

# Surgical Management of Male Voiding Dysfunction



Jessica Mandeville, MD<sup>\*</sup>, Arthur Mourtzinis, MD, MBA

## KEYWORDS

- Benign prostatic hypertrophy • Lower urinary tract symptoms
- Transurethral resection of the prostate • Holmium laser enucleation of the prostate
- Photoselective vaporization of the prostate • Open simple prostatectomy

## KEY POINTS

- BPH is a common, surgically correctable cause of voiding dysfunction and troublesome lower urinary tract symptoms in males.
- Indications for surgical intervention in the management of BPH include urinary retention, recurrent urinary tract infections, bladder stone formation, upper urinary tract deterioration, and failure of medical management.
- Numerous surgical interventions are available for the management of BPH. The procedure of choice is determined by patient and surgeon preference, desired outcome, prostate size, and other patient-related factors (ie, anticoagulation use).



Video content accompanies this article at <http://www.surgical.theclinics.com>

## INTRODUCTION

Male voiding dysfunction is associated with various genitourinary conditions including urethral stricture, idiopathic detrusor overactivity, neurogenic bladder (ie, from spinal cord injury), neurologic disorders (ie, stroke, parkinsonism), poorly controlled diabetes, and benign prostatic hyperplasia (BPH). All of these conditions are associated with troubling lower urinary tract symptoms (LUTS), which can have a negative impact on quality of life. This article focuses on the management of male voiding dysfunction and LUTS related to BPH.

---

Disclosure Statement: J. Mandeville has provided educational lectures for Lumenis, but has no financial relationship with the company. A. Mourtzinis has nothing to disclose.

Department of Urology, Lahey Hospital and Medical Center, 41 Mall Road, Burlington, MA 01805, USA

\* Corresponding author.

E-mail address: [jessica.a.mandeville@lahey.org](mailto:jessica.a.mandeville@lahey.org)

Surg Clin N Am 96 (2016) 491–501

<http://dx.doi.org/10.1016/j.suc.2016.02.006>

[surgical.theclinics.com](http://www.surgical.theclinics.com)

0039-6109/16/\$ – see front matter © 2016 Elsevier Inc. All rights reserved.

**ETIOLOGY AND EPIDEMIOLOGY OF BENIGN PROSTATIC HYPERPLASIA AND LOWER URINARY TRACT SYMPTOMS**

BPH is a histologic diagnosis characterized by enlargement of the prostate gland from a nonmalignant proliferation of glandular and stromal elements in the transition zone of the prostate.<sup>1</sup> Development of BPH in males is an age-related process. Histologic evidence of BPH is identified in approximately 10% of men in their 30s, in 50% to 60% of men in their 60s, and in up to 90% of men in their 70s and 80s.<sup>1,2</sup>

BPH may be entirely asymptomatic or associated with a wide variety of LUTS. The LUTS develop as a result of bladder outlet obstruction from the enlarged prostate. LUTS is separated into voiding-related symptoms or storage-related symptoms (Box 1).<sup>2,3</sup> Numerous self-completed, validated questionnaires exist for the assessment of LUTS related to BPH and the most commonly used tool is the International Prostate Symptoms Score. Symptoms are considered mild if the score is seven or less, moderate if the score is 8 to 19, and severe if the score is 20 to 35. The quality of life question response ranges from zero to six, with a score of zero indicating the patient is “delighted” with their symptoms and a score of six indicating the symptoms are “terrible.” Severity of symptoms is not well correlated with prostate size or patient age. However, the risk for developing urinary retention does increase with increasing symptom score and higher preoperative symptoms scores are associated with successful postoperative outcomes in patients undergoing surgery for BPH/LUTS.<sup>1,2</sup> The International Prostate Symptoms Score is also useful for assessing treatment success (medical or surgical).

**MANAGEMENT OF BENIGN PROSTATIC HYPERPLASIA AND LOWER URINARY TRACT SYMPTOMS**

A wide variety of treatments are available for the management of BPH/LUTS. The most commonly used initial measures are conservative (watchful waiting, behavioral modification, oral fluid management, or medical therapy with  $\alpha$ -blockers and/or 5 $\alpha$ -reductase inhibitors). However, these management options are outside of the scope of this review.

Surgical intervention is often necessary for patients with complications related to BPH including urinary retention, development of bladder calculi, recurrent urinary tract infections, recurrent prostatic bleeding, or impairment of renal function related to upper urinary tract obstruction. Additional indications for surgical intervention are severe symptoms, failure of medical therapy, intolerance of medical therapy, or patient preference to avoid medications.

Currently, urologic surgeons and their patients have a wide variety of surgical treatment options available for management of BPH/LUTS. These treatments include

**Box 1**  
**Lower urinary tract symptoms that may be associated with BPH**

Voiding symptoms

- Slowing urinary stream
- Hesitancy in initiating urinary stream
- Straining to initiate urinary stream
- Sensation of incomplete bladder emptying
- Postvoid dribbling of urine

Storage symptoms

- Increased daytime urinary frequency (>7 voids per day)
- Nocturia (waking to void at night)
- Urgency of urination
- Urgency-related incontinence of urine

Download English Version:

<https://daneshyari.com/en/article/4310608>

Download Persian Version:

<https://daneshyari.com/article/4310608>

[Daneshyari.com](https://daneshyari.com)