

HOLMIUM LASER ENUCLEATION OF THE PROSTATE: SINGLE-CENTER EXPERIENCE OF THE FIRST 1000 KOREAN CASES

Hypothesis / aims of study

Holmium laser enucleation of the prostate (HoLEP) is a recent step in enabling a true anatomical enucleation of prostatic tissue. The aims of this study was to present our clinical outcomes and morbidity with the first 1000 cases of HoLEP performed in a single center.

Study design, materials and methods

The data from the 1000 consecutive patients who underwent HoLEP for the symptomatic BPH between April 2009 and February 2012 were evaluated retrospectively. Data were analyzed to obtain prostate volume by transrectal ultrasound, serum prostate specific antigen (PSA), hospitalization time, time to catheter removal, enucleation and morcellation time, and weight of resected prostate. The follow up included the International Prostate Symptom Score (IPSS), quality of life (QoL) score, maximum urinary flow rate (Qmax), and postvoiding residual urine volume (PVR).

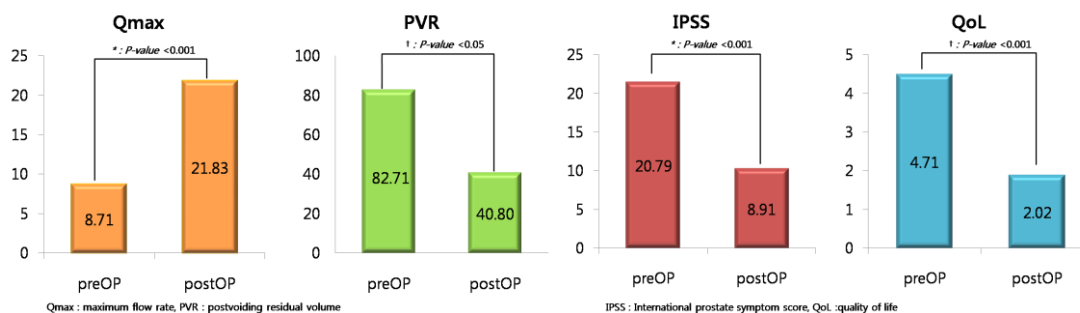
Results

The patients' mean age was 67.95 ± 7.57 years and mean prostate volume was 54.18 ± 30.26 g. Mean enucleation time was 58.60 ± 42.27 minutes, mean morcellation time was 12.27 ± 18.93 minutes, and the mean resected weight of the prostate was 21.40 ± 24.48 g. The mean catheter indwelling period was 40.27 ± 35.39 hours and mean hospital stay was 3.85 ± 2.50 days. 17 cases (1.7%) of prostate adenocarcinoma (incidentaloma) were found among all patients.

Table 1. Preoperative patient characteristics and perioperative findings

Patient's characteristics	Mean±SD (range)
Age (years)	67.95 ± 7.57 (46~91)
TRUS prostate volume (g)	54.18 ± 30.26 (11~288)
PSA (ng/ml)	4.75 ± 7.13 (0.05~67.79)
Enucleation time (minutes)	58.60 ± 42.27 (9~375)
Morcellation time (minutes)	12.27 ± 18.93 (0~190)
Resected volume (g)	21.40 ± 24.81 (0.5~181)
Hospital period (days)	3.85 ± 2.50 (1~15)
Indwelling catheter period (hours)	40.27 ± 35.39 (1~312)

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

HoLEP is a safe and effective modality for treating symptomatic BPH independent of prostate size, with satisfactory clinical outcome.

Disclosures

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