

MORBIDITY AND MID-TERM RESULTS OF HOLMIUM LASER ENUCLEATION OF THE PROSTATE (HoLEP) FOR THE TREATMENT OF BENIGN PROSTATIC HYPERPLASIA (BPH)

Hypothesis / aims of study

Here the author report morbidity and mid-term clinical outcomes analysis with of HoLEP.

Study design, materials and methods

From May 2010 to March 2013, 380 consecutive patients treated with HoLEP were enrolled in this study. All patients was evaluated by digital rectal examination (DRE), transrectal ultrasonography (TRUS), serum PSA preoperatively. International Prostate Symptom Score (IPSS), peak urinary flow rate (Qmax), and postvoid residual urine (PVR) were documented preoperatively and 1, 3, 6, 12, 24 months postoperatively. The perioperative, immediate postoperative data and complications were analyzed. Longer term complications were recorded during follow up. All procedures of HoLEP was done by a single surgeon.

Results

The mean patient age at the surgery was 67.5 (45-85), and the mean PSA was 3.7 ng/ml (0.4-19.4). Mean operation time was 77.6 minutes (range, 30-180). Mean prostate volume was 64.3 ml (range, 20-192) and mean resected tissue weight was 12.3 g (range, 2-83), with 20 (5.3%) patients diagnosed with adenocarcinoma. Mean catheter indwelling time was 2.7 day (1-6), and mean hospital stay was 3.2 day (1-7). The blood loss was minimal, only two patients (0.5%) required postoperative transfusions. No deaths, major complications (myocardial infarction or pulmonary embolism) or TUR syndrome episodes occurred. The baseline data were IPSS; 23.0 (7-35), QoL score; 5.4 (4-6), Qmax (ml/s); 12.5 (1.2-16.5), PVR (ml); 59 (20-250). Postoperatively, IPSS and QoL scores and PVR decreased, and Qmax increased significantly. Intraoperative complication was minor capsular perforation (n=5, 1.3%). Postoperative complications were acute urinary retention (n=9, 2.4%), transient incontinence (n=17, 4.4%), urinary tract infection (n=6, 1.5%), urethral stricture (n=4, 1.0%) and bladder neck contracture (n=18, 4.7%).

Interpretation of results

HoLEP can be performed with minimal complication risks and blood loss. And showed statistical improvement of clinical parameters after 1 month operation and these results sustained for 24 months regardless of prostatic size.

Concluding message

HoLEP showed minimal morbidity and significant midterm results.

Disclosures

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