610

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THE EFFECTIVENESS OF SILODOSIN FOR NOCTURNAL POLYURIA IN ELDERLY MEN WITH BENIGN PROSTATIC HYPERPLASIA: A MULTICENTRE, PRELIMINARY STUDY

Hypothesis / aims of study

To investigate improvement of nocturia and nocturnal polyuria in nocturnal polyuria patients after silodosin administration by using a 3-day frequency volume chart.

Study design, materials and methods

This is a prospective multicenter study. We enrolled nocturnal polyuria patients (NPi > 0.33) aged ≥ 60 years, through the 3-day frequency volume charts of patients with benign prostatic hyperplasia taking α-blockers. Of the 54 patients, 30 (55.6%) completed the study according to the study protocol (per-protocol group), and 24 dropped out (dropout group).

Results

Of the 24 patients in the dropout group, 5 withdrew consent due to side effects or lack of efficacy, 7 were lost to follow-up at 4 weeks, 8 were lost to follow-up at 12 weeks, and 4 dropped out due to no implementation of 3-day frequency volume chart at 12 weeks. In the per-protocol group, there were significant improvements in the IPSS, especially question number 1, 3, 4, 5, 6, 7, and QoL question (p=0.001, p=0.007, p<0.001, p=0.003, p=0.049, p<0.001, and p<0.001, respectively). The LSEQ score for the sleep question was improved from 64.36 to 70.43 (p=0.039). NPi was reduced from 0.4005 to 0.3573 (p=0.027); however, in many cases night polyuria itself was stationary.

Interpretation of results

These results suggest that silodosin could be a useful drug for managing NP in elderly BPH patients without serious adverse events, such as hyponatremia. However, mean NPi was not decreased to lower than 0.33. Silodosin could not improve NP. Although NP occurs due to various causes, NP in elderly BPH patients seems to be caused by large NUV. Thus, we suggest that silodosin is the first choice to treat NP and nocturia in elderly BPH patients with potential hyponatremia.

Concluding message

Silodosin monotherapy can be given to elderly nocturnal polyuria patients with side effects, including hyponatremia, before administration of drugs, such as desmopressin. Considering the high dropout rate of our study due to no implementation of 3-day frequency volume chart, prospective and large-scale studies are needed to confirm our results.

References

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Disclosures

Funding: This study was partially supported by the JW pharmaceutical. **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** IRB of Chungbuk National University Hospital, IRB of Eulji University Hospital, IRB of Kunkuk University hospital **Helsinki:** Yes **Informed Consent:** Yes