



ASSESSMENT OF QOL IN PATIENTS WITH LUTS DUE TO BPH AND COMPARE THE OUTCOME ON A MODIFIED BPH-QOL SCALE AND IPSS SCALE

Urology

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ABSTRACT

Background: Lower urinary tract symptoms (LUTS) include post-micturition symptoms such as post-micturition dribble or incontinence. The present study was conducted to assess the QoL in patients with LUTS due to BPH and compare the outcome on a modified BPH-QoL scale and IPSS scale. **Materials & Methods:** 200 men of BPH were recorded. Sensation of incomplete bladder emptying, voiding frequency, intermittence, urgency, urine stream force, strain to begin urination and nocturia responses on both the scales (IPSS and BPH specific QoL scale) were noted and the total score was calculated. **Results:** Age group 30-40 years had 42, 40-50 years had 50 and 50-60 years had 108 patients. The difference was significant ($P < 0.05$). The correlation of BPH specific QoL scale questions with QoL question of IPSS was found to be statistically significant ($P < 0.05$). The correlation coefficients of BPH specific QoL questionnaire were found to be $r=0.562$ ($p<0.0001$) with the total IPSS and $r=0.374$ ($p<0.0001$). **Conclusion:** A statistically significant association between the IPSS scale and the BPH-specific QoL scale was discovered. In comparison to the IPSS scale, the BPH-specific QoL scale is far more helpful and thorough in addressing the QoL in patients with LUTS brought on by BPH. The short and simple BPH-specific QoL scale was easy to use.

KEYWORDS

Lower urinary tract symptoms, post-micturition symptoms, incontinence

INTRODUCTION

Lower urinary tract symptoms (LUTS) include post-micturition symptoms such as post-micturition dribble or incontinence, a feeling of incomplete emptying, and storage symptoms such as urgency, urgency incontinence, frequency, nocturia, slow and/or interrupted stream, terminal dribble hesitancy, and straining.¹ LUTS in association with BPH are common in elderly males. Almost half of this age group over the fifth decade of age complain of moderate to severe LUTS, which impedes their quality of life (QoL).^{2,3}

Due to urinary symptoms, men with BPH experienced higher levels of bother and impairment with a few daily tasks. When recommending a therapeutic approach for any condition, the enhancement of quality of life (QoL) should be kept in mind.⁴ The goals of BPH treatment should be to relieve patients' symptoms, enhance their quality of life, and slow the disease's progression. Based on the severity of the sickness and the annoyances it causes, the cornerstone of treatment planning in such circumstances has been formed. As a result, symptom scores are used to develop a personalized care strategy for BPH patients.⁵ The International Prostate Symptom Score (IPSS), which evaluates the severity of urine symptoms, is the most popular symptom score. The limitation of IPSS is that it is not a reliable instrument because its questionnaire does not address quality of life.⁶ The present study was conducted to assess the QoL in patients with LUTS due to BPH and compare the outcome on a modified BPH-QoL scale and IPSS scale.

MATERIALS & METHODS

The present study consisted of 200 men of BPH. All gave their written consent to participate in the study.

Data such as name, gender etc. was recorded. Sensation of incomplete bladder emptying, voiding frequency, intermittence, urgency, urine stream force, strain to begin urination and nocturia. The responses on both the scales (IPSS and BPH specific QoL scale) were noted and the total score was calculated. The BPH-specific QoL was compared with the IPSS scale. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Age group (years)	Number	P value
30-40	42	0.02
40-50	50	
50-60	108	

Table I shows that age group 30-40 years had 42, 40-50 years had 50 and 50-60 years had 108 patients. The difference was significant ($P < 0.05$).

Table II Pearson correlation between total score of BPH scale and QoL score on IPSS Scale

Groups		BPH-specific scale total score
IPSS total score	Pearson Correlation	0.562
	P value	0.01
IPSS QoL Score	Pearson Correlation	0.374
	P value	0.01

The correlation of BPH specific QoL scale questions with QoL question of IPSS was found to be statistically significant ($P < 0.05$). The correlation coefficients of BPH specific QoL questionnaire were found to be $r=0.562$ ($p<0.0001$) with the total IPSS and $r=0.374$ ($p<0.0001$) with the QoL score of IPSS.

DISCUSSION

BPH, the actual hyperplasia of the prostate gland, develops as a strictly age-related phenomenon in nearly all men, starting at approximately 40 years of age.^{7,8} In fact, the histologic prevalence of BPH, which has been examined in several autopsy studies around the world, is approximately 10% for men in their 30s, 20% for men in their 40s, reaches 50% to 60% for men in their 60s, and is 80% to 90% for men in their 70s and 80s. No doubt, when living long enough, most men will develop some histologic features consistent with BPH.⁹ The present study was conducted to assess the QoL in patients with LUTS due to BPH and compare the outcome on a modified BPH-QoL scale and IPSS scale.

We found that age group 30-40 years had 42, 40-50 years had 50 and 50-60 years had 108 patients. Sarkar et al¹⁰ found that most men were in age group 50-60 years with median age of 58 years. The correlation of BPH-specific QoL scale questions with QoL question of IPSS was found to be statistically significant. The correlation coefficients of BPH-specific QoL questionnaire were found to be $r=0.560$ ($p<0.0001$) with the total IPSS and $r=0.376$ ($p<0.0001$) with the QoL score of IPSS. The reliability i.e., Cronbach's alpha for BPH specific QoL was 0.879. Adverse symptoms of BPH in the form of fear of cancer and fear for surgery were noted.

We found that the correlation of BPH specific QoL scale questions with QoL question of IPSS was found to be statistically significant ($P < 0.05$).

The correlation coefficients of BPH specific QoL questionnaire were found to be $r=0.562$ ($p<0.0001$) with the total IPSS and $r=0.374$ ($p<0.0001$). Alcaraz et al¹¹ evaluated change in quality of life (QoL) and symptoms in patients with lower urinary tract symptoms/ benign prostatic hyperplasia (LUTS/BPH) in conditions of current clinical practice. 1713 patients were included for analysis. Mean (SD) IPSS and BII scores at baseline were 16.8 (5.4) and 6.8 (2.6), respectively. 8.9 % ($n = 153$) of study participants did not receive treatment (watchful waiting, WW), 70.3 % ($n = 1204$) were prescribed monotherapy (alphaadrenergic blockers [AB]; phytotherapy [PT, of which 95.2 % was the hexanic extract of *Serenoa repens*, HESr]; or 5-alpha-reductase inhibitors [5ARI]), and 20.8 %.

Coyne et al¹² determined associations of LUTS and perception of bladder problems, anxiety and depression. The overall survey response rate was 59.2%; 30 000 subjects (14 139 men and 15 861 women) participated. Men and women with LUTS in the all LUTS subgroup (storage, voiding and postmicturition) reported the lowest levels of HRQL and highest levels of anxiety and depression, with 35.9% of men and 53.3% of women meeting self-reported screening criteria for clinical anxiety (Hospital Anxiety and Depression Scale, HADS, Anxiety $> \text{or} = 8$), and 29.8% of men and 37.6% of women meeting self-reported criteria for clinical depression (HADS Depression $> \text{or} = 8$). In both men and women, storage symptoms were significantly associated with greater perceived bladder impact, whereas voiding symptoms were not. Significant predictors of anxiety included nocturia, urgency, stress urinary incontinence, leaking during sexual activity, weak stream and split stream in women; and nocturia, urgency, incomplete emptying and bladder pain in men. For depression, weak stream, urgency and stress urinary incontinence were significant for women, and perceived frequency and incomplete emptying were significant for men. The limitation of the study is small sample size.

CONCLUSION

Authors found that A statistically significant association between the IPSS scale and the BPH-specific QoL scale was discovered. In comparison to the IPSS scale, the BPH-specific QoL scale is far more helpful and thorough in addressing the QoL in patients with LUTS brought on by BPH. The short and simple BPH-specific QoL scale was easy to use.

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