

INFLUENCE OF LOWER URINARY TRACT SYMPTOMS ON QUALITY OF LIFE IN PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA -EVALUATION USING BOTHER SCORES-

Hypothesis / aims of study

Benign prostatic hyperplasia (BPH) affects quality of life (QOL), and the goal of treatment is to improve lower urinary tract symptoms (LUTS), thus improving patient QOL. In our clinical experience, however, the international prostate symptom score (IPSS) used for evaluating LUTS does not always reflect the level of patient bother, and improvement in the IPSS score does not always reflect patient QOL. Therefore, for the present study, we created an original symptom bother scale, which was used in addition to the IPSS and QOL index, to evaluate LUTS in individual BPH patients in order to examine the correlation between LUTS and QOL.

Study design, materials and methods

Ninety three men diagnosed with BPH who had not yet been treated were enrolled (mean age, 70 years). The IPSS, QOL index, and bother score for each symptom of IPSS (7 grades; maximum 42 points: not at all bothersome, not bothersome, not much bother, neutral, a little bothersome, somewhat bothersome, very bothersome) were assessed in order to examine the correlation between LUTS and QOL. After treatment with tamsulosin hydrochloride 0.2 mg/day for 8 weeks, the change in each IPSS and bother score and correlation was reassessed.

Results

On the IPSS at initial evaluation, the score was highest for slow stream. The bother scores were high for slow stream, nocturia, and daytime frequency. For slow stream, patients with a high IPSS score also had a high bother score, but for nocturia, there was a large discrepancy between the IPSS and bother scores. (Fig. 1). After treatment, total IPSS, QOL and total bother scores were significantly improved ($P < 0.01$). With the exception of urgency, improvements in all individual symptom scores and bother scores were observed ($P < 0.01$) (Fig.2). After treatment with tamsulosin, each LUTS mean score decreased, and QOL significantly increased (Wilcoxon signed rank test). The improvement in QOL after treatment correlated well with improvement in the bother score for nocturia (F test, $p < 0.01$).

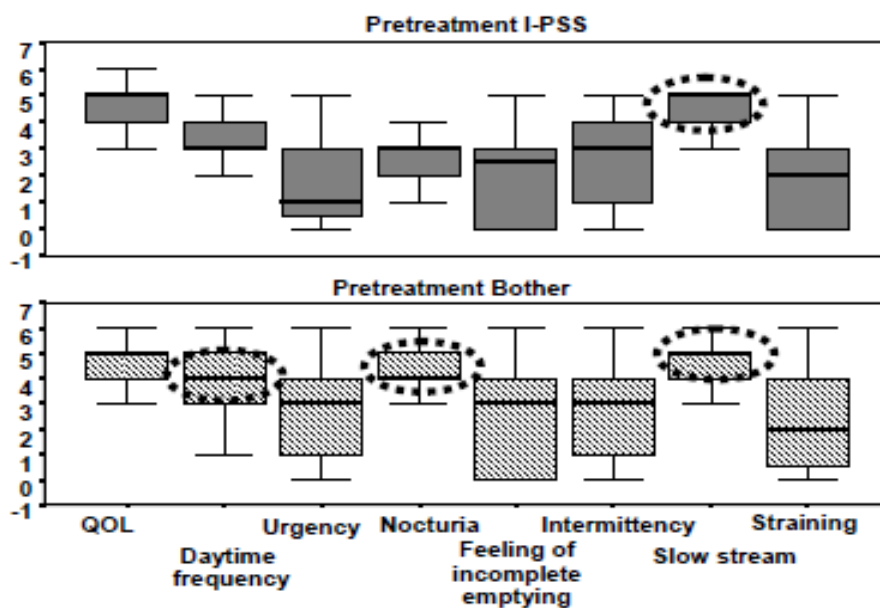


Fig. 1 Pre-treatment I-PSS and bother score in BPH patients

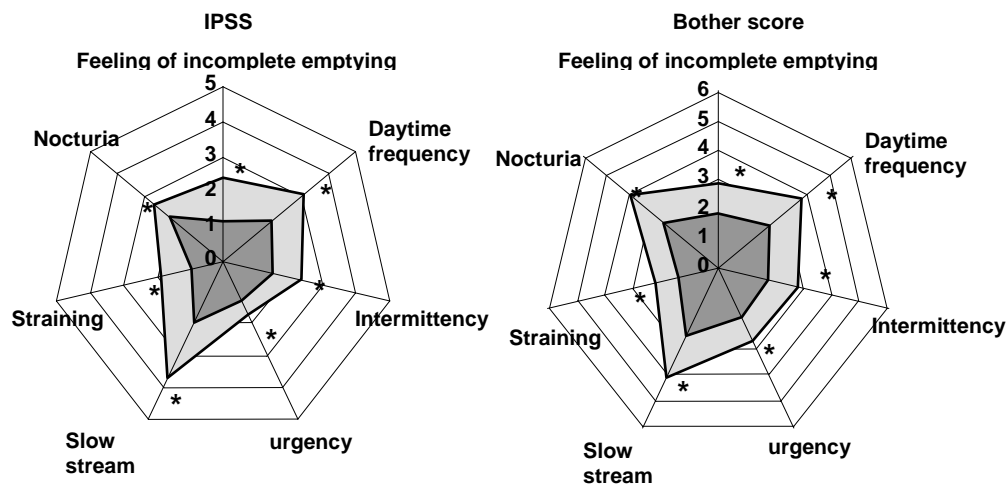


Fig. 2 Effect of tamsulosin treatment for each I-PSS and botherscore in BPH patients

Interpretation of results

Slow stream and increased day time frequency and nocturia are important symptoms that motivate patients to seek medical care in patients with LUTS suggestive of BPH. Tamsulosin has significant efficacies to both voiding and storage symptoms and QOL. Furthermore, the present study suggests that improvement in the botherscores for nocturia is the most important to improvements in QOL after α_1 -blocker treatment for BPH.

Concluding message

Most patients with BPH may seek medical treatment because they are bothered by symptoms of a slow stream, nocturia, and daytime frequency. Tamsulosin improved these symptoms in BPH patients, thus improving patient QOL. After treatment, the improvement in botherscore for nocturia strongly correlated with improvement in QOL. For nocturia, there was a large discrepancy between the IPSS and botherscore. Therefore, in addition to the IPSS, the botherscore may be necessary in evaluating patients with LUTS suggestive of BPH and their response to drug treatment.

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CLINICAL TRIAL REGISTRATION: This clinical trial has not yet been registered in a public clinical trials registry.

HUMAN SUBJECTS: This study was approved by the The ethics committee of Kumamoto University and followed the Declaration of Helsinki Informed consent was obtained from the patients.