Editorial Comment on: Thulium Laser versus Standard Transurethral Resection of the Prostate: A Randomized Prospective Trial
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Although transurethral resection of the prostate (TURP) is still regarded as the gold standard in the treatment of patients with benign prostatic hyperplasia (BPH), it is associated with significant morbidity rates. Therefore, in recent decades various alternative laser treatment options have been developed. Although neodymium:yttrium-aluminum-garnet (Nd:YAG) laser therapy has been associated with less morbidity than TURP due to excellent hemostatic characteristics, the remaining necrotic tissue caused bladder outlet obstruction (BOO) and BOO-related symptoms for several weeks after treatment. Immediate tissue ablation was accomplished when Malek et al [1] introduced a 60-W potassium-titanyl-phosphate laser vaporization (KTP laser = kalium-titanyl-phosphate laser) and Fraundorfer et al [2] introduced holmium laser enucleation of the prostate (HoLEP). Although, KTP laser vaporization of the prostate is meanwhile a widely excepted treatment option in patients with BPH, to date only one prospective randomized trial (KTP vs. TURP) has been carried out comparing perioperative complications and early functional outcome; it demonstrated similar outcomes with both techniques after (1) 6 mo [3]. In contrast, HoLEP proved to be safe and effective in several trials with long-term follow-up periods and thus is considered to be an alternative to TURP and also to open surgery [4].

In the present article, Xia et al [5] report a series of 52 thulium laser resections of the prostate (TmLRP) at a single institution with a follow-up of 12 mo. This first report of a prospective, randomized study comparing TmLRP to standard TURP for symptomatic BPH documented remarkable outcomes. Although the restricted time of follow-up has to be considered, TmLRP seems to be a safe and durable procedure and by all means to be comparable to TURP in quickly relieving BOO in this study. TmLRP retrieves tissue for histologic analysis, which is an advantage over KTP laser vaporization. At the same time TmLRP is a user-friendly TURP-like technique requiring less expertise compared to HoLEP. In the light of these excellent results, it will be interesting to see whether these data can be confirmed in large-scale studies by other institutions. To reduce the overall costs of laser procedures, it is possible that alternative laser therapies such as TmLRP will push onto the market.

References

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