

The Butterfly: A Novel Minimally Invasive Transurethral Retraction Device for Benign Hypertrophy of the Prostate

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Dear Editor,

We read with interest the recently published feasibility study of Katz et al. [1] reporting the use of a novel prostatic retraction device named “*The Butterfly*.” The general principle of minimally invasive surgical treatments is to yield a superior improvement in urinary symptoms than is possible with medical treatments while still preserving sexual function and maintaining a lower morbidity profile compared to surgeries such as transurethral resection of the prostate [2]. While we certainly commend the authors for successfully performing a prospective study on a new device and completing 12 months follow-up, there are parts of this research that warrant discussion, namely, these include the high rates of both study drop-out (19/63 successfully implanted devices) and the complications reported. Furthermore, the results of the functional outcomes were suboptimal.

Firstly, it is worth mentioning that cumulative urinary retention is nearly 2-fold higher when compared to the UroLift procedure with a rate of 9% [2]. It also seems concerning that 4 cases required a suprapubic catheter insertion (6.3%) to treat retention and while others required a small gauge (10Fr) catheter to relieve acute obstruction. This could create an array of practical problems if the patient presents acutely to another hospital who are unfamiliar with the device and the need for a smaller gauge catheter. While suprapubic catheterisation offers an effective temporary solution, it is itself not free from a morbidity profile.

Reported flowrates post treatment still show a clearly obstructive flow ($Q_{max} = 10.5$ mL/s) and are less efficacious when compared to other available minimally invasive implantable devices such as *UroLift* and *iTind* [2–4]. It is unclear if prostate size had been a factor in outcomes as the included range of prostate sizes (30–110 mL) was very wide and the current permitted prostate size for undergoing a prostatic urethral lift (*UroLift*) is defined as <70–80 mL in current international guidelines [5].

In summary, the study outcomes are perhaps skewed due to the learning curve as evident by procedure time alone (upper range of 50 min). This could be the contributing factor to the complication rates. Therefore, while we applaud the authors for researching novel BPH solutions, this device seems far behind its counterparts.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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Author Contributions

Sabine Uguzova, Christian Beisland, and Patrick Juliebø-Jones: critical article review, manuscript writing, and editing.

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