

A Clinical Trial Comparing BiVap (Richard Wolf®) Saline Vaporization of The Prostate vs. Twister™ Diode Laser System in The Treatment of Benign Prostatic Obstruction Between Prostate Volume 90 to 150 ml.

Ayhan Karaköse¹ and Yasin Yitgin¹

¹Istinye University

February 27, 2021

Abstract

Introduction:To evaluate the efficacy, safety and postoperative outcomes of the BiVap saline vaporization and Twister Diode Laser systems with benign prostatic obstruction (BPO) in prostate volüm between 90-150 ml. **Methods:**In total, we included 131 patients treated with BiVap system (n=68) and Twister system (n=63). Postoperative complications including urinary tract infection, transient hematuria, severe dysuria and fever >38° C, urinary incontinence and urethral stricture were also noted. All patients were evaluated at the postoperative 1st, 3rd, 6th and 12th month and preoperative and postoperative values of IPSS score, QoL score, total PSA, IIEF 15, PVR, Qmax and Qave were compared. Statistical analyses were performed with SPSS version 18. A P-value<0.05 was considered significant. **Results:**Preoperative demographic characteristics were similar in the 2 groups. There was observed significant improvement for IPSS, Qmax, Qave, PVR, and QoL score by the postoperative first month compared to the preoperative values in both groups. Maximum improvement in the IPSS, Qmax, Qave, QoL score and PVR were achieved at postoperative 6, 3, 12, 3 and 12th months respectively in group 1. In group 2 maximum improvement in the IPSS, Qmax, Qave, QoL score and PVR were achieved at postoperative 6, 3, 6, 6 and 12th months, respectively. There was no significant difference between the two groups in terms of IPSS, Qmax, Qave, QoL score, PSA, PVR, IIEF-EF and IIEF-OS during the 1 year follow-up period postoperatively. **Conclusions:**BiVap and Twister systems are safe, effective, and useful technique, which can be used in the surgical treatment of BPO between 90-150ml.

A Clinical Trial Comparing BiVap (Richard Wolf®) Saline Vaporization of The Prostate vs. Twister™ Diode Laser System in The Treatment of Benign Prostatic Obstruction Between Prostate Volume 90 to 150 ml.

Ayhan Karakose¹, Yasin Yitgin¹

¹ *Istinye Universtiy Faculty of Medicine, Depatment of Urology, Esenyurt/Istanbul, Turkey*

Keywords : Vaporization; Prostatic obstruction; BiVap; Twister

Ayhan Karakose, Prof. Dr.

Phone: +90 212 9794000/4458

Adress: Istinye Universtiy Faculty of Medicine, Depatment of Urology, Esenyurt/Istanbul, Turkey

e-mail: ayhan.karakose@isu.edu.tr

Facsimile Number: +90 212 481 36 88

Yasin Yitgin, M.D. (Corresponding author)

Phone: +90 212 9794000/1009

Adress: Istinye Universtiy Faculty of Medicine, Depatment of Urology, Esenyurt/Istanbul, Turkey

e-mail: yasinyitgin@hotmail.com

Facsimile Number: +90 212 481 36 88

Corresponding author: Yasin Yitgin

Competing interests: None

Hosted file

manuscript.pdf available at <https://authorea.com/users/398521/articles/511114-a-clinical-trial-comparing-bivap-richard-wolf-saline-vaporization-of-the-prostate-vs-twistertm-diode-laser-system-in-the-treatment-of-benign-prostatic-obstruction-between-prostate-volume-90-to-150-ml>

Hosted file

Table 1.pdf available at <https://authorea.com/users/398521/articles/511114-a-clinical-trial-comparing-bivap-richard-wolf-saline-vaporization-of-the-prostate-vs-twistertm-diode-laser-system-in-the-treatment-of-benign-prostatic-obstruction-between-prostate-volume-90-to-150-ml>

Hosted file

Table 2.pdf available at <https://authorea.com/users/398521/articles/511114-a-clinical-trial-comparing-bivap-richard-wolf-saline-vaporization-of-the-prostate-vs-twistertm-diode-laser-system-in-the-treatment-of-benign-prostatic-obstruction-between-prostate-volume-90-to-150-ml>

Hosted file

Table 3.pdf available at <https://authorea.com/users/398521/articles/511114-a-clinical-trial-comparing-bivap-richard-wolf-saline-vaporization-of-the-prostate-vs-twistertm-diode-laser-system-in-the-treatment-of-benign-prostatic-obstruction-between-prostate-volume-90-to-150-ml>

Hosted file

Figure 1.pdf available at <https://authorea.com/users/398521/articles/511114-a-clinical-trial-comparing-bivap-richard-wolf-saline-vaporization-of-the-prostate-vs-twistertm-diode-laser-system-in-the-treatment-of-benign-prostatic-obstruction-between-prostate-volume-90-to-150-ml>