

CHANGES OF URINARY SUBJECTIVE AND OBJECTIVE SYMPTOMS FOLLOWED ANDROGEN DEPRIVATION THERAPY OF PROSTATE CANCER PATIENTS.

Hypothesis / aims of study

I examined changes of urinary subjective and objective symptoms and association with QOL index, ADL followed androgen deprivation therapy (ADT) of prostate cancer (PCa) patients retrospectively.

Study design, materials and methods

Twenty eight PCa patients (age; median 81.6 years old) underwent ADT in our hospital were enrolled in this study (treatment period; median 37.0 months). I evaluated about following factors; prostate volume, PSA value, International Prostate Symptom Score (IPSS) [storage symptom score, voiding symptom score, postvoid symptom score], QOL index, activity of daily living (ADL; Karnofsky Index), Uroflowmetry measurements (maximum flow rate [Qmax], average flow rate [Qave], voided volume, voiding time), and postvoid residual urine volume (PVR). Also, I examined relationship between above mentioned factors including body mass index (BMI) and QOL index / ADL before and after treatment.

Results

The factor revealed statistically significant difference before and after treatment was only prostate volume (27.0 to 20.3ml, $p < 0.0001$). Multiple regression analysis using a pre-ADT QOL index as independent variable showed statistically significant ($p = 0.003$, $R^2 = 0.670$), the significant factors affecting QOL index were IPSS (voiding symptom score; $p = 0.027$), Qmax ($p = 0.049$), and PVR ($p = 0.015$). For about post-ADT QOL index analysis on the same way, it was also statistically significant ($p = 0.016$, $R^2 = 0.559$). But there were no significant factors. Multiple regression analysis using a pre-ADT ADL as independent variable showed statistically significant ($p = 0.005$, $R^2 = 0.642$), the significant factor affecting ADL was only pre-ADT prostate volume ($p = 0.006$). For about post-ADT ADL analysis on the same way, it was also statistically significant ($p = 0.017$, $R^2 = 0.552$). The significant factors affecting ADL were post-ADT prostate volume ($p = 0.020$) and IPSS (voiding symptom score; $p = 0.044$).

Interpretation of results

In this study, it was observed prostate volume reduced approximately 25% after ADT, and no statistical improvement on IPSS, QOL index, ADL, Uroflowmetry measurements, and PVR. These results suggested reduction of mechanical obstruction did not improve urinary subjective and objective symptoms.

It was also suggested QOL index was affected by voiding symptoms before ADT, that prostate volume was very important factor on ADL.

Concluding message

The management of the urination, QOL, and ADL of PCa patients was not similar as patients with benign prostatic hyperplasia.

Specify source of funding or grant	NONE
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Kobe Medical Center Institutional Review Board
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes