

Greenlight[®] users should move from photoselective vaporization to endoscopic enucleation in larger prostates

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Dear Editor,

In their manuscript, Meskawi et al. aimed to assess the outcomes and, most importantly, the durability of photoselective vaporization of the prostate (PVP) using the XPS-180 system in prostates over 100 cc [1]. Despite several drawbacks, this is an important paper as it addresses a very relevant clinical issue, which has not been well evaluated in the literature to date. Although several studies have suggested satisfactory perioperative and functional outcomes of PVP in prostates >80–100 cc [2], none have reported on long-term (≥5 years) or even mid-term (≥3 years) outcomes in this population of larger glands. In the absence of published

data, the incomplete removal of the transitional zone (TZ) of the prostate has often been assumed to be the major limitation of Greenlight[®] vaporization in larger prostates, as it could lead to higher reoperation rates than techniques that remove more of the TZ [3].

The series of Meskawi et al. is the first to report the mid-term (≥3 years) outcomes of PVP in larger prostates. This is also the largest study to date to assess XPS-180 W PVP in larger glands. Two important findings from this study have to be highlighted. First, the relatively low postoperative PSA decrease (49% at 6 months) combined with the high retreatment rate (9.3% at 36 months) suggests an incomplete removal of the TZ, with consequent regrowth and increasing reoperation rate over time. Second, at least two fibres were needed in 40% of patients including 9% of patients requiring three fibres. Considering the cost of each fibre, PVP for the prostates >100 cc is less cost effective overall than PVP in smaller glands.

In recent years, the efficacy and the long-term reliability of endoscopic enucleation of the prostate have been supported by level 1 evidence [4] and have been proven to be feasible using numerous energy sources, including the Greenlight[®] laser [5]. If there is no question that the unique haemostasis property of the Greenlight[®] laser [6] makes it a valuable option in frail and high surgical risk patients with larger glands, we believe that, given the limitations underlined in the series by Meskawi et al., men with prostates >100 cc should be considered for endoscopic enucleation in first instance rather than vaporization.

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