INTRODUCTION

Techniques and innovative technologies for the treatment of BPH

The surgical management of benign prostatic hyperplasia (BPH) has changed in the past 5 years and the recently updated American Urological Association (AUA) guidelines reflect these changes. Historically, transurethral resection of the prostate (TURP) was the endoscopic treatment of choice for under 80 grams. Open prostatectomy was considered the procedure of choice for larger prostate glands (> 80 grams).

Newer techniques and innovative technologies have changed the strategies utilized by physicians for the procedure-oriented management of BPH. The updated AUA guidelines for BPH state laser enucleation procedures of the prostate, either with holmium or thulium, is the endoscopic treatment of choice for BPH, independent of prostate size. Holmium laser enucleation of the prostate (HoLEP) was the first described technique for endoscopic enucleation of the prostate. HoLEP has been extensively studied in randomized prospective trials comparing HoLEP to TURP or open prostatectomy. HoLEP has proven to be superior to TURP and open prostatectomy and this technique is utilized by many physicians throughout the world and is considered by many the "gold standard" for the surgical management of BPH. The photoselective vaporization of the prostate or PVP can be used for patients with prostates between 30-80 grams and shows significant benefit in patients who are on anticoagulation therapy. New technologies such as urethral lift procedures (Urolift) or steam therapy procedures (Rezūm) have been incorporated into the AUA BPH guidelines for patients desiring office based technology with preservation of antegrade ejaculation and with minimal sexual side effects with these procedures. Lastly, the newest technology, robot assisted water jet system called Aquablation of the prostate, may prove to be an important technique to treat patients with symptomatic BPH. Aquablation has also been recently incorporated to the updated AUA guidelines BPH for patients in patients with prostate sizes between 30 g to 80 g.

These newer technologies and innovative techniques was the impetus for the topic selection for the 2nd annual Jefferson urology symposium, **Emerging Technologies for the Treatment of BPH**. These five technologies/techniques have been summarized with the data presented at this meeting. We hope that you find this information helpful and useful as a quick reference guide to incorporate these new technologies and techniques into your practice.

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