

## NSAIDS IS MORE EFFECTIVE THAN DESMOPRESSIN IN BENIGN PROSTATIC HYPERPLASIA PATIENTS WITH NOCTURNAL POLYURIA?

### Hypothesis / aims of study

The effectiveness of non-steroidal anti-inflammatory drug (NSAID) of reducing night-time urine volume and number of nocturia episode on the nocturnal polyuria in patients with benign prostatic hyperplasia has been reported. This study was conducted to compare the effectiveness between Desmopressin and NSAIDs in benign prostatic hyperplasia patients with nocturnal polyuria by voiding diary.

### Study design, materials and methods

Between May 2010 and December 2012, 81 BPH patients with 2 or more episodes of nocturia, despite treatments with at least 3months alpha-blocker, 5- alpha reductase were enrolled in this study. Nocturnal polyuria was defined when greater than 20% below 65 years to 33% over 65 years of 24hr urine volume was produced at night. A single does Desmopressin or NSAID was orally administered prior to sleeping for 2 weeks. We respectively compared 24hour urine volume, daytime urine volume, daytime functional bladder capacity, Number of nocturia episode, Night-time urine volume, Night-time functional bladder capacity, International Prostate Symptom Score (IPSS), quality of life(QoL) before treatment and after treatment.

### Results

There were no significant differences between Desmopressin group and NSAID group at the time of administration in age, 24hour urine volume, daytime urine volume, daytime functional bladder capacity, number of nocturia episode, night-time urine volume, night-time functional bladder capacity, IPSS, QoL ( $p>0.05$ ). Change of 24hour urine volume, daytime urine volume, daytime functional bladder capacity, night-time functional bladder capacity, IPSS, QoL were no significant differences between Desmopressin group and NSAID group after treatment ( $p>0.05$ ). Number of nocturia episode, night-time urine volume was significantly decreased in Desmopressin group ( $p=0.039$ ,  $p=0.045$ ). While patterns to reduce the number of nocturia episode, night-time urine volume in NSAID group, there was no statistical significance ( $p=0.056$ ,  $p=0.065$ ).

### Interpretation of results

Our study showed the number of nocturia episode and night-time urine volume in benign prostatic hyperplasia patients with nocturnal polyuria of both Desmopressin group and NSAIDs group reduced, however it showed was statistical significance in Desmopressin group.

### Concluding message

Therefore we preferentially have to consider the usage of Desmopressin in patients with nocturnal polyuria and could be use NSAIDs in patients without nocturnal polyuria.

### Disclosures

**Funding:** no **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** Keimyung University Medical Research Ethics Review Committee **Helsinki:** Yes **Informed Consent:** Yes