

THE EFFICACY OF HOLMIUM LASER ENUCLEATION OF PROSTATE IN PATIENTS WITH HUGE BENIGN PROSTATIC HYPERPLASIA

Hypothesis / aims of study

To evaluate the efficacy and safety of holmium laser enucleation of prostate (HoLEP) in patient with resected prostate volume exceeding 100 grams.

Study design, materials and methods

We reviewed the data of 16 patients with postoperative resected prostate volume exceeding 100 grams, who had undergone HoLEP at our institution from September 2009 to June 2012. The patients characteristics, serum prostate specific antigen (PSA), preoperative and postoperative international prostate symptom score (IPSS), including quality of life (QoL), peak urinary flow rate (Qmax), postvoiding residual urine volume (PVR) were recorded and perioperative parameters, operation time (enucleation time with morcellation time), total energy used, catheterization time, hospital stay were also recorded.

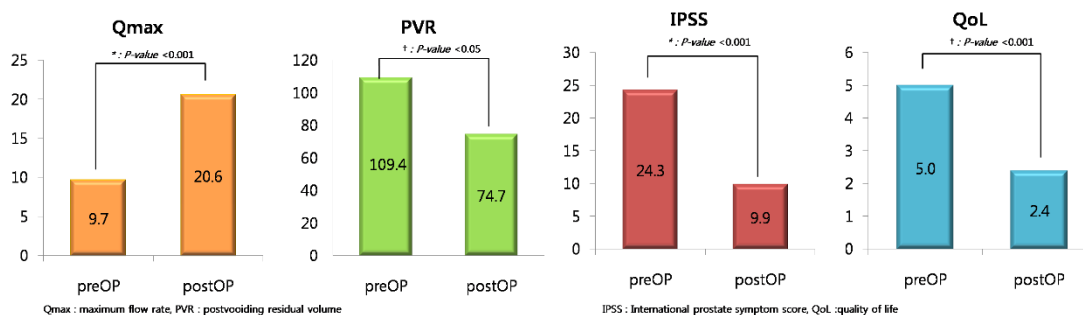
Results

The mean patients' age was 74.0 (59-86) years and mean prostate size was 168.1 (87-288) gm. The Enucleation time was 115.1 (60-220) minutes, and the mean catheterization time and hospital stay was 2.8 (2-7) days and 4.7 (3-8) days, respectively. At postoperative follow up, the IPSS was improved from 24.3 \pm 8.0 to 9.9 \pm 5.5, the QoL score had improved from 5.0 \pm 1.0 to 2.4 \pm 1.6. The peak urinary flow rate had increased from 9.7 \pm 5.6ml/s to 20.6 \pm 12.4ml/s and the postvoiding residual volume had decreased from 109.4 \pm 96.9ml to 74.7 \pm 51.1ml. There were no major complications were encountered.

Table 1. Preoperative patient characteristics and perioperative findings

Patient's characteristics	Mean \pm SD (range)
Age (years)	70.4 \pm 4.6 (59~86)
TRUS prostate volume (g)	168.1 \pm 21.3 (87~288)
PSA (ng/ml)	10.5 \pm 2.2 (2.8~23.9)
Enucleation time (minutes)	115.1 \pm 32.3 (60~220)
Morcellation time (minutes)	53.8 \pm 13.9 (20~150)
Resected volume (g)	129.1 \pm 24.8 (100~195)
Hospital period (days)	4.7 \pm 2.3 (3~8)
Indwelling catheter period (hours)	66.3 \pm 17.4 (48~144)

Figure 1. Preoperative and postoperative parameters



Interpretation of results

Significant improvement was noted in Qmax, PVR, IPSS, and QoL at postoperative follow-up compared with baseline.

Concluding message

Holmium laser enucleation of the prostate is safe and effective procedure in large prostate, with low morbidity.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** PNUH IRB (Pusan National University Hospital Institutional Review Board) **Helsinki:** Yes **Informed Consent:** Yes

