

Bölüm 11

DIODE LAZER PROSTATEKTOMİ

YAZAR: Kazım YELSEL

1. Giriş
2. Diod Lazer prostatektomi etkinlik ve güvenliği
3. Kaynaklar

olmadı, bu teknik hakkında herhangi bir sonuç çıkarılamaz. Prostatın lazerle enükleasyonu daha umut verici görünmektedir, çünkü adenomektomiyi taklit eder, ancak kullanılan dalga boyalarının çeşitliliği şu anda karşılaştırmayı güçlendirmektedir.

EUA 2019 klavuzu, TURP'a benzer bir alternatif olarak, orta-şiddetli AÜSS'li erkeklerde prostatın 120 Watt 980 nm diode lazerle vaporizasyonunu "Zayıf" kanıt düzeyi ile önermektedir. Orta-şiddetli AÜSS'i olan erkeklerde, TURP veya bipolar enükleasyonun karşılaştırılabilir bir alternatif olarak prostatın 120 Watt 980 nm veya 1,318 nm diode lazerle enükleasyonunu "Zayıf" kanıt düzeyi ile önermektedir.

Kaynaklar

- Leonardi R (2009) Preliminary results on selective light vaporization with the side-firing 980 nm diode laser in benign prostatic hyperplasia: an ejaculation sparing technique. *Prostate Cancer Prostatic Dis* 12(3):277–280.
- Zhao Y, Liu C, Zhou G, Yu C, Zhang Y, Ouyang Y (2013) A retrospective evaluation of benign prostatic hyperplasia treatment by transurethral vaporization using a 1470 nm laser. *Photomed Laser Surg* 31(12):626–629.
- Gunnar Wendt-Nordahl, Stephanie Huckele, Patrick Honeck, et al. 980-nm Diode Laser: A Novel Laser Technology for Vaporization of the Prostate. *Eur Urol* 2007; Dec;52(6):1723–8.
- Ruszat R, Seitz M, Wyler SF, et al. Prospective single centre comparison of 120-W diode-pumped solid-state high intensity system laser vaporization of the prostate and 200-W highintensive diode-laser ablation of the prostate for treating benign prostatic hyperplasia. *BJU Int* 2009;104:820-5.
- P.H.Chiang C.H.Chen C.H.Kang Y.C.Chuang GreenLight HPS laser 120-W versus diode laser 200-W vaporization of the prostate: comparative clinical experience. *Lasers Surg Med*, 42 2010 s.624-629.
- Gunnar Wendt-Nordahl, Stephanie Huckele, Patrick Honeck, et al. 980-nm Diode Laser: A Novel Laser Technology for Vaporization of the Prostate. *Eur Urol* 2007; Dec;52(6):1723–8. Pubmed:17611013.
- Ruszat R, Seitz M, Wyler SF, et al. Prospective single centre comparison of 120-W diode-pumped solid-state high in-tensity system laser vaporization of the prostate and 200-W highintensive diode-laser ablation of the prostate for treating benign prostatic hyperplasia. *BJU Int* 2009;104:820-5.
- Chiang PH, Chen CH, Kang CH et al (2010) Green Light HPS laser 120-W versus diode laser 200-W vaporization of the prostate: comparative clinical experience. *Lasers Surg Med* 42:624–629)
- Lee WC, Lin YH, Hou CP et al (2013) Prostatectomy using different lasers for the treatment of benign prostate hyperplasia in aging males. *Clin Interv Aging* 8:1483–1488)
- Sanwei Guo, Georg Müller, Gernot Bonkat, Heike Püschel, Thomas Gasser, Alexander Bachmann, Malte Rieken. *Journal of Endourology* Greenlight laser versus Diode laser vaporization of the prostate: 3-year results of a prospective

- non-randomized study (doi: 10.1089/end.2014.0572).
- 11. Wezel F, Wendt-Nordahl G, Huck N, et al. New alternatives for laser vaporization of the prostate: experimental evaluation of a 980-, 1,318- and 1,470-nm diode laser device. *World J Urol* 2010; 28:181-186.
 - 12. Rieken M, Kang HW, Koullick E, Ruth GR, Bachmann A. Laser vaporization of the prostate in vivo: Experience with the 150-W 980-nm diode laser in living canines. *Lasers Surg Med* 2010; 42:736-742.
 - 13. Mohammad Reza Razzaghi, Mohammad Mohsen Mazloomfard, Hooman Mokhtarpour, and Aida Moeini. Diode Laser (980 nm) Vaporization in Comparison With Transurethral Resection of the Prostate for Benign Prostatic Hyperplasia: Randomized Clinical Trial With 2-year Follow-up. *UROLOGY* 84: 526e532, 2014.
 - 14. Xinji Tan, Xiaobo Zhang, Dongjie, Xiong Chen, Yuanqing Dai, Jie Gu, Mingquan Chen, Sheng Hu, Yao Bai, Yu Ning. Transurethral vapo resection of prostate: diode laser or thulium laser? *Lasers in Medical Science*. 10.1007/s10103-018-2499-4.
 - 15. Herrmann TR, Bach T, Imkamp F, Georgiou A, Burchardt M, Oelke M, Gross AJ (2010) Thuliumlaser enucleation of the prostate (ThuLEP): transurethral anatomical prostatectomy with laser support. Introduction of a novel technique for the treatment of benign prostatic obstruction. *World J Urol* 28(1):45–51.
 - 16. Erol A, Cam K, Tekin A, Memik O, Coban S, Ozer Y. High power diode laser vaporization of the prostate: preliminary results for benign prostatic hyperplasia. *J Urol* 2009;182:1078-82.
 - 17. Jun Zhang, Xilong Wang, Yanbin Zhang, Chaoliang Shi, Minqi Tu, Guowei Shi. 1470 nm Diode Laser Enucleation versus Plasmakinetic Bipolar Resection of the Prostat for Benign Prostatic Hyperplasia: a Randomized Study. *Journal of Endourology* (DOI: 10.1089/end.2018.0499).
 - 18. Buisan O, Saladie JM, Ruiz JM, Bernal S, Bayona S, Ibarz L. Diode laser enucleation of the prostate (Dilep): technique and initial results. *Actas Urol Esp Engl Ed* 2011;35(1):37-41.
 - 19. Yang SS-D, Hsieh C-H, Chiang I-N, Lin CD, Chang S-J. Prostate volume did not affect voiding function improvements in diode laser enucleation of the prostate. *J Urol* 2013;189(3):993- 8).
 - 20. Lukas Lusuardi, Michael Mitterberger, Stephan Hruby, Thomas Kunit, Birgit Kloss, Paul F. Engelhardt, Manuela Sieberer, Günter Janetschek. Update on the use of diode laser in the management of benign prostate obstruction in 2014. *World J Urol DOI* 10.1007/s00345-014-1327-0.