

ASSOCIATION BETWEEN OVERACTIVE BLADDER AND DEPRESSIVE STATUS IN THE ELDERLY: A COMMUNITY-BASED STUDY IN JAPAN.

Hypothesis / aims of study

Overactive bladder (OAB) occurs in a wide range of patients from the comparatively young to the elderly. In 2002, OAB was defined as a syndrome of pollakisuria and urgency of urination by the ICS.¹ Many epidemiological and clinical studies of this symptom have been reported. The presence of OAB has been defined as urination eight times or more per day in several recent reports, although the method for evaluation of the frequency of urination has differed in these studies. We conducted a cross-sectional study on subjects aged ≥ 70 years old in an urban community examine overactive bladder (OAB) generally increases in elderly people, but its relationship with other factors, including depression, is unclear. this, a survey-based epidemiological study of OAB was conducted. In the current study, we performed a survey of symptoms of the lower urinary tract, including determination of the frequency of urination per day and the International Prostate Symptom Score (IPSS). Based on the survey results, the subjects were divided into OAB and non-OAB groups, while the Geriatric Depression Scale (GDS) was used for grouping of the subjects into normal and depressive groups. Effective treatment for OAB might be achieved by taking into account factors of relevance to OAB, and such treatment would improve the QOL of the elderly, as well as reducing national medical costs.

Study design, materials and methods

Evaluation of urological function in elderly people was performed in an urban community; 958 people (431 males and 517 females) aged 70-96 years old were interviewed. The analysis included 865 subjects, after exclusion of 11 subjects who provided insufficient information about urological and depressive symptoms by Geriatric Depression Scale (GDS) and 72 subjects whose Mini-Mental Status Examination (MMSE) score was 24 points or less.

Results

Of the 865 subjects in the analysis, 162 were diagnosed with OAB (18.7%), including 72 males (18.1%) and 90 females (19.3%). The total MMSE score for the 165 OAB subjects was 28.5 ± 1.4 (males: 28.6 ± 1.6 points, females: 28.5 ± 1.5 points). Subjects with a GDS score of 11 or higher were included in the depressive tendency group; this group comprised 180 subjects (20.8%), including 123 males (26.4%) and 57 females (14.3%). The mode value was 6 points (males: 6 points, females: 4 points). Of the 466 female subjects in the analysis, 374 (87.2%) had experienced child birth, and t-tests and χ^2 tests performed for this variable showed significant correlations with ischemic heart disease ($p=0.048$) and depressive tendency ($p=0.018$). A logistic regression analysis showed a correlation of OAB with depressive tendency and alcohol consumption, with odds ratios of 1.99 (1.27 - 3.14, 95% CI, $p=0.003$) and 1.70 (1.10 - 2.62, 95% CI, $p=0.0163$), respectively.

Interpretation of results

The frequency of OAB is generally known to be higher in the elderly, and this conclusion is supported by our results. However, large differences in the frequency of OAB are evident in different reports. Although this may be due to differences in the environment and specific characteristics of the population, differences in diagnostic standards and survey methods may also be responsible for the inconsistent results.

Concluding message

Our analysis is the first to show a relationship between OAB and depressive tendency in elderly people. Although it is unclear whether depressive tendency is caused by OAB or *vice versa*, this relationship should be a focus of future OAB treatment.

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HUMAN SUBJECTS: This study was approved by the the Ethics Committee of Tohoku University and followed the Declaration of Helsinki Informed consent was obtained from the patients.