

Vapoenucleation of the Prostate Using 180 W GreenLight Laser



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INTRODUCTION The vapoenucleation of the prostate using green laser is an alternative hybrid technique between vaporization and enucleation. It consists of vaporizing the lateral lobes and enucleating the median lobe.

The advantages compared with photoselective vaporization of the prostate (PVP) are: a fairly fast operation, low reoperation rates, it is suitable for large glands and provides pathology specimen.

The aim of this video is to demonstrate the vapoenucleation technique step-by-step.

METHODS The surgery was performed with a 532-nm lithium triborate laser (GreenLight XPS 180W, American Medical Systems, Minnetonka, Minnesota), MoXy side-fire laser fiber at power settings: 180 W for cutting, 35 W for coagulation and a Piranha morcellation system (Richard Wolf GmbH, Germany).

CASE REPORT A 68-year-old patient presented with lower urinary tract symptoms secondary to benign prostatic obstruction. The prostate volume was 88 mL, PSA of 3.4 ng/mL, the peak urinary flow rate (Q_{max}) was 7 mL/s, the postvoid residual volumen was 160 mL and international prostate symptom score was 22.

RESULTS The total operative time was 72 minutes, total energy employed was 354 kJ and the pathology report showed no evidence of prostate cancer (35 g).

The bladder catheter was removed at 24 hours postsurgery and the patient was discharged 48 hours postoperative without complications.

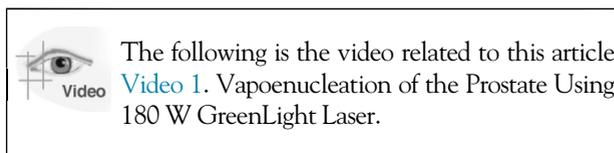
Three months later all the parameters showed significant improvement (PSA: 1.02 ng/mL, international prostate symptom score: 4, Q_{max} : 43 mL/seg and postvoid residual volumen: 15 mL). Green laser vapoenucleation of the prostate represents a safe alternative technique for the complete removal of adenomatous prostate tissue, regardless of gland size, and it is particularly advantageous for the treatment of large prostates.

CONCLUSION This technique can also be used as an intermediate step during the learning curve of "en bloc" green laser enucleation of the prostate (GreenLEP).

These promising results warrant further studies to assess long-term outcomes. UROLOGY 124: 308, 2019. © 2018 Elsevier Inc.

KEYWORDS Vapoenucleation, Green light laser, Benign prostatic hyperplasia, Laser prostatectomy

The video related to this article can be found online at: [doi:10.1016/j.urology.2018.10.031](https://doi.org/10.1016/j.urology.2018.10.031).



Conflict of interest: None.

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