



# It's Time to Take Advantage of Robotic Assisted Simple Prostatectomy in Large Benign Prostatic Hyperplasia

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The surgical management of large benign prostatic hyperplasia (BPH) remains a challenge. Surgical methods have evolved over the last three decades from the traditional open simple prostatectomy, to transurethral techniques including transurethral resection of the prostate, holmium laser enucleation of the prostate (HoLEP), and other vaporization methods, as well as laparoscopic simple prostatectomy, or robotic assisted simple prostatectomy (RASP). The recent report by Umari et al [1] is indeed interesting, and it may be helpful to choose a proper surgical procedure for large BPH. This article is one of scarce studies which compared treatment outcomes between RASP and HoLEP in patients with large-sized BPH. In this study, a total of 81 patients underwent RASP, and 45 underwent HoLEP during 7-years period [1]. Both groups demonstrated comparable post-operative improvements in urodynamic parameters and subjective symptom scores. Perioperative outcomes including operation time, risks for transfusion were similar in both groups.

HoLEP is a minimally invasive procedure for lower urinary tract symptoms suggestive of BPH [2]. Moreover, HoLEP has been shown to be associated with a higher enucleated tissue weight per enucleation time in large prostates, and theoretically to be a size-independent procedure [3]. However, HoLEP in extremely large prostate is challenging procedures, even after the surgeon has overcome the learning curve [4,5]. Technical challenges including bleeding risk, complex surgical plane, disturbance of surgical field, and difficulties in manipulating the resectoscope, are frequently encountered during the HoLEP of large prostates [4,5]. Moreover, HoLEP does carry a risk of postoperative complications, including urethral stricture, incontinence. The incidence of urethral stricture and late iatrogenic stress incontinence after HoLEP has been reported as 1.2% to 7.3% and 0% to 2.4%, respectively [3]. In real-life practice, the true complication rates might be greater than that of previous reports, based on how and when the diagnosis is made. The majority of those complica-

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tions after HoLEP are likely due to the use of a larger diameter scope for morcellation, or its retrograde access for adenoma dissection which is adjacent to the internal sphincter. The risks for such complications following HoLEP might be prostate size dependent.

In this respect, we believe that there might be a domain for RSAP to intervene in the surgical treatment for large BPH. Most importantly, in RSAP, fine anterograde dissection of the prostatic adenoma *via* high definition vision system and tiny wristed instrument of robot, which mimics the finger dissection of open simple prostatectomy, enables to lessen the risks for the complications including urethral stricture or incontinence. Considering those potential benefits by the RASP procedure, we believe that the adoption of this procedure in large BPH is reasonable. And our study group is now establishing a prospective multicenter RASP cohort to investigate our hypothesis in the future, and we are always welcome our collaborators.

### Disclosure

The authors have no potential conflicts of interest to disclose.

### Author Contribution

Research conception & design: all authors. Drafting of the

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