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## EDITORIAL COMMENT



While the armamentarium available to urologists for managing bladder outlet obstruction due to benign prostatic hyperplasia (BPH) continues to grow, this meta-analysis of 11 randomized controlled trials (RCTs) again demonstrates the

excellent outcomes of holmium laser enucleation of the prostate (HoLEP), a procedure established more than 20 years ago. The authors present objective and subjective data demonstrating superior or equivalent perioperative and postoperative outcomes with HoLEP compared to the “gold standard” transurethral resection of prostate (TURP) for prostates <100 g in almost all categories that were evaluated, including decreased blood loss and transfusion rates. Indeed, the authors were unable to assess for differences among patients on anticoagulation as this is typically considered a contraindication for TURP, but not HoLEP.<sup>1</sup>

Some are concerned that men undergoing HoLEP are at a higher risk of postoperative incontinence, possibly related to superior rates of apical tissue removal. However, in this study, no difference was found between TURP and HoLEP with respect to rates of transient or persistent incontinence. In addition, while sexual side effects were not evaluated in this meta-analysis, a prior review suggested that HoLEP may have a proerectile effect,<sup>2</sup> though retrograde ejaculation is a well-established side effect. One area in which TURP was found to be superior in this study was operative time, and this may be related to variability in surgeon experience and the steep learning curve of HoLEP, a concept that has been previously documented.<sup>3</sup>

As the authors noted, 2 of the great benefits of HoLEP, ability to treat very large prostates and long-term efficacy, could not be compared to TURP in the present analysis due to a lack of data and should be assessed in future RCTs. While less than half the RTCs utilized in this study included follow-up  $\geq 24$  months, others have published outcomes up to 18 years after HoLEP, consistently showing low reoperation rates for BPH regrowth (<1%-1.5%<sup>4,5</sup> vs  $\geq 9\%$  with TURP<sup>4,6</sup>). Regarding prostate size, HoLEP is a size-independent option per the AUA and recommended specifically for prostates >80 g by the EAU.

Despite the overwhelming evidence supporting use of HoLEP for BPH, HoLEP only accounted for an estimated 5% of all outlet procedures in the United States as recently as 2015,<sup>7</sup> with the majority being performed at a small number of centers. A lack of equipment, a steep learning curve, and limited training opportunities are typically cited as the reasons for why HoLEP is not more widely disseminated in the United States. However, the majority of urology practices use a holmium laser for stone treatment, and it has been demonstrated that HoLEP can be successfully performed with a standard 30W laser.<sup>8</sup> Furthermore, HoLEP may be a more cost-effective option compared to some outlet procedures.<sup>9</sup> With respect to the learning curve, multiple groups are working toward improving HoLEP training through

simulation and mentoring.<sup>10</sup> The findings of the current study support these ongoing efforts to increase HoLEP access to more patients with symptomatic BPH.

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