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## EDITORIAL COMMENT

**Re: Trends and attitudes in surgical management of benign prostatic hyperplasia – pages 6170-6175.**

Benign prostatic hyperplasia (BPH) is one of the most common male urological disorders with management constantly evolving. Evidence-based guidelines on BPH and lower urinary tract symptoms (LUTS) have been developed to assist the practicing urologist with the decision making of selecting a particular procedure in order to provide the highest standard of care to their patients. Surgical management is recommended both by AUA and European guidelines for men in which BPH is causing renal insufficiency, recurrent urinary tract infections, bladder stones or gross hematuria.<sup>1,2</sup> In addition, surgery can also be considered for patients with moderate to severe LUTS refractory to medical treatment or who are significantly bothered by these symptoms. Traditionally, open prostatectomy and transurethral resection of the prostate (TURP), initially reported in 1951 and 1935, respectively, have continued to remain the surgical standard BPH procedures.<sup>3,4</sup> Holmium laser enucleation of the prostate (HoLEP), holmium laser ablation of the prostate (HoLAP), and photoselective vaporization (PVP) have all, but only recently been considered effective treatment alternatives.<sup>1,2</sup> In addition, EAU guidelines acknowledge that because there is increasing evidence that intraoperative safety is greater with Greenlight PVP and HoLEP compared with monopolar TURP, these novel approaches should be considered, particularly in men receiving anticoagulant medication or with a high cardiovascular risk.<sup>2</sup> Ultimately, the treatment choice is left to the surgeon who makes a decision based on the patient's presentation, anatomy, level of training and experience with the available technique.

Nevertheless, it seems the increasing number of techniques available has been paralleled with an increasing range of personal opinions and preference when choosing the best treatment in patients with BPH. It is known that a wide variation exists in the evaluation and treatment of BPH patients across the United States.<sup>5</sup> Therefore, it is reasonable to wonder what are the other factors that may influence the choice of procedure utilization.

The current paper by Lee et al attempts to capture the current trend of procedures used in the United States and whether factors such as age, location, type of practice or experience has an impact on the urologist for choosing or rejecting a particular surgical procedure. The authors present here their results of a 90-item on-line survey distributed to over 5500 American urologists.

Among the 600 respondents, which unfortunately represents only 11% of the target population, open prostatectomy and monopolar TURP continue to be utilized by 78% and 73% of the respondent urologists, respectively. Interestingly, the most popular, current minimally invasive therapy was photoselective vaporization that was utilized by 58% of the urologists. Button plasmavaporization, bipolar TURP and holmium laser ablation of the prostate (HoLAP) were reported by approximately 20% of the respondents, while holmium laser enucleation of prostate (HoLEP) was only used by 8%. No significant differences were observed between full time academic and non-academic settings in the types of procedures performed except for robotic prostatectomy reflecting the availabilities of the novel non-invasive technology.

Interestingly, age and year of residency completion had no influence on the choice of technique. The overall frequency of BPH surgery was relatively low with over half of respondents completing less than 50 procedures per year (roughly 4/month), while only 22% performed more than 75 procedures per year. Not surprisingly, higher volume was associated with a higher skilled procedure such as HoLEP.

According to the survey, the dominant reason for selecting a BPH procedure was good clinical outcomes and patient safety. The authors also observed that a technique was chosen based on supporting published data in only 26% of the cases while it was rejected based on insufficient published data in only 5% of the cases. This suggests that good clinical outcomes and safety is mainly assessed based on the surgeon's own clinical experience rather than evidence-based published data.

Unfortunately, this study represents a small percentage of nationwide practice and may suffer a severe selection bias, compromising external validity and forbidding definitive conclusion. Therefore, it remains difficult to draw significant inferences. In order to determine the current surgical choice favored by urologists, a larger study is needed. The authors acknowledge this limitation but hope that this survey, rather than trying to change our current practice, may encourage a personal reflection on how we choose a particular technique and whether we are aware of the potential bias influencing our choice.

Another limitation is the lack of temporal trend to see BPH practice changes over time. Nevertheless, despite the minimally invasive nature being reported as important criteria for choosing a technique by the majority of the respondents, only less than a quarter appears to be using holmium laser technology. Also, only less than 10% of respondents mentioned being interested in learning another procedure except for bipolar TURP, for which 42% replied being very interested which suggests the possibility of bipolar TURP becoming more prevalent in the future.

With the diversified armamentarium, the urologist remains in a good position to individualize the surgical treatment for their BPH patients. Ultimately, improving adherence to current scientific literature may reduce personal bias and improve BPH care quality.

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## References

1. McVary K, Roehrborn CG, Avins AL et al. Update on AUA guideline on the management of benign prostatic hyperplasia. *J Urol* 2011; 185(5):1793-1803.
2. Oelke M, Bachmann A, Descazeaud A et al. European Association of Urology Guidelines on non-neurogenic treatment of male LUTS, European Association of Urology update March 2011 available at <http://www.uroweb.org>.
3. Sewart BL Transurethral, perineal, and retropubic prostatectomy; an analysis of 300 operations performed for the correction of benign prostatic hypertrophy. *Urol Cutaneous Rev* 1951;55(5):282-290.
4. Walker KM. Transurethral resection of the prostate. *Br Med J* 1937;1;1(3982):901-903.
5. Stroppe SA, Elliott SP, Saigal CS et al. Urologists compliance with AUA best practice guidelines for benign prostatic hyperplasia in Medicare population. *Urology* 2011;78(1):3-9.