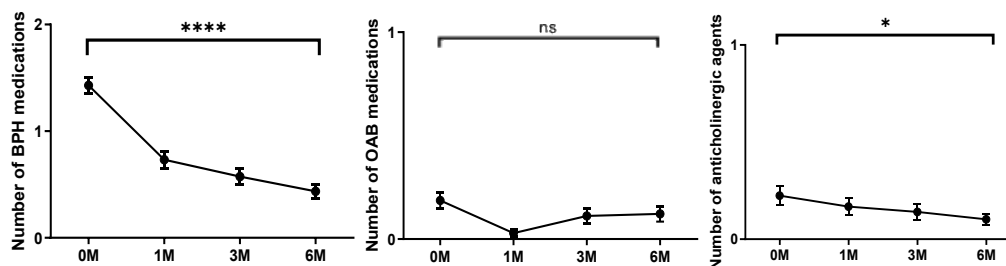
Study Design & Methods

Multicenter retrospective study of 164 patients undergoing WVTT (n=107) or PUL (n=57).

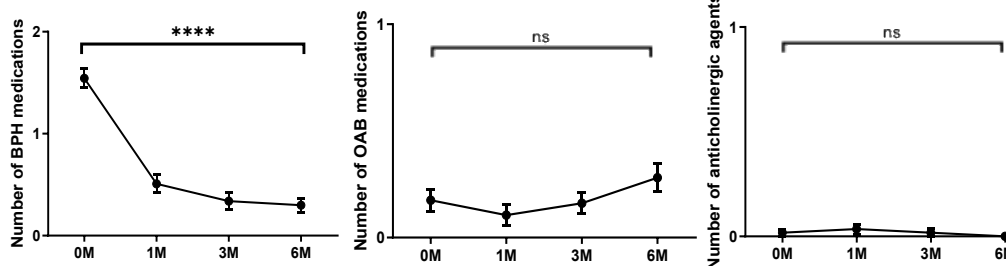
Medication use was assessed at baseline and at 1, 3, and 6 months after treatment.

Temporal Changes in LUTS Medication Use After MIST (0-6 Months)

WVTT (n = 107)



PUL (n = 57)



Data are presented as mean ± standard error

BPH medication burden decreased significantly in both groups. OAB medication use remained largely unchanged.

Conclusion

BPH medication burden decreased substantially after MIST, whereas OAB medication use remained largely unchanged.

Baseline OAB medication use may help identify patients who require continued assessment and individualized postoperative management.

Limitations

Limitations include the retrospective design, missing symptom and uroflowmetry data, and the use of medication as a surrogate for symptoms.

Multivariable analysis of factors associated with OAB medication use at 6 months

Variable	OR	95% CI	p-value
PUL (vs WVTT)	1.81	(0.58–5.70)	0.309
Age	1.01	(0.96–1.06)	0.680
Prostate volume (mL)	0.94	(0.89–0.98)	0.004
IPP (mm)	1.02	(0.94–1.10)	0.620
Diabetes	1.21	(0.39–3.72)	0.730
BPH medication count	1.08	(0.81–1.44)	0.590
Baseline OAB medication use	7.37	(2.32–23.40)	<0.001

Odds ratio (log scale)

Baseline OAB medication use showed the strongest association with OAB medication use at 6 months

Sensitivity analysis: de novo OAB medication initiation

Variable	OR	95% CI	p-value
PUL (vs WVTT)	4.80	(0.88–26.11)	0.069
Age	1.02	(0.96–1.08)	0.480
Prostate volume (mL)	0.95	(0.89–1.01)	0.110
IPP (mm)	1.03	(0.93–1.14)	0.540

Odds ratio (log scale)

Procedure type was not significantly associated with de novo OAB medication initiation.

IPTW-adjusted outcomes

OUTCOME	OR	95% CI	p-value
Postoperative OAB medication use	1.10	(0.44–2.73)	0.844
De novo OAB medication initiation	2.49	(0.63–9.76)	0.191

Odds ratios represent PUL versus WVTT after IPTW adjustment. (log scale)

No significant differences were observed between WVTT and PUL after IPTW adjustment