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Transperineal Laser Ablation of the Prostate for Symptomatic Benign Prostatic Hyperplasia: safety, effectiveness and durability in Long-Term Follow-Up in 40 Patients

Abstract: Purpose: To evaluate the safety, effectiveness and durability of transperineal laser ablation (TPLA) in Benigne Prostate Hyperplasia . Materials and Methods: patients affected by symptomatic benign prostatic hyperplasia (BPH) were treated by TPLA with a 1,064-nm continuous-wave diode laser. International Prostate Symptom Score (IPSS), quality of life (QoL), postvoid residual (PVR), and prostate volume were evaluated at baseline and successive timepoints in the 40 patients with a follow-up of ≥ 36 months. Results: in 40 patients, the median duration of follow-up was 57 months (range, 36–76 months). The median reduction of IPSS at 12-month follow-up was 74% (interquartile range [IQR], 60%–81%) ($P < .001$). Median QoL score at 12 months improved from 5 (IQR, 4–5) to 1 (IQR, 0–1) ($P < .001$). Median PVR at 12 months decreased from 108 mL (IQR, 38–178 mL) to 13.5 mL (IQR, 0–40.5 mL) ($P < .001$), a median reduction of 88% (IQR, 61%–100%). At one year follow up, median prostate volume was from 66 mL (IQR, 48.5–86.5 mL) to 46 mL (IQR, 36–65 mL) ($P < .001$), with a median reduction of 32% (IQR, 21%–45%). For all of these parameters, the benefit of TPLA persisted at last follow-up, and all changes were statistically significant compared with baseline. No intraoperative complications occurred. Perioperative adverse events consisted of 1 case of prostatitis and 1 case of urinary tract infection (both Society of Interventional Radiology [SIR] Grade I). Conclusions: in selected patients affected by symptomatic BPH, TPLA is a valid option, safe, well tolerated, effective and with durable benefits in follow-up at median duration of 57 months

Keywords: writing, template, sixth, edition, self-discipline, good

Biography: Dr Gianluigi Patelli, with Professor Pacella, introduced the Transperineal Interstitial Laser Ablation (TPLA) for the treatment of Benign Prostatic hyperplasia and published the first case study in Journal of Cardiovascular and Interventional Radiology (JCIR) .