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BLADDER NECK PRESERVATION DURING RADICAL PROSTATECTOMY NEEDED FOR RECOVERY OF CONTINENCE IN ELDERLY MEN (>70 YEARS)

Hypothesis / aims of study
To determine the effect of bladder neck preservation (BNP) on postoperative continence and positive bladder neck surgical margin (BN-PSM) rates.

Study design, materials and methods
We performed a retrospective analysis of 528 patients who underwent open or robot-assisted radical prostatectomy by a single surgeon. Postoperative 1 year incontinence and BN-PSM rates were compared. Urinary incontinence was defined as any urine drops in pants. The association between BNP and continence was also assessed using multivariate binary logistic regression models.

Results
BNP group (n=390) and Non-BNP (n=138) group were analyzed. Patient characteristics and treatment outcomes are described in Table 1. Clinical T stage and pathologic Gleason score was significantly lower in BNP group. Urinary in continence rate is significantly higher in non-BNP group (36.2%) than BNP group (23.0%). BN-PSM were reported 30 (7.7%) cases in BNP group, and 14 (10.1%) cases in non-BNP group, however, there was no significant difference between two groups. Age> 70yr was positively related with postoperative 1year incontinence (OR;1.083, 95% CI;1.027-1.158), and bladder neck preservation was negatively related with incontinence in multivariate analysis (OR;0.456, 95% CI;0.249-0.831) (Table 2).

Interpretation of results
Postoperative 1yr continence is associated with BNP however not with positive bladder neck surgical margin and also age> 70yr was positively related with postoperative 1year incontinence

Concluding message
In old patient, BNP during radical prostatectomy could help to return to continence.

Table 1. Patient characteristics and treatment outcomes

Bladder neck preservation (BNP)	BNP (n = 390)	Non-BNP (n = 138)	P- value
	Mean ± SD, Frequency (%)	Mean ± SD, Frequency (%)	
Age (yr)	70.9 ± 6.3	69.3 ± 8.7	0.227
Initial PSA (ng/dL)	15.1 ± 24.7	11.2 ± 12.1	0.305
Biopsy Gleason score			0.408
≤ 6	136 (34.9%)	53 (38.4%)	
7-8	150 (38.5%)	63 (45.7%)	
>9	104 (26.7%)	22 (15.9%)	
Clinical T stage			0.001*
T1, T2	243 (62.3%)	58 (42.0%)	
T3, T4	147 (37.7%)	80 (58.0%)	
Pathologic Gleason score			0.031*
≤ 6	102 (26.2%)	14 (10.1%)	
7-8	179 (45.9%)	81 (58.7%)	
>9	109 (27.9%)	43 (31.2%)	
Pathologic prostate volume (cc)	43.2 ± 21.3	40.2 ± 15.2	0.219
Positive bladder neck surgical margin	30 (7.7%)	14 (10.1%)	0.387
Lymph node dissection	368 (94.4%)	6 (4.3%)	<0.001*
Urinary incontinence at 1yr	90 (23.0%)	50 (36.2%)	0.027*

Table 2. Factors related to urinary incontinence 1 year after radical prostatectomy

	Univariate			Multivariate		
	OR	(95% CI)	p value	OR	(95% CI)	p value
Age> 70 (yr)	1.038	1.011-1.083	0.018*	1.083	1.027-1.158	0.011*
Bladder neck preservation	0.638	0.358-0.937	0.021*	0.456	0.249-.0.831	0.007*
Pathologic prostate volume (cc)	1.058	0.998-1.076	0.093	1.021	0.997-1.030	0.083
Positive bladder neck surgical margin	1.218	0.638-2.847	0.831	1.527	0.792-3.097	0.297

References
1. A comparison of bladder neck preservation and bladder neck reconstruction for urinary incontinence after radical retro pubic prostatectomy; J Res Med Sci. 2014 Dec;19(12):1140-4
2. Bladder neck preservation improves time to continence after radical prostatectomy: a systematic review and meta-analysis: Oncotarget. 2016 Oct 11;7(41):67463-67475
3. Posterior Urethral Suspension During Robot-Assisted Radical Prostatectomy Improves Early Urinary Control: A Prospective Cohort Study: J Endourol. 2016 Oct;30(10):1089-1094

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