IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 22, Issue 5 Ser.9 (May. 2023), PP 39-41
www.iosrjournals.org

Sexual Dysfunction In Patients With Benign Prostatic Hyperplasia – A Prospective Study In A Tertiary Care Centre

V Durga Prasad Mutyala,
Department of Urology, Andhra Medical College, Visakhapatnam
P Shiva Prasad,
Department of Urology, Andhra Medical College, Visakhapatnam
Vaibhav Joshi,
Department of Urology, Andhra Medical College, Visakhapatnam

Date of Submission: 16-05-2023 Date of Acceptance: 26-05-2023

I. INTRODUCTION

The symptoms of benign prostatic hyperplasia (BPH), including sexual dysfunction and lower urinary symptoms (LUTS/BPH), are quite common in older men. The phrase "lower urinary tract symptoms" is often used to refer to all urinary symptoms, including post-micturition, storage, and voiding. Age and cardiovascular comorbidities such as hypertension, heart disease, hypercholesterolemia, and diabetes are the leading predictors of sexual dysfunction.

Three factors make up male sexual dysfunction: erectile dysfunction (ED), ejaculatory dysfunction (EjD), and hypoactive desire (HD), sometimes known as loss of desire or diminished desire.(1,2) Male sexual dysfunction was once thought to be a normal result of aging. Sexual function and activity do not decline with age. Most elderly men and women are sexually active. (3) Sexual dysfunction is frequently present in LUTS linked with BPH. With increasing LUTS severity, interest in sexual activity decreases.(4) Therefore, LUTS/BPH therapy should also strive to at least preserve or, if feasible, enhance a person's sexual function.(5)

II. AIMS AND OBJECTIVES

To analyse the prevalence of sexual dysfunction among BPH patients.
To evaluate the numerous ways that BPH affects sexual function.
To evaluate the impact on sexual function of the various BPH treatment methods.

III. MATERIALS AND METHODS

The present study is a prospective cross-sectional conducted in Department of Urology in Andhra Medical College in Visakhapatnam. Male patients aged > 50 years who were diagnosed with BPH and presented with LUTS were included in the study. After thorough physical examination, DRE & Focused neurological examination, Baseline blood parameters, USG KUB, Uroflow & PVR were done. Sample size = 100.

Patients already treated for LUTS/BPH, with comorbidities like DM & HTN, with associated neurological disorders were excluded.

To gauge the severity of LUTS, all patients were administered the linguistic form of the International - Prostate Symptom Score (I - PSS). Seven components that make up the IPSS may be categorised as follows:
Symptoms of storage- Nocturia, Frequency, Urgency
Symptoms of voiding- Weak stream, intermittency, and incomplete emptying

Any pathologic condition that causes these symptoms may be evaluated using the IPSS score to determine how unpleasant they are. Based on this, we utilised this IPSS score for individuals who had been diagnosed with BPH and had LUTS. This score's biggest benefit is how simple it is to use.

The Male Sexual Function Scale's language adaptation was used to measure sexual function. Eight items make up the Male Sexual Function Scale, and two of them are on the erectile function domain and its discomfort and one each on sexual desire and satisfaction, together with three questions on the ejaculatory function domain and its discomfort. The last inquiry measured the entire burden or disturbance brought on by sexual dysfunction. The investigator converted the languages with the assistance of a psychologist with experience conducting these

kinds of patient interviews. Most likely, care was made in how the statements were phrased to avoid making the patient feel uncomfortable.

The researcher conducted interviews with 60 patients who were illiterate, had vision problems, and were unable to read the questionnaire's questions. The same investigator spoke with each of these patients to avoid bias. It was administered as a self-administered questionnaire (SAQ) to all other individuals (40 patients).

These individuals were treated in accordance with our department's procedure. Medical treatment in the form of 5-α reductase inhibitors and alpha blockers was used for management. Monopolar Transurethral resection of the prostate (TURP) was the most common surgical procedure.

At the completion of the third month, an evaluation was conducted after therapy. All patients were given the I-PSS and Male Sexual Function Scale questionnaires and instructed to come in for follow-up at the end of the third month. To evaluate the effectiveness of the treatment, uroflow with post-void residue was also performed.

Using the correlation coefficient in Microsoft Excel, the relationship between the severity of LUTS and the severity of sexual function was evaluated.

IV. RESULTS

The mean age of the study population was 61.22 ∓ 7.2 years. Most people belonged to the age group 60-69 (58%). 55% had severe LUTS score, 34% had moderate LUTS score and 11% had mild LUTS score. Moderate LUTS was significantly more in 60-69 age group and severe LUTS was also significantly higher in the age group 60-69 (*p*- value= 0.01).

Prevalence of sexual dysfunction:

Erectile dysfunction	Number	Percentage
None	6	6%
Very mild	13	13%
Mild	14	14%
Moderate	48	48%
Severe	19	19%

Out of the 70 patients in the 60-69 age group, 56 patients (80%) had moderate to severe erectile dysfunction.

Ejaculatory dysfunction	Number	Percentage
None	50	50%
Very mild	7	7%
Mild	8	8%
Moderate	26	26%
Severe	9	9%

Sexual satisfaction	Number	Percentage
Completely satisfied	40	40%
Mild dissatisfaction	30	30%
Moderate dissatisfaction	19	19%
Total dissatisfaction	11	11%

All LUTS patients reported either no or very mild erectile dysfunction. Nearly every patient in the group with severe LUTS had moderate to severe erectile dysfunction. Only people with moderate to severe ejaculatory dysfuction experienced severe LUTS.

LUTS SCORE	Age	Erectile Dysfunction	Ejaculatory Dysfunction	Sexual satisfaction
Pearson correlation	0.27	0.78	0.66	0.62

V. DISCUSSION

Of the total 100 patients included in the study, the mean age of the study population was 61.22 ∓ 7.2 years. Most people belonged to the age group 60-69 (58%). These correlated well with studies in literature. (5) Kenenna Obiatuegwu et. al.'s study to determine the correlation between ED and prostate size in BPH patients had a similar age distribution with mean age being 64.00 ∓ 7.07 years.(6) Elderly age may be crucial because, as the Cologne Male Survey found, ageing might affect sexual dysfunction. (7)

The incidence of ED increased with even a little rise in LUTS/BPH severity, which also had a significant impact on quality of life (QL). Additionally, it was discovered that the higher prevalence of males with ED is influenced by age and BPH comorbidities. (8) In the present study, 55% had severe LUTS score, 34% had moderate LUTS score and 11% had mild LUTS score. Moderate LUTS was significantly more in 60-69 age group and severe LUTS was also significantly higher in the age group 60-69 (p- value= 0.01). Out of the 70 patients in the 60-69 age group, 56 patients (80%) had moderate to severe erectile dysfunction. These results correlated well with Mawji et. al.'s study (3) who showed that with increasing age, prevalence of LUTS severity increases (55% in age <61 years, 82% in ages 61-70 years and 93% in >71 years of age).

In the present study, the erectile dysfunction was moderate in 48% and severe in 19% of the cases. Out of the 70 patients in the 60-69 age group, 56 patients (80%) had moderate to severe erectile dysfunction. These results correlated well with Kenenna Obiatuegwu et. al.'s study in which the prevalence of ED with Symptomatic BPH was 76.9%. (80% in the present study) and it increased with age as the incidence was 93.7% in men who were over 70 years old.(6)

The prevalence of moderate and severe Ejactulatory dysfunction in the present study was 26% and 9% respectively. Total Sexual dissatisfaction was noted in 11% in the present study. Compared to ED, LUTS did not usually impact the ejaculatory function. Regardless of their LUTS status, 50% of patients did not see any changes in their ejaculatory function. While among those who were impacted, more than 70% belonged to the group with moderate to severe LUTS. The Pearson correlation between LUTS score and Sexual dissatisfaction was 0.62 showing a positive correlation.

All mild LUTS patients reported either no or very mild erectile dysfunction. Nearly every patient in the group with severe LUTS had moderate to severe erectile dysfunction. Only people with moderate to severe ejaculatory dysfuction experienced severe LUTS. This shows that ED severity and LUTS severity were correlated. This conclusion supported the study by Darab Mehraban et al. that employed the IPSS and IIEF questionnaires to evaluate LUTS brought on by BPE and ED, respectively, and shown how the severity of LUTS can have a significant impact on sexual function. (9)

VI. CONCLUSION

LUTS and ED are prevalent age-related diseases. Epidemiological research and probable biological processes support this association.

LUTS patients should be assessed for sexual dysfunction and ED because many older men do not seek care for their sexual issues and physicians seldom enquire about their sexual lives. LUTS should be assessed in ED patients.

In clinical practise, LUTS management with simultaneous ED and various LUTS/BPH therapies may affect sexual function. Clinical trials can help find novel targets and create new treatments for both conditions by improving our understanding of the molecular mechanisms involved.

REFERENCES

[1]. Dutkiewicz S, Skawiński D, Duda W, Duda M. Assessing the Influence of Benign Prostatic Hyperplasia (BPH) on Erectile Dysfunction (ED) among patients in Poland. Cent Eur J Urol [Internet]. 2012 [cited 2023 May 7];65(3):135–8. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3921801/

[2]. Lowe FC. Treatment of lower urinary tract symptoms suggestive of benign prostatic hyperplasia: sexual function. BJU Int. 2005 Jun;95 Suppl 4:12–8.

[3]. Mawji SA, Mkony C, Nyongole O, Msinde P, Mahenda D. Assessment of Erectile Dysfunction in Patients with Benign Prostate Hyperplasia Using the Sexual Function Index at Muhimbili National Hospital, Dar es Salaam, Tanzania [Internet]. medRxiv; 2023 [cited 2023 May 7]. p. 2023.03.06.23286860. Available from: https://www.medrxiv.org/content/10.1101/2023.03.06.23286860v1

[4]. Bruskewitz RC. Quality of Life and Sexual Function in Patients with Benign Prostatic Hyperplasia. Rev Urol [Internet]. 2003 [cited 2023 May 7];5(2):72–80. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1473005/

[5]. P L, J S. A prospective study of sexual dysfunction in patients with benign prostatic hyperplasia. Int Surg J [Internet]. 2018 Feb 26 [cited 2023 May 7];5(3):802–9. Available from: https://www.ijsurgery.com/index.php/isj/article/view/2688

[6]. Obiatuegwu K, Atim T, Abu S, Aisuodionoe-Shadrach O, Dakum N. Correlation between the severity of erectile dysfunction and prostate size in patients with benign prostatic enlargement. Afr J Urol [Internet]. 2021 Feb 17 [cited 2023 May 15];27(1):31. Available from: https://doi.org/10.1186/s12301-020-00119-5

[7]. Ma C, Su H, Li H. Global Research Trends on Prostate Diseases and Erectile Dysfunction: A Bibliometric and Visualized Study. Front Oncol [Internet]. 2021 Feb 12 [cited 2023 May 7];10:627891. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7908828/

[8]. The ageing male and erectile dysfunction - PubMed [Internet]. [cited 2023 May 15]. Available from: https://pubmed.ncbi.nlm.nih.gov/12930410/