

URGE INCONTINENCE AS A PREDICTOR OF INSTITUTIONALIZATION IN AN OLDER POPULATION

Aims of Study

Institutionalization has been suggested as an outcome of urinary incontinence, however, longitudinal data on the subject in random older populations are limited (1,2). The aim here was to examine the predictive significance of urge incontinence in an unselected older population during a 13-year follow-up.

Methods

A population-based longitudinal survey was conducted involving 366 men and 409 women aged 60 years and over. Urge incontinence was defined as having trouble in getting to the lavatory in time with urinary leakage in the daytime or during the nights. Institutionalization was defined as the date when the person was admitted to a nursing home or to a hospital providing long-term care. Long-term care involved only cases where the person did not return to ordinary home. In the analyses, time was counted up to the date of death for those who died at home and to the end of the follow-up period for those who survived living at home. Age-adjusted Cox proportional hazards models with RR (relative risks) and 95 % CI (confidence intervals) were used to examine the association of urge incontinence, living arrangements, self-reported neurological, cardiovascular, musculoskeletal and other chronic diseases, ADL (activities of daily living) disability and depressive symptoms with institutionalization. In the multivariate analyses, all the predictors were taken into account simultaneously in order to examine the independent association of urge incontinence with institutionalization. Regarding the differences in the nature of urinary symptoms and living conditions between the two genders, the analyses were conducted separately for men and women.

Results

The crude prevalence for urge incontinence in men and women were 5 % and 15 %, respectively. During the 13-year follow-up, 13 % of the men and 26 % of the women moved into an institution. Of the men 50 % and of the women 37 % died before being institutionalized. In the age-adjusted analyses, urge incontinence (RR 3.17; 95 % CI 1.41-7.13), other chronic diseases (RR 2.33; 95 % CI 1.35-4.02), ADL disability (RR 2.04; 95 % CI 1.06-3.89) and depressive symptoms (RR 1.32; 95 % CI 1.12-1.55) predicted institutionalization in men. In women, urge incontinence did not predict institutionalization, but living alone (RR 1.95; 95 % CI 1.24-3.06), cardiovascular diseases (RR 1.63; 95 % CI 1.09-2.44), other chronic diseases (RR 1.46; 95 % CI 1.00-2.13) and ADL disability (RR 1.80; 95 % CI 1.13-2.89) were significant predictors. In the multivariate analyses, simultaneously adjusted for age and other health and social indicators, age in both men and women (RR 1.15; 95 % CI 1.10-1.19 and RR 1.15; 95 % CI 1.12-1.19, respectively) significantly predicted institutionalization. Urge incontinence remained a strongly significant predictor for institutionalization in men (RR 3.07; 95 % CI 1.24-7.59) and depressive symptoms also showed some predictive power (RR 1.22; 95 % CI 1.00-1.48). In women, in addition to age, living alone was the only independent predictor in the multivariate analysis (RR 1.99; 95 % CI 1.25-3.18).

Conclusions

Urge incontinence is a significant predictor of institutionalization in men but not in women. The finding may imply that the condition is a marker of more advanced disability in men, but differences in the etiology and psychosocial factors may also contribute to the gender difference. Nevertheless, the finding emphasises the importance of interventions aiming at promoting continence and coping with the problem in the clinical practice and whenever community based supportive systems for caregivers are being designed especially in older men.

- 1) Medically recognized urinary incontinence and risks of hospitalization, nursing home admission and mortality. *Age and Ageing* 1997; 26: 367-374.
- 2) Urinary incontinence as a predictor of death and institutionalization in a general aged population. *Arch Gerontol Geriatr* 1995; 21: 307-315.