Examining the Overuse of Cystoscopy in the Evaluation of Lower Urinary Tract Symptoms in Men with Benign Prostatic Hyperplasia: A Prospective Study

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Abstract: Introduction: Benign prostatic hyperplasia (BPH) is a common condition that affects men over the age of 50 and is characterized by an enlarged prostate gland that can cause lower urinary tract symptoms (LUTS). Uroflowmetry and cystoscopy are two commonly used diagnostic tests to evaluate LUTS and diagnose BPH. While both tests can be useful, there is a risk of overusing cystoscopy and underusing uroflowmetry in the evaluation of LUTS. The aim of this study was to compare the use of uroflowmetry and cystoscopy in a prospective cohort of 100 patients with suspected BPH or other urinary tract conditions and to assess the diagnostic yield of each test. Materials and Methods: This was a prospective study of 100 male patients over the age of 50 with suspected BPH or other urinary tract conditions who underwent uroflowmetry and cystoscopy for the evaluation of LUTS at a single tertiary care center. Inclusion criteria included male patients over the age of 50 with suspected BPH or other urinary tract conditions, while exclusion criteria included previous urethral or bladder surgery, active urinary tract infection, and significant comorbidities. The primary outcome of the study was the frequency of cystoscopy in the evaluation of LUTS, and the secondary outcome was the diagnostic yield of each test. Results: Of the 100 patients included in the study, 86 (86%) were diagnosed with BPH and 14 (14%) had other urinary tract conditions. The mean age of the study population was 67 years. Uroflowmetry was performed on all 100 patients, while cystoscopy was performed on 70 (70%) of the patients. The diagnostic yield of uroflowmetry was high, with a clear diagnosis made in 92 (92%) of the patients. The diagnostic yield of cystoscopy was also high, with a clear diagnosis made in 63 (90%) of the patients who underwent the procedure. There was no statistically significant difference in the diagnostic yield of uroflowmetry and cystoscopy (p = 0.20). Discussion: Our study found that uroflowmetry is an effective and well-tolerated diagnostic tool for evaluating LUTS and diagnosing BPH, with a high diagnostic yield and low risk of complications. Cystoscopy is also a useful diagnostic tool, but it is more invasive and carries a small risk of complications such as bleeding or urinary tract infection. Both tests had a high diagnostic yield, suggesting that either test can provide useful information in the evaluation of LUTS. However, the fact that 70% of the study population underwent cystoscopy raises concerns about the potential overuse of this test in the evaluation of LUTS. This is especially relevant given the focus on patient-centered care and the need to minimize unnecessary or invasive procedures. Our findings underscore the importance of considering the clinical context and using evidence-based guidelines. Conclusion: In this prospective study of 100 patients with suspected BPH or other urinary tract conditions, we found that uroflowmetry and cystoscopy were both valuable diagnostic tools for the evaluation of LUTS. However, the potential overuse of cystoscopy in this population warrants further investigation and highlights the need for careful consideration of the optimal use of diagnostic tests in the evaluation of LUTS and the diagnosis of BPH. Further research is needed to better understand the relative roles of uroflowmetry and cystoscopy in the diagnostic workup of patients with LUTS, and to develop evidence-based guidelines for their appropriate use.

Keywords: uroflowmetry, cystoscopy, LUTS, BPH

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