

Bladder Neck Preservation Further Improves Immediate Continence in Retzius-Sparing Robotic-Assisted Radical Prostatectomy

Introduction

- RARP: improved functional outcomes with similar oncological outcomes as open surgery.
- Retzius-sparing RARP, which involves removing the prostate from posterior and leaving the bladder in situ, has better early continence.
- We explore whether bladder neck (BN) preservation can further improve immediate continence in patients undergoing RS-RARP.

Methods

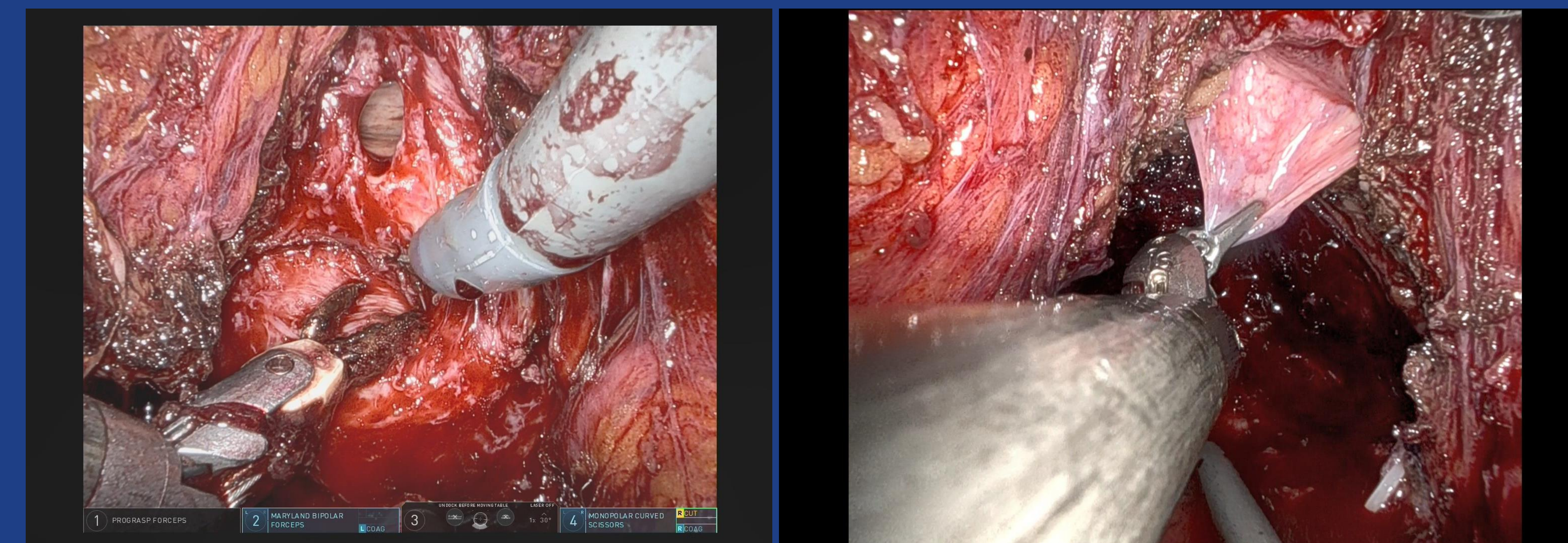
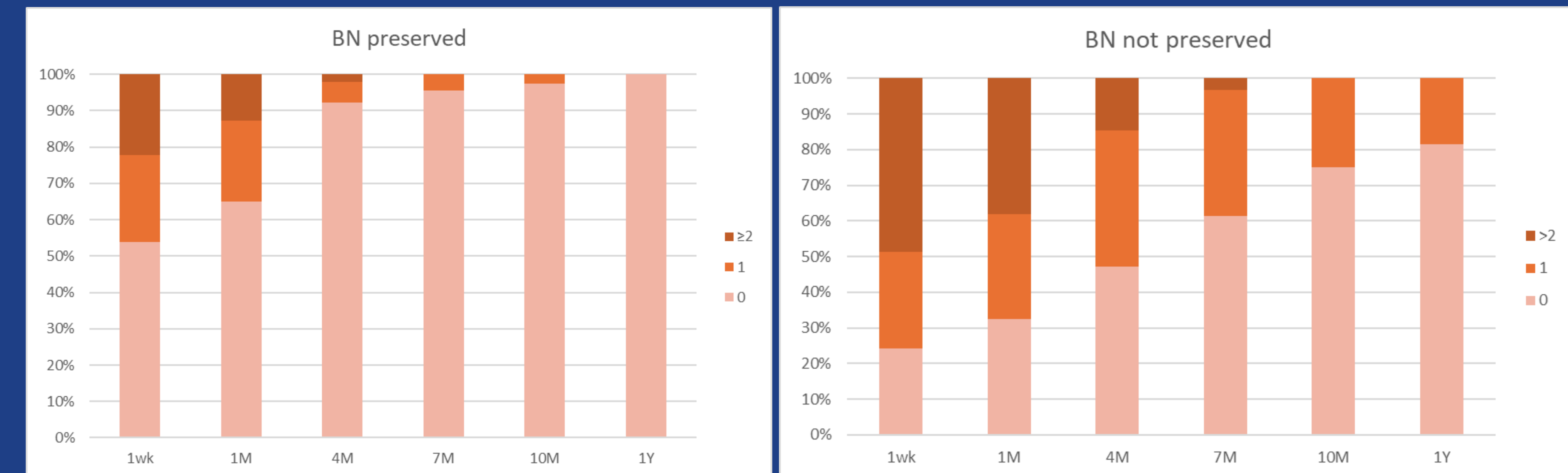
- RS-RARP between 2018 to 2024 by a single surgeon
- Followed up > 6 months
- Two groups: BN preserved and not preserved.
- Primary outcome: immediate continence rate, defined as no pads within 1 week after Foley removal.
- Secondary outcome: pad numbers at each follow-up visit.

Table 1. Demographic data

	Bladder neck preserved (n=63)	Non-bladder neck preserved (n=37)	P value
Mean age (SD)	66.5 (5.74)	69.1 (4.28)	0.02*
NCCN risk stratification			0.48
Very low and low	2 (3.17%)	3 (8.10%)	
Intermediate	42 (66.7%)	18 (48.6%)	
High and very high	19 (30.2%)	16 (43.2%)	
Pathological T stage			
pT2	45 (71.4%)	27 (73.0%)	0.87
pT3	18 (28.6%)	10 (27.0)	
Preoperative PSA (ng/mL)	8.90 (6.79-13.6)	9.20 (6.29-13.7)	0.58
Total prostate volume (mL)	39.0 (31.0-50.5)	42.1 (26.6-53.6)	0.97
Median operation time (min)	204.0 (197.0-221.5)	240.0 (215.0-259.5)	0.0012*
Median estimated blood loss (mL)	300.0 (202.5-500.0)	300.0 (187.5-585.0)	0.86
Nerve sparing (%)			0.27
Unilateral	17 (27.0%)	5 (13.5%)	
Bilateral	26 (41.3%)	14 (37.8%)	
Positive margin	29 (46.0%)	15 (40.5%)	0.60

Table 2. Immediate Continence

Immediate continence	Bladder neck preserved (n=63)	Non-bladder neck preserved (n=37)	P value
Yes	33 (52.4%)	9 (24.3%)	0.0063*
No	30 (47.6%)	28 (75.7%)	



Results

- N = 63 vs. 37
- Immediate continence was observed in 52.4% vs. 24.3% (p=0.0063)
- At 7 months, 95.4% vs. 61.2% had 0 pad (Figure 1).
- Multivariate analysis showed BN preservation as an independent factor for immediate continence (OR=4.16, p=0.009).

Conclusion

- Bladder neck preservation further improves immediate continence in patients undergoing RS-RARP.