

CLINICAL EFFICACY OF NAFTOPIDIL IN THE TREATMENT OF LOWER URINARY TRACT SYMPTOMS AFTER RADICAL PROSTATECTOMY.

Hypothesis / aims of study

Some patients after radical prostatectomy require improvement in lower urinary tract symptoms (LUTS), not only in urinary storage symptoms but also voiding symptoms, although the procedure of radical prostatectomy seems to have impact on improving LUTS¹. We studied the effects of naftopidil, a selective α_1 -adrenoceptor antagonist, on LUTS of the patients after radical prostatectomy.

Study design, materials and methods

Twenty-seven patients with International Prostatic Symptom Scores equal to or more than 8 who had been treated for localized prostatic cancer at least 1 year before were enrolled in the study. They did not need wearing pads for incontinence and their residual urine volume was 13.6 ± 18.6 mL (mean \pm SD). Patients were prescribed naftopidil 75mg once daily for 4 weeks, and changes of IPSS, QOL (Quality of Life) index, flow rates, and voided volumes assessed by micturition diary were evaluated prior to drug administration and at 4 weeks. The paired *t*-test was used to analyze the significance of difference.

Results

The total IPSS, sub-total scores for voiding symptoms, and storage symptoms improved from 15.1 ± 7.6 to 7.0 ± 5.4 ($p < 0.001$) (Fig. 1), from 7.3 ± 3.0 to 3.5 ± 3.0 ($p < 0.001$), and from 8.1 ± 4.2 to 3.9 ± 2.9 ($p < 0.001$), respectively. QOL index improved from 3.9 ± 1.2 to 2.8 ± 1.2 ($p < 0.01$). Maximum flow rates and average flow rates increased from 10.2 ± 8.5 mL/sec to 13.2 ± 11.1 mL/sec (n. s.) and from 3.4 ± 2.2 mL/sec to 5.7 ± 4.7 mL/sec (n. s.), respectively. Voiding frequency per day decreased from 9.5 ± 4.7 to 8.6 ± 3.4 (n. s.). Maximum and average voided volumes were increased from 341.6 ± 187.6 mL to 389.1 ± 209.1 mL ($p < 0.05$) (Fig. 2), and from 187.6 ± 83.0 mL to 204.8 ± 82.1 mL (n. s.), respectively. One patient complained mild dizziness, another patient complained appetite-loss, and the other 2 patients complained small amount of stress urinary incontinence as side-effects during the treatment.

Interpretation of results

Naftopidil improved total IPSS, sub-total scores for voiding symptoms and storage symptoms, QOL index, and maximum voided volume significantly of the patients with LUTS after radical prostatectomy.

Concluding message

It has been suggested that naftopidil improves LUTS of the patients after radical prostatectomy partially via α_1 -adrenoceptor in the bladder.

References

1. Lepor H, Kaci L. The impact of open radical retropubic prostatectomy on continence and lower urinary tract symptoms: a prospective assessment using validated self-administered outcome instruments. *J Urol*, 2004; 171(3):1216-9
- 2.

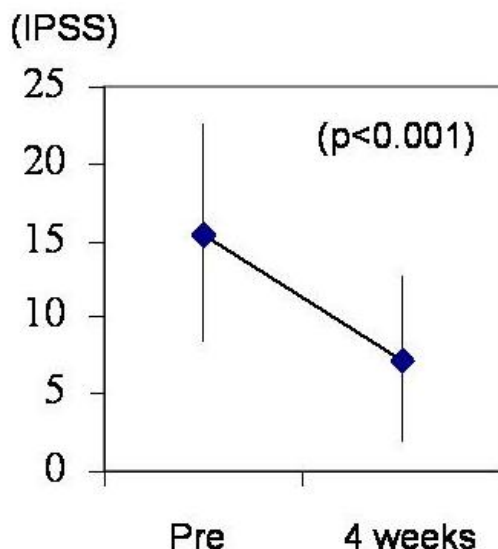


Fig. 1. The effect of naftopidil on IPSS

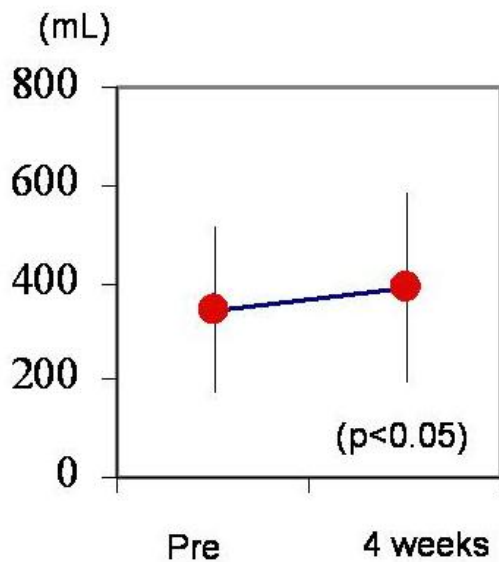


Fig. 2. The effect of naftopidil on maximum voided volume

<i>Specify source of funding or grant</i>	We did not receive any funding or grant for this study.
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Ethics committee of Kanto Central Hospital
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes