#### Moses B Mode for HoLEP: Transforming Enucleation into a Day Case

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## **Disclosures**

AE Krambeck: Boston Scientific and Lumenis CU Nottingham: None

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T Large: None





#### Holmium Laser Enucleation of the Prostate (HoLEP)





## **Clot Retention/Return to OR**



- Return to OR 0-6%<sup>1</sup>
- Clot retention 0-3.6%<sup>1</sup>
- Transfusion 0-2%<sup>2</sup>
  - **8.4%** in anticoagulated patients<sup>4</sup>
- Risk factor is incomplete resection<sup>3</sup>
  - Sinuses unlikely to coapt with residual tissue 
    bleeding

- 1. Shah H, et al BJU Int 2007; 100: 94
- 2. Vincent M World J Urol 2015; 33: 487
- 3. Kuo RL, et al. Urology 2003; 72: 59
- 4. Elzayat E, et al. J Urol 2006; 175: 1428

## Distance vs. Energy

The MOSES Technology results in up to double energy transmission per each working distance, eliminating the need to be in full contact with the target





Elhilali M., Badaan S., Ibrahim A., Andonian S. Journal of Endourology (June, 2017)

# **Optimized MOSES for HoLEP**

Novel modification of MOSES technology has been developed and optimized specifically for treatment of benign prostate hyperplasia

550 micrometer diameter fiber

No contact or distance mode



# **Study Objectives**

To describe perioperative and postoperative outcomes of patients undergoing HoLEP with the optimized MOSES technology

To compare this group of patients to a historical group of patients who underwent HoLEP using standard holmium:YAG technology



## Methods

Retrospectively collected data on patients undergoing HoLEP using the optimized MOSES technology.

Preoperative and postoperative symptom scores, urine flow metrics, and post-void residual

Perioperative outcomes

Compared to a group of 50 patients who previously underwent HoLEP using standard holmium:YAG technology with a 550 micrometer laser fiber



	Standard 550 µm Fiber (n=50)	New, Optimized Moses 550 µm Fiber (n=62)	P-value
Mean (SD) Age in Years	71 (8.8)	72 (8.3)	0.732
Mean (SD) BMI	28.0 (5.4)	28.2 (5.1)	0.669
Concomitant Cystolitholapaxy, n (%)	5 (10.0)	8 (12.9)	0.633 0.77
Total Enucleation Time in Minutes	47 (18)	46 (19)	0.729
Laser Cutting Time in Minutes	23 (7)	24 (10)	0.395
Laser Hemostasis Time in Minutes	11 (6)	8 (6)	0.035
Morcellation Time in Minutes	12 (11)	10 (10)	0.561
Mean (SD) Total Energy Used in kJ	96.0 (39.7)	110.4 (47.7)	0.083
Enucleated Prostate Weight in Grams	72 (50)	77 (61)	0.640
Discharged Same Day, n (%)	0	43 (69.4)	<0.001
Required Repeat Catheterization after Failed Trial of Void	3 (6.0)	2 (3.2)	0.655
			HEALTH 9

## **Moses B Mode**

Modification of Moses Technology Pushes the bubble away from the laser tip **More efficient Energy delivery** Less fiber break back More fiber stability Better hemostasis





#### Insert Moses B mode video of bubble





## Moses B Mode HoLEP

- 77 year old male
- 200 gram prostate on Ultrasound
- Chronic indwelling catheter
- Actively taking ASA 81 mg for cardiac disease



## Insert case video



## Postop

- 160 grams enucleated
- Discharged home 2 hours postop
- Catheter removal next day in clinic
- Fiber breakback with Moses B mode was 6.9 cm to 6.7 cm
- Fiber breakback with only 1 lobe enucleation with Standard Moses was 6.7 cm to 6.5 cm



## CONCLUSIONS

- Moses B mode for HoLEP results in excellent hemostasis without compromising visibility or plane dissection
- Furthermore, there is minimal fiber movement and break back improving overall efficiency of the procedure



