

CLINICAL SIGNIFICANCE OF LOWER URINARY TRACT SYMPTOMS WITH PROSTATE CANCER

Hypothesis / aims of study

Lower urinary tract symptoms (LUTS) accompanying benign prostatic hyperplasia are a common problem, which the prevalence in men aged over 50 was about 30-50%. And diverse opinions were expressed that LUTS is one of the risk factors of prostate cancer. In this study, we investigated the relationship between prostate cancer and LUTS.

Study design, materials and methods

Between January 2010 and December 2011, 192 patients who diagnosed prostate cancer with transrectal ultrasound prostate biopsy because of PSA \geq 4 or rectal examination abnormalities, were included. We excluded patients with pyuria. And we classified these patients with two groups; 1) LUTS, 2) Non-LUTS. All patients evaluated PSA, prostate volume and IPSS before prostate biopsy. We compared the differences according to the presence or absence of LUTS

Results

Mean age, mean PSA and mean PV of patients were 68.04 \pm 5.64 years, 26.07 \pm 24.65 ng/mL and 32.07 \pm 11.63 gm. In all patients with prostate cancer, LUTS group was 153 (79.69%) and non-LUTS group was 39 (20.31%). The medication history of α -blocker and 5 α -reductase inhibitor were not significantly differences.

Interpretation of results

LUTS group has more advanced stage ($p=0.021$) and metastasis ($p=0.047$) than non-LUTS group.

Concluding message

The prostate cancer patients with LUTS showed higher stage and metastasis. We might be recommended more aggressive screening tests of prostate cancer in patients with LUTS.

Table 1. Patients characteristics

	Mean \pm SD (n=192)		p-value*
	LUTS (n=153)	No LUTS (n=39)	
Age (years)	67.12 \pm 7.53	66.02 \pm 8.90	0.102
PSA (ng/ml)	18.03 \pm 45.08	15.09 \pm 36.28	0.251
PV (ml)	35.30 \pm 23.09	29.06 \pm 20.44	0.065
IPSS	19.13 \pm 7.21	6.49 \pm 1.70	< 0.001
Storage score	9.54 \pm 3.05	3.56 \pm 1.27	< 0.001
Voiding score	11.33 \pm 6.01	2.15 \pm 2.07	< 0.001
α -blocker	84 (54.9%)	20 (51.3%)	0.621
5ARI	45 (29.4%)	11 (28.2%)	0.459
Prostate cancer stage	3.21 \pm 0.96	2.62 \pm 0.66	0.021
Distant metastasis	58 (37.9%)	6 (15.4%)	0.047

*: Independent sample T-test

Disclosures

Funding: None **Clinical Trial:** Yes **Public Registry:** No **RCT:** Yes **Subjects:** HUMAN **Ethics not Req'd:** This study is retrospective study using chart review **Helsinki:** Yes **Informed Consent:** Yes