

The Continuous Evolution of the Greenlight Laser Photo-Selective Vaporisation of the Prostate: Better Outcomes with the XPS System

Introduction and Objective: Transurethral resection of the prostate (TURP) has been the gold standard for outflow tract surgery. However it is associated with significant morbidity and is far from the ideal procedure. Laser vaporisation of the prostate (PVP) was introduced with the aim of achieving the same improvement in lower urinary tract symptoms as TURP but with fewer complications. The demand for a safer procedure has increased with an increasingly ageing population with multiple co-morbidities. Early PVP had long operative times but the new XPS generation using the Moxy fibre aims to achieve a bigger cavity in a shorter time with less bleeding.

Materials and Methods: We looked retrospectively at all patients who underwent PVP using the 180-W XPS Greenlight laser between July 2010 and October 2011. Data on patient demographics, prostate volume, IPSS score and flow rate both pre and post-operatively were collated and compared at three months.

Results: There were 94 patients with an average age of 72.6 years who underwent PVP. 26 (28%) had a prostate volume greater than 80cc. Eighteen (19%) were anti-coagulated at the time of surgery. At three months, there was a mean reduction in IPSS score of 9.9 points and a mean increase in flow rate of 10.3 mls/sec. Reduction in prostate size was 51%, 49% and 48% for those with pre-operative prostate volumes of <40cc, 40-80cc, and >80cc respectively. There were 86 (92%) day cases. None required transfusion. There were 4 (5%) cases of urosepsis and 8 (9%) cases of clot retention.

Conclusion: Early experience with PVP using the new XPR generation system has produced promising results with minimal complications.