

Re: Clinical Significance of Peripheral Zone Thickness in Men with Lower Urinary Tract Symptoms/Benign Prostatic Hyperplasia

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Abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/25807886>

Editorial Comment: Having been in the benign prostatic hyperplasia (BPH) space for more years that I would like to admit, one of the most studied and least resolved issues is the holy grail of a surrogate proxy to accurately predict which men will have lower urinary tract symptoms (LUTS) secondary to BPH. The corollary would have the said proxy be predictive of therapeutic success. To that end, our group was one of the first to describe the transition zone index, or ratio between transition zone volume and total prostate volume, as highly correlated to LUTS. Other studies have had variable results.

In this series a variable of transrectal ultrasound is described, ie prostatic zone thickness (PZT). The premise is that as the BPH portion of the prostate, ie the transition zone, expands, the peripheral zone becomes relatively thinner.

In this large study of Korean men decreasing PZT was highly correlated with subjective end points, including LUTS and quality of life, and objective parameters, including uroflow and post-void residual volume. It is noteworthy that other groups have not verified the strength of this association. While the authors believe that this may be due to variability in ultrasound measurements and, more importantly, measurers, there may be another factor. In this group of men prostates were relatively small (mean 33.3 gm). It may be easier to accurately measure PZT in a smaller prostate or one in which there is no significant middle lobe component. Therefore, in other parts of the world, such as the United States, where prostate volumes are larger, the consistent and accurate measurement of PZT could be challenging. It appears that the basic premise our predecessors in urology taught us, that is prostate size matters, is the ultimate truth regardless of what proxies we use.

Steven A. Kaplan, MD

Suggested Reading

Kaplan SA, Te AE, Pressler LB et al: Transition zone index as a method of assessing benign prostatic hyperplasia: correlation with symptoms, urine flow and detrusor pressure. *J Urol* 1995; **154**: 1764.

Re: Finasteride, Not Tamsulosin, Increases Severity of Erectile Dysfunction and Decreases Testosterone Levels in Men with Benign Prostatic Hyperplasia

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Abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/26053014>

Editorial Comment: One of the concerns expressed by patients who opt for medications to treat lower urinary tract symptoms secondary to benign prostatic hyperplasia (BPH) is the potential for sexual side effects. Given that the 2 most common classes of agents prescribed for BPH, ie alpha-adrenergic receptor inhibitors and 5 α -reductase inhibitors, have sexual adverse events associated with their use, these concerns are appropriate.

In this retrospective registry study 470 men 47 to 68 years old were treated with finasteride and 230 men 52 to 72 years old were treated with tamsulosin. Sexual function was ascertained via the erectile function domain of the International Index of Erectile Function and measurement of serum

testosterone. The authors concluded that finasteride therapy resulted in a decrease in International Index of Erectile Function score (6 to 8 points) and serum testosterone during the course of 45 months, while both measures remained stable in the tamsulosin group.

Some of the data are a bit confusing. In this cohort of 700 men with a baseline International Prostate Symptom Score of only 9 more than twice as many men received finasteride compared to tamsulosin monotherapy and remained on the drug for 45 months. In addition, why were men who reported bothersome sexual side effects continued on their medication? The authors contend that other studies suggest that continuation of a 5 α -reductase inhibitor in the face of sexual adverse events will somehow resolve the issue. I think most of us in clinical practice would have suggested cessation of finasteride (or tamsulosin). Of further interest is why the authors did not evaluate ejaculatory function in either group. The bottom line is that a detailed conversation, including the risks and benefits, must take place with our patients before we prescribe any medication for BPH. Moreover, it is reasonable to expect that in the age group we treat changes in sexual function will occur regardless of what medication is prescribed.

Steven A. Kaplan, MD

Suggested Reading

Fwu CW, Eggers PW, Kirkali Z et al: Change in sexual function in men with lower urinary tract symptoms/benign prostatic hyperplasia associated with long-term treatment with doxazosin, finasteride and combined therapy. *J Urol* 2014; **191**: 1828.

Laparoscopy/New Technology

Re: Aquablation—Image-Guided Robot-Assisted Waterjet Ablation of the Prostate: Initial Clinical Experience

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Abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/26477826>

Editorial Comment: High pressure water-jet technology has been used to divide and ablate tissue in a variety of applications. The authors report the initial results with this technology to ablate benign prostate tissue via an automated robotic platform that uses transrectal ultrasound treatment planning and guidance. The result is a cavity analogous to that created with transurethral resection. Treatment times are incredibly brief (mean 8 minutes), and after “aquablation” the prostate cavity is cauterized for hemostasis as needed. Results for the first 15 patients (mean prostate volume 54 gm) were impressive, with the mean International Prostate Symptom Score decreasing from 23 to 8.6 and maximum flow rates increasing from 8.6 to 18.6 cc per second at 6 months. No complications were reported. The promise of this heat-free, conformal and automated prostate ablation/resection technology could significantly alter clinical practice.

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