

## EDITORIAL



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## Editorial comment on “Reevaluating ‘Top-Down’ HoLEP: the case for anterior fibromuscular stroma as a surgical landmark”

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The scientific community greatly benefits from diverse perspectives and vigorous discussions. In their article titled “Reevaluating ‘Top-Down’ HoLEP: the case for anterior fibromuscular stroma as a surgical landmark,” Lin and Juang demonstrate the essence of scientific inquiry and the significance of collaborative discourse.

While stress urinary incontinence (SUI) can be bothersome, it is typically transient. The incidence of SUI is influenced by multiple factors, including the patient’s age, prostate size, and the surgeon’s learning curve. Recent data has been accumulating to enhance our understanding of the anatomy of the external sphincter and attempts to preserve sphincteric mucosa by cutting between 1 and 11 o’clock [1].

Furthermore, a crucial factor to decrease the incidence of SUI is the timing of separating the adenoma from the external sphincter. Whether the surgeon starts true enucleation from the top-down or follows the traditional approach is less significant. What ultimately matters is the surgeon’s attempt to separate the mucosal strip earlier.

I’m perplexed by Lin and Juang’s assertions that our 2019 study [2] did not report on postoperative SUI and their interpretation of our current findings [3] as indicating that the top-down technique does not aid in reducing postoperative SUI.

Our study “Top-down Holmium Laser Enucleation of the Prostate: Technical Aspects and Early Outcomes” reports a 3.3% incidence of SUI at 3 months postoperative. Moreover, our 2023 randomized controlled trial (RCT) [3] revealed that 6% of patients in the top-down HoLEP group experienced SUI at 1 month postoperative. At the 3-month follow-up, SUI was observed in only one patient (2.2%) in the top-down HoLEP group. However, none of the participants exhibited persistent SUI from 3 months postoperative onwards until their last follow-up visit.

This contrasts with the findings of Lin et al., where they attempted to preserve the anterior fibromuscular stroma (AFS) [4]. They reported that 14 patients (23.33%) experienced stress/urge urinary incontinence that resolved within 3 months. This relatively high percentage does not provide substantial support for any suggested benefit of AFS-preserved endoscopic enucleation of the prostate in relation to transient SUI during the initial 3 month period.

As mentioned in our paper [3], the predictors of transient SUI following HoLEP are multifactorial and can be associated with either the patient or the HoLEP procedure. One of the most critical factors is prostate size. To ensure a fair comparison, it is important to note that the median prostate size in our cohort was

significantly larger than that reported by Lin and colleagues [4], at 102 cc (80–213 cc) compared to 40.61 cc (32.53–56.36 cc).

In another study conducted by Fujisaki and colleagues [5], the median prostate volume was 60.0 ml (14.6–263 ml), which is considerably smaller than our cohort. In that study, the incidence of stress incontinence immediately after catheter removal following surgery was 4.1%.

Rucker et al. found that the overall rate of SUI within 3 months after surgery was 4.8%. More specifically, the rates of SUI were 5% for the en-bloc technique, 4% for the two-lobe technique, and 5.5% for the three-lobe technique. However, the enucleation technique was not found to be significantly associated with either outcome [6].

Furthermore, attempting to make precise incisions between the AFS and the transitional zone involves a significant degree of guesswork and may inadvertently result in cutting through the adenoma, particularly in larger-sized glands (>40 g). It is my opinion that labeling AFS-preserved endoscopic enucleation of the prostate as a “precision anatomical approach” does not reflect the complexity of the procedure. Also, there’s a risk of leaving residual tissues behind. Therefore, a more fitting description of AFS-preserved endoscopic enucleation of the prostate might be as a mega-resection rather than a true anatomical enucleation.

In addition, the overall 10% urethral stricture rate in Lin et al.’s study could indicate some difficulties encountered during the manipulation of attempting to get the beak of the scope into the adenoma.

I didn’t fully understand Lin’s comment, which suggests that the AFS plays a role in initiating urination and injury to this muscle unit could lead to prolonged incontinence due to spasms.

Standardizing AFS-preserved endoscopic enucleation of the prostate could prove challenging, given the subjectivity involved in determining where to initiate the incision between the AFS and the transitional zone. The early apical release is a valuable addition and can be incorporated into any HoLEP technique, regardless of the direction of enucleation. It’s time to focus our efforts on minimizing the steep learning curve and promoting the broader adoption of anatomical endoscopic enucleation of the prostate.

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#### **AUTHOR CONTRIBUTIONS**

All contributions were from the single author.

#### **COMPETING INTERESTS**

The author declares no competing interests.