Week 6 Discussion: Part 2

Benign Prostatic Hyperplasia (BPH)

According to the National Institute of Diabetes and Digestive and Kidney Diseases (n.d.) the prostate is a walnut-sized gland that encircles the urethra near the neck of the bladder. In BPH the prostate becomes enlarged but is not cancerous. This condition is unique to men, as the prostate's main job is to create fluid that contributes to semen and it has an important function in a man's fertility. As men age the prostate grows in two distinct phases. The first phase occurs in puberty when the gland doubles its size. The second phase, when BPH is most likely to occur, starts around the age of 25 and continues for most of a man's life. As the prostate becomes enlarged it compresses the urethra and results in the lower urinary tract symptoms associated with the condition. Symptoms can include bladder hypertrophy, a weakened bladder, incomplete bladder emptying, urethral narrowing, symptomatic urinary retention, pain with urination, trouble starting a stream, and dribbling urine.

Diagnostics

Many of the clues that would lead to including BPH on the list of differentials will come from the patient's subjective reports, their physical examination, evaluation of risk factors, and a thorough family history. Their subjective reports would include symptoms related to lower urinary tract dysfunction, typically evident by alterations in urination and urinary patterns. The physical exam can reveal an enlarged, smooth, semi-firm to firm prostate on digital rectal exam (DRE), tenderness on palpation to the bladder and/or lower abdomen, and potentially enlarged inguinal lymph nodes (Foo, 2019). Risk factors to consider when ruling in BPH in the differential include gender (male), age (over 40), family history, obesity, personal cardiac or diabetic medical history, erectile dysfunction, and lack of physical exercise. When taking the patient's medical history, a key clue is determining if there is a first-degree relative, such as a father or brother, who also has a diagnosis of BPH (NIDDK, n.d.). A helpful tool that can be used by clinicians is the International Prostate Symptom Score (IPSS). This consists of an eight-question screening tool that can be used to screen for, diagnose, track, and guide management in men who have BPH or prostate-related symptoms (Kellogg-Parsons et al., 2021).

After BPH is considered for the differential, the next step is to rule it out or make a diagnosis based on testing. Due to symptomology that could also indicate infection, the patient's work-up should begin with a urine analysis (UA) to rule out any type of urinary tract infection (UTI). In this patient's case the results of the UA would most likely be negative, as the causes of the symptoms stem from the size of the prostate rather than an infectious source. However, a positive UA does not necessarily rule out BPH, as urinary retention and urinary tract dysfunction can contribute to developing a UTI. Other causes of urinary symptoms should also be searched for in the UA. This would include finding proteinuria, glucosuria, and hematuria (Kellogg- Parsons et al., 2021). Blood work for diagnosing BPH should include a prostate specific antigen (PSA). This measures a protein produced by the prostate. Levels in men who have enlarged prostates are expected to be elevated. Results from this test are non-specific, as PSA can be elevated due to age, infection, inflammation, or prostate cancer, in addition to BPH. However,