

Transvesical Benign Prostatectomy (TVBP) and Transurethral Resection of the Prostate (TURP): A Comparative Clinical Study

Introduction and Objectives: The objective of our prospective randomized study was to compare the efficacy and safety of transvesical benign prostatectomy (TVBP) and transurethral resection of the prostate (TURP) in patients with prostate volume of 80 mL to 130 mL.

Materials and Methods: One hundred and twenty patients with prostate volume of 80 mL to 130 mL and urodynamically confirmed bladder outflow obstruction were included in the study and assigned to two groups: TVBP (55 patients) or TURP (65 patients). Patients were assessed preoperatively and followed up at 3, 6, and 12 months postoperatively. Each follow-up assessment included International Prostate Symptom Score (IPSS), maximum flow rate (Qmax), and postvoid residual volume (PVR). Pre- and postoperative data were then compared and all complications were recorded.

Results: Of 120 patients selected for the study, 103 patients went through 12 months of follow-up. TURP was not faster than TVBP ($P=0.44$); 52% and 85% of the prostate tissue were removed as a result of TURP and TVBP, respectively ($P<0.001$). At 3rd, 6th and 12th months postoperatively, greater improvements in IPSS, Qmax and PVR were demonstrated in the TVBP group. At the 12th month follow-up, IPSS improved 88%, mean Qmax increased by 12 mL/s (232%), and mean PVR volume decreased by 72 mL (89%) in the TVBP group. In the TURP group, IPSS improved 61%, mean Qmax increased by 5.9 mL/s (101%), and mean PVR volume decreased by 64 mL (70%). In the latter group, 3 patients developed urethral stricture, requiring surgical treatment.

Conclusions: TVBP may be more effective and safer than TURP for benign prostatic hyperplasia in patients whose prostate volume is 80 mL to 130 mL.