

## PREVALENCE AND FACTORS ASSOCIATED WITH URINARY INCONTINENCE IN COMMUNITY-DWELLING ELDERLY JAPANESE MEN

### Hypothesis / aims of study

Urinary incontinence is an important and complex problem for older persons, but information on urinary incontinence in elderly men is limited. The aim of this study was to estimate the prevalence, frequency, volume, type, and risk factors associated with urinary incontinence in elderly community-dwelling Japanese men.

### Study design, materials and methods

The study subjects were 259 men aged 75 or older who participated in a comprehensive health examination, which included face-to-face interviews and physical fitness tests. In order to evaluate the differences in the physical fitness and interview data between men with and without urinary incontinence, we used *t*-tests for continuous variables and chi-square tests for categorical variables. Multivariate logistic regression models were used to assess the factors associated with urinary incontinence.

### Results

The prevalence of urinary incontinence was 22.8% in elderly men, and urinary incontinence types were classified as 3.4% stress, 55.2% urge, and 41.4% mixed urinary incontinence. The subjects with urinary incontinence were significantly older ( $83.59 \pm 3.26$  yr vs.  $81.71 \pm 3.42$  yr), urinated more frequently in the daytime ( $8.25 \pm 3.35$  times vs.  $6.44 \pm 2.39$  times) and during the nighttime ( $2.64 \pm 1.45$  times vs.  $1.97 \pm 1.31$  times), and had lower walking ability ( $1.11 \pm 0.25$  m/sec vs.  $1.27 \pm 0.24$  m/sec) compared to non-urinary incontinence subjects. Also, the urinary incontinence subjects had a greater degree of knee pain and a history of osteoporosis. According to the logistic model, urinary incontinence was significantly associated with age (odds ratio (OR)=1.14, 95% confidence interval (CI)=1.03-1.26), usual walking speed (OR=0.15, 95%CI=0.03-0.65), and frequency of urination in the daytime (OR=1.21, 95%CI=1.07-1.37).

### Interpretation of results

Urinary incontinence was significantly associated with lower levels of walking ability, older age and urination frequency in the daytime.

### Concluding message

Our findings suggest that an active lifestyle focused on increasing walking ability, may contribute to the prevention of urinary incontinence in elderly men.

<b>Specify source of funding or grant</b>	Research Grant from the Ministry of Health and Welfare of Japan, a Grant-in-Aid for Scientific Research B from the Japanese Society for the Promotion of Science (22300243)
<b>Is this a clinical trial?</b>	No
<b>What were the subjects in the study?</b>	HUMAN
<b>Was this study approved by an ethics committee?</b>	Yes
<b>Specify Name of Ethics Committee</b>	Clinical Research Ethics Committee of Tokyo Metropolitan Institute of Gerontology
<b>Was the Declaration of Helsinki followed?</b>	Yes
<b>Was informed consent obtained from the patients?</b>	Yes