Ejaculation Preserving Photoselective Vaporization of the Prostate

Introduction and Objective: In the traditional transurethral resection of the prostate (TURP), extensive resection of the enlarged prostate tissue is the goal in order to maximize voiding function. These traditional margins have included resecting the prostatic tissue at the paracollicular zone, the site of entry of the ejaculatory ducts into the urethra. In addition, extensive resection at the bladder neck often involves resection of the bladder neck musculature and may involve significant undermining. The combined effects may account for the elevated incidence of dry and retrograde ejaculations in the postoperative period. This can cause significant discomfort, displeasure and infertility for the patient. In our study, we aimed to modify the traditional photoselective vaporization of the prostate to both preserve the bladder neck musculature and the paracollicular / supramontanal tissue. We used patient-reported ejaculatory function to measure the incidence of diminished or dry ejaculation.
Materials and Methods: A total of 94 patients from the years of 2004 – 2010 underwent ejaculation-preserving photoselective vaporization of the prostate (EP-PVP). All patients had lower urinary tract symptoms and presented with an indication to undergo prostate debulking based on AUA/EAU guidelines. All patients reported intact ejaculatory function preoperatively. All procedures involved preservation of the bladder neck musculature and the paracollicular / supramontanal region, and avoidance of undermining the bladder neck. Preoperative and postoperative International Prostate Symptom Scores (IPSS), AUA QOL scores, uroflow rates, ejaculatory function scores were obtained postoperatively. Patients were followed for a mean follow up of 32 months.
Results: There was a statistically significant improvement in IPSS, AUA QOL, and uroflow rates. The rates of ejaculatory function were 56.3% for normal ejaculation, 30.9% diminished ejaculation, and 12.7% dry ejaculation.
Conclusions: Ejaculation preserving photoselective vaporization of the prostate offers equivalent improvements in symptom scores (IPSS), uroflow rates, and QOL scores as traditional TURP (based on comparison with historical controls). There was a low incidence patient-reported dry ejaculation. It is a safe and effective alternative for the patient hoping to maintain ejaculatory function post-procedure.

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