

## **Prostate Vaporization Using the XPS 180W GreenLight System: Have We Now Reached the 'Tipping Point' in the Challenge to Succeed TURP?**

**Introduction and Objective:** With evolution in laser vaporization technology, it is emerging as a potential challenge to TURP. The criticisms of the 80W and the 120W systems were the time taken to perform the procedure and that larger glands could not be successfully treated. In this study we assess the transition from the 120W to 180W GreenLight (GL) system.

**Materials and Methods:** To date we have performed over 800 GL PVP procedures in our unit over the last 7 years, initially with the 80W, with a change over to the 180W from the 120W system in May 2011. Data was prospectively collected for the last 50 cases we performed using the HPS 120W system (group 1,) and the subsequent 50 cases using the XPS 180W system (group 2). This included operative data and early post-operative complications, as well as symptom scores at 3 months.

**Results:** Average age for both groups were (68.2 and 70.4 years) respectively. One third of the HPS group had prostate volume above 50 cc while nearly two thirds of the XPS group were > 50 cc. The overall mean  $\pm$  SEM energy applied for both Group 1 and 2 were (185500  $\pm$  10200 and 257500  $\pm$  18080) respectively, which showed statistical significance (P=0.0008). Whilst the mean + SEM total lasing time were (30.28  $\pm$  1.530 & 29.53  $\pm$  1.968) similar for both groups with no statistical significance (P=0.7648). This suggests that although bigger prostate volumes were treated and more energy applied with the 180W system; the lasing time is similar and indeed even slightly less time is expended. No cases were converted to TURP and no blood transfusion or significant complications were reported. There were no differences in symptom evaluations at 3 months.

**Conclusions:** Our transition to the XPS 180 system with the MoXy fibre was seamless with the advantage of offering effective energy application and tissue removal along with a shorter learning curve.