

Week 7 Written Transcript: Benign Prostatic Hyperplasia

Hello, I'll be discussing the management of Benign Prostatic Hyperplasia, commonly known as BPH, according to the 2021 guidelines provided by the American Urological Association, along with updates from the 2023 guideline amendment. This presentation will cover the disease background, applicability in primary care, key action statements, and a clinical application example.

BPH is a histologic diagnosis referring to the proliferation of smooth muscle and epithelial cells within the prostatic transition zone. This condition is a common cause of lower urinary tract symptoms, or LUTS, in older men, significantly impacting their quality of life.

BPH is a highly prevalent condition, especially among older men. The prostate typically begins to enlarge between the ages of 40 and 45. By the age of 60, the prostate size can increase by 60%, and by the age of 80, it can increase by as much as 80%. These statistics highlight the widespread nature of BPH in the aging male population.

The prostate gland consists of two main sections: the inner section, which produces secretions to keep the urethra moist, and the outer section, which contributes to seminal fluids. In Benign Prostatic Hyperplasia (BPH), the hyperplasia is primarily driven by the enzyme 5-alpha reductase, whose activity increases with age. This enzyme converts testosterone into dihydrotestosterone (DHT), leading to an accumulation of DHT in the prostate tissue. As a result,

the cells in the prostate live longer and multiply faster, causing glandular enlargement. This enlargement of the prostate compresses the urethra, leading to obstructive and irritative urinary symptoms characteristic of BPH.

Patients with BPH typically present with a range of urinary symptoms. Subjectively, they may report decreased force of stream, hesitancy, post-void dribbling, a sensation of incomplete bladder emptying, and urinary retention. Other symptoms include overflow or urge incontinence, nocturia, frequency, urgency, and dysuria. Objectively, a distended bladder or gross hematuria may be observed during the physical exam. A digital rectal exam, or DRE, is often performed, but it's important to note that the size of the prostate does not always correlate with the severity of symptoms. Some men with enlarged prostates may have no symptoms, while others with small prostates may experience significant obstructive and irritating symptoms.

Now, we will explore the applicability of the American Urological Association's guidelines for managing Benign Prostatic Hyperplasia (BPH) in the primary care setting. Primary care providers play a crucial role in the initial assessment and ongoing management of BPH, making these guidelines essential for ensuring evidence-based and effective patient care.

The American Urological Association updated its guidelines for the management of BPH in 2023, incorporating new evidence published between 2020 and 2022. These guidelines were developed by a team of experts led by Dr. Jaspreet Sandhu and colleagues, and they provide comprehensive recommendations for the diagnosis, management, and treatment of BPH, particularly in the primary care setting.

The AUA guidelines are vital in primary care for the initial assessment and management of BPH. Symptoms are often identified through a patient's medical history and physical exam,