

Perioperative Bleeding Risk After MIST for BPH Is Determined by Antithrombotic Therapy Rather Than Procedure Type: A Multicenter Cohort Study

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Hypothesis / aims of study

- The relative contributions of patient- and procedure-related factors to perioperative bleeding risk after MIST remain unclear.
- We evaluated perioperative complications and factors associated with bleeding-related complications after MIST.

Study design & methods

- Multicenter retrospective cohort of 377 patients undergoing water vapor thermal therapy (WVTT, n=280) or prostatic urethral lift (PUL, n=97) across 12 institutions.
- Complications were graded using the Clavien–Dindo classification.
 - Bleeding-related complications were defined as a composite of gross hematuria, bladder irrigation, transurethral coagulation, or pelvic hematoma.
- Multivariable logistic regression analysis was performed to identify factors independently associated with bleeding-related complications.

Results

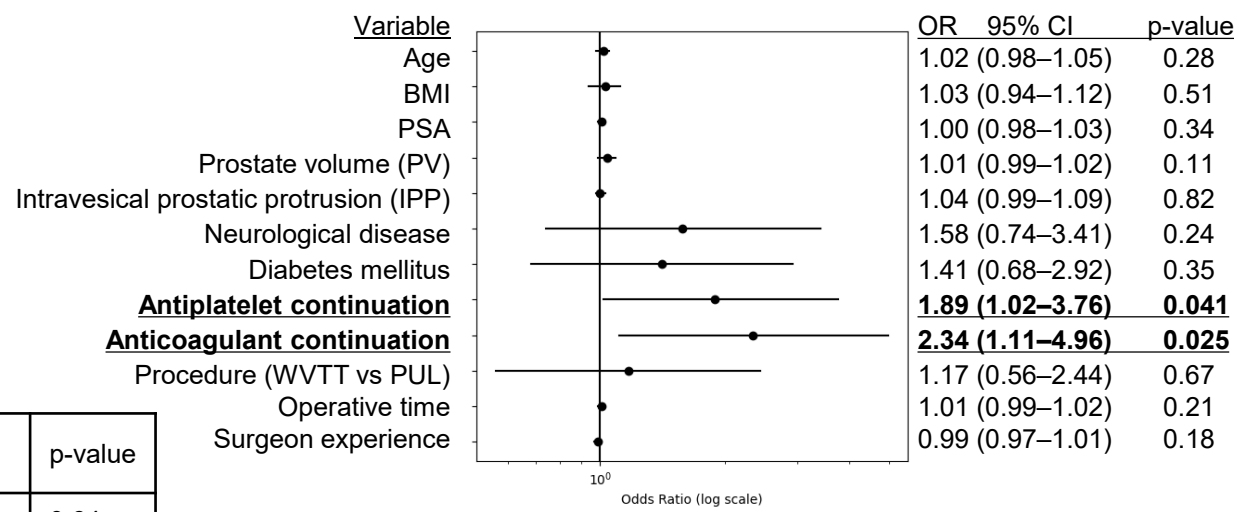
Clavien–Dindo Classification of Complications

Grade	WVTT (n=280)	PUL (n=97)	p-value
Grade I	22 (7.9%)	6 (6.2%)	0.64
Grade II	10 (3.6%)	3 (3.1%)	1.00
Grade IIIa	1 (0.4%)	0 (0%)	1.00
Grade IIIb	1 (0.4%)	1 (1.0%)	0.52
Grade ≥IV	0 (0%)	0 (0%)	—

Detailed Breakdown of Complications

Complication	WVTT (n=280)	PUL (n=97)	p-value
Overall complications	34 (12.1%)	10 (10.3%)	0.64
Urinary tract infection (UTI)	12 (4.3%)	4 (4.1%)	1.00
Gross hematuria	8 (2.9%)	2 (2.1%)	0.73
Transient urinary retention	9 (3.2%)	2 (2.1%)	0.76
Reoperation	1 (0.4%)	1 (1.0%)	0.52

Factors Associated with Bleeding-Related Complications After MIST



Odds ratios (OR) and 95% confidence intervals (CI) were calculated using multivariable logistic regression analysis.
OR >1 indicates higher odds of bleeding-related complications.

Concluding message

- Bleeding-related complication rates did not differ significantly between WVTT and PUL.
- Continuation of antiplatelet or anticoagulant therapy was independently associated with higher odds of bleeding-related complications. (Interpretation is limited by the retrospective design and small number of bleeding events.)