

Benign Prostatic Hyperplasia and Sexual Dysfunction

Battikhi MN*

Battikhi Central Laboratories 149 Ibn Khaldon Street, Amman 11183, Jordan

***Corresponding Author:** Moh'd Nizar Battikhi, 1017-1645 De Maisonneuve O, Montreal H3H 2N3, QC, Canada.

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Benign prostatic hyperplasia (BPH) is a histologic diagnosis that refers to the proliferation of smooth muscle and epithelial cells within the prostatic transition zone [1,2]. Symptomatic benign hyperplasia (BPH) also called benign enlargement of the prostate (BEP or BPE) is a noncancerous increase in size of the prostate which involves hyperplasia of the prostatic stromal and epithelial cells resulting in the formation of large fairly discrete nodules in the transition zone of the prostate [3]. BPH also called lower urinary tract symptoms (LUTS) as characterized by lower urinary tract symptoms is a common condition in the elderly male population and very common in men age > 50 years [4]. LUTS are often caused by BPH which include 'voiding' symptoms, such as reduced stream, hesitancy and straining [5-7]. Other symptoms were reported as storage symptoms which include frequency, nocturia and incontinence symptoms [6,7]. The enlarged gland has been proposed to contribute to the overall lower urinary tract symptoms by either direct bladder outlet obstruction (BOO) from enlarged tissue (static component) or indirect by increased smooth muscle tone and resistance within the enlarged gland (dynamic component) [8]. Symptomatic PBH occurs in approximately 20% - 30 % of men aged 60 years or over and patients showing PBH symptoms seek better quality of life rather than to be relieved from symptoms [6,9,10]. Self administrated questionnaires showed to be more affected and more important in PBH patients feedback in recognizing variety of various symptoms such as sleep anxiety, disease worries, impact of symptoms, daily activities, sexual function and satisfaction with sexual relationship [6,9,10]. However, epidemiological studies revealed that independently of age, lower urinary tract symptoms (LUTS) affect approximately 10% of older men and usually refer to a group of medical symptoms [11]. LUTS is a recent term for what used to be known as prostatism [12] are strongly associated with sexual dysfunction and spoilt sex life, more ever the prevalence of erectile dysfunction and reduced ejaculation increases with the severity of LUTS [4]. Both conditions are also highly bothersome among those patients with severe LUTS where patients exhibited reduced erection and reduced ejaculation [13]. The relationship between LUTS and sexual dysfunction has been controversial [14], but recent community-based studies suggest that erectile dysfunction (ED) and ejaculation disorders ejaculatory dysfunction (EjD) are related to increasing age and the severity of LUTS [6,15-18]. A multinational Survey of the Aging Male (MSAM-7), showed a strong association between LUTS and sexual disorders in USA and in Europe [12]. ED is often associated with chronic conditions such as cardiovascular diseases, diabetes and depression [15,19]. It is considered a symptom of vascular endothelium damage, which can be induced by hypertension, diabetes, hyperlipidaemia and smoking [14]. Other studies carried out Japanese men's showed significant correlation between diabetes mellitus, heart disease, hypertension and ED [14] which suggest that might be intercultural differences in the prevalence of LUTS [20]. Other studies showed difference in the prevalence of LUTS in deferent countries where Japan and USA showed higher prevalence France or Scotland [21]. In a community-based study, the prevalence of LUTS was reported to be higher in Japan and USA than in France or Scotland [21]. Further, Malaysian study carried out in Kuala Lumpur showed that there is a difference in the severity of LUTS in deferent ethnic and the prevalence of LUTS in Malay, Chinese and Indian men aged \geq 50 years was 70%, 59% and 50%, respectively [22]. Others studies have reported variation in the prevalence of sexual dysfunction among different countries [15]. The incidence of ED sowed variation in epidemiological study carried out in four different countries where Japan showed the highest incident rate of (34%) followed by, Malaysia, Italy and Brazil with ED incident rate of (22%), (17%) and (15%) respectively [17]. In community-based studies comparing sexual function in Japanese and American populations also reported a higher incidence of sexual problems in ageing Japanese men [23]. Assessment of patients with erectile dysfunction revealed LUTS prevalence in up to 72.2% incident rate and treatments either surgical or medical may

impair sexual function [8]. Choosing medical treatments usually include alpha-1 blockade and anti androgens however, if the medical treatment fails then surgical techniques are other option [24]. In direct comparative studies where finasteroid was used as 5 α -reductase inhibitor an increased incidence of ED, decreased libido and abnormal ejaculation were observed compared with alpha blockers as doxazosin and terazosin where abnormal ejaculation is reported by 4% to 6.0% of patients treated with tamsulosin in Europe and In USA 30% of patients complain of abnormal ejaculation over a mean exposure of 16 months conversely, ejaculatory disorders appears to be negligible with alfuzosin results in population trails [8]. Improvement in a sexual status was noted with increasing age where men experience significant changes in the average frequency of intercourse and ability of getting or maintain erection [8,15].

Traditionally, the primary goal of treatment has been to alleviate bothersome LUTS that result from prostatic enlargement. More recently, treatment has additionally been focused on the alteration of disease progression and prevention of complications that can be associated with BPH/LUTS [8]. A variety of pharmacologic classes are employed including alpha-adrenergic antagonists (alpha-blockers), 5-alpha- reductase inhibitors (5-ARIs), anticholinergics and phytotherapeutics. Many studies showed treating BPH patients with either single or combined drugs illustrate that the main concern is in choosing the correct medical treatment for BPH and even so the choice of drug is truly complex and ever-changing [26].

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