

## QUESTIONNAIRE FOR INSOMNIA MAY PREVENT INAPPROPRIATE TREATMENT FOR NOCTURIA.

### Hypothesis / aims of study

Insomnia may result in nocturia and nocturia may cause insomnia. Since insomnia causes nocturia, and vice versa, the patients with insomnia and/or nocturia may be treated in inappropriate way. The aim of this study is to clarify prevalence of insomnia and nocturia, and their correlation in Urological clinics irrelevant to their purpose of visit, and to achieve appropriate treatment strategy.

### Study design, materials and methods

The 2388 patients were subjected to this study. We conducted a survey in the form of three types of questionnaires, questionnaire for Athens Insomnia Scale (AIS), IPSS and ICIQ-SF for patients. AIS consists of 8 items evaluating, sleep induction, awakenings during the night, final awakening, total sleep duration, sleep quality and sleepiness during the day.

### Results

The presence of nocturia was correlated with higher age, and patients with insomnia (X<sup>2</sup>test,  $p < 0.0001$ ). Thirty percent, however, those who had insomnia and nocturia revealed lower total score of IPSS, less than 8 and not fulfilling criteria of overactive bladder either.

### Interpretation of results

Except the nocturnal polyuria, the selected patients in this category should be treated with hypnotics primarily, and nocturia as well as insomnia expected to be improved with or without administration of anti-muscarinic drugs.

### Concluding message

The patients complaining nocturia might have insomnia as a primary problem, which may be clarified with careful interview and/or questionnaire. This endeavor elicits treatment of insomnia for subgroup of patients with nocturia and insomnia preventing unnecessary prescription of anti-muscarinic drugs.

### References

1. Soldatos CR, Dikeos DG, Paparrigopoulos TJ. Athens Insomnia Scale: validation of an instrument based on ICD-10 criteria. *J Psychosom Res* 2000;48:555–60.
2. Constantin RS, Francois AA, Tatsuro O, Dimitris GD. How do individuals sleep around the world? Results from a single-day survey in ten countries. *Sleep Medicine* 2005;6: 5–13

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<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>Yamagata University faculty of Medicine Ethics Committee</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>