

RISK FACTORS ASSOCIATED WITH INCIDENCE OF URINARY INCONTINENCE IN COMMUNITY-DWELLING JAPANESE ELDERLY WOMEN – A 5-YEAR FOLLOW-UP STUDY –Hypothesis / aims of study

Many studies have revealed several factors associated with urinary incontinence in elderly population. But, very few longitudinal studies have been conducted. The aim of this study was to identify the risk factors associated with incidence of urinary incontinence in urban community-dwelling elderly women.

Study design, materials and methods

The baseline survey of Tokyo Metropolitan Institute of Gerontology, Longitudinal and Interdisciplinary Study on Aging (TMIG-LISA) was conducted in 2002, and 1,015 women aged 70 and older participated. Ninety two of them were excluded, because they had experienced urine leakage more than once per week. 923 women who did not have urinary incontinence at entry of the study were selected. This cohort has been followed, and 456 subjects (49.4 %) were able to complete the study for 5-year by comprehensive medical examination included an interview and physical performance tests, conducted on a yearly basis using methods similar to the baseline survey.

Results

After the 5-year follow-up, the incidence of urinary incontinence was 16.7 % (76/456) in urban community-dwelling elderly women. The new onset of urinary incontinence group had a significantly higher BMI and lower level of usual walking speed and total cholesterol at baseline. By the logistic model, BMI (per 1-kg/m² increase: OR=1.13, 95%CI: 1.04-1.22), fear of falling (no: OR=0.69, 95%CI: 0.50-0.97), total cholesterol (per 1.0 mg/dl increase: OR=0.98, 95%CI: 0.97-0.99), grip strength (per 1-kg increase: OR=0.94, 95%CI: 0.87-0.99), and regular exercise habits (no: OR=1.83, 95%CI: 1.04-3.17) were the independent variables significantly associated with incidence of urinary incontinence.

Interpretation of results

Our data suggest that lifestyle, nutritional status, and functional fitness are significantly associated with new onset of urinary incontinence in urban community-dwelling elderly women aged 70 and older.

Concluding message

Nutrition status and lifestyle as well as a pelvic floor muscle exercise should be considered a first line treatment for urinary incontinence in elderly population.

<i>Specify source of funding or grant</i>	This study was supported by a Research Grant of the Ministry of Health and Welfare of Japan and the Grant-in-Aid for Scientific Research B of the Japan Society for the Promotion of Science. The authors have no conflict of interest to disclose.
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Institutional Review Board and Ethics Committee of the Tokyo Metropolitan Institute of Gerontology
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes