

OUTCOMES OF PALLIATIVE TRANSURETHRAL RESECTION OF THE PROSTATE IN PATIENTS WITH PROSTATE CANCER: AGE-MATCHED CASE-CONTROL STUDY

Hypothesis / aims of study

Most of patients with advanced prostate cancer (CaP) complain obstructive voiding symptoms due to growing of cancer tissues even after androgen ablation. However, the effectiveness and morbidity of palliative transurethral resection of the prostate (TURP) in advanced CaP is still under debate. Therefore we investigate the efficacy and morbidity of palliative TURP in patients with advanced CaP through age-matched case-control study.

Study design, materials and methods

A retrospective review of patients with advanced prostate undergoing palliative TURP at a single institution was performed. A total of 134 cases with advanced CaP were enrolled for the study. Controls of 134 were selected from the database of BPH patients who underwent TURP, and one-to-one matched with similar age and the closest date of operation according to those of cases.

Results

Average ages of cases and controls were 73.8±7.2 years. Preoperative PSA was higher in CaP patients than BPH controls (199.7 ± 875.4 vs 6.9 ± 10.7), but prostate size, preoperative MFR and Preoperative PVR were similar between cases and controls (table 1). Resected weight, operative time, postoperative MFR and PVR were not different between two groups (table 2). However, CaP patients had longer hospital stay days and catheterization time (each $P < 0.05$). TUR-related complications were not different between CaP and BPH patients (table 3).

Table 1. Baseline characteristics

Parameter	BPH	CaP	<i>P</i> -value
Age (yrs)	73.8 ± 7.2	73.8 ± 7.2	
PSA (ng/ml)	6.9 ± 10.7	199.7 ± 875.4	0.02
Prostate size (gm)	47.0 ± 24.7	43.3 ± 18.8	0.11
Preoperative MFR (ml/sec)	9.0 ± 3.9	11.1 ± 3.1	0.15
Preoperative PVR (ml)	59.5 ± 51.6	38.0 ± 22.1	0.39

Table 2. Comparison of the efficacy

Variables	BPH	CaP	<i>P</i> -value
Resected weight (g)	22.0 ± 15.8	18.9 ± 12.7	0.98
Op. time (min)	48.3 ± 22.7	44.7 ± 20.8	0.19
Hospital day (days)	6.2 ± 1.8	6.8 ± 2.6	0.04
Duration of catheter	3.9 ± 1.1	4.5 ± 1.9	<0.01
Postop. MFR (ml/sec)	16.5 ± 7.5	18.0 ± 7.7	0.55
Postop. PVR (ml)	27.0 ± 26.9	21.2 ± 34.6	0.58

Table 3. Comparison of the complication

Variables	BPH (%)	CaP (%)	<i>P</i> -value
Early complication	12 (9.7)	13 (9.9)	0.55
Urinary Incontinence	4	6	
Prostatic Bleeding	8	6	
Urge	0	1	
TUR syndrome	0	0	
Perforation	0	0	
Infection	0	0	
Postop. Urinary retention	4 (3.3)	12 (9.0)	0.15
Reoperation	11 (8.9)	13 (9.7)	0.49
Retention	3	8	
Bleeding	8	5	

Interpretation of results

According to our results, TURP was effective and safe in advanced CaP patients who have obstructive symptoms. However, CaP patients had longer hospital stay days and delayed catheterization time than BPH patients.

Concluding message

Palliative TURP can be performed safely in patients with advanced prostate cancer with significant improvement in urinary symptoms. However, prolonged hospital stay and delayed catheterization period might be commented to patients with advanced prostate cancer.

Disclosures

Funding: No source of funding or grant **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Institutional Review Board of Chungbuk National University Hospital **Helsinki:** Yes **Informed Consent:** No