

CHANGES IN LOWER URINARY TRACT SYMPTOMS AND QOL IN FRAIL ELDERLY OVER A ONE-YEAR PERIOD

Hypothesis /aims of study

The present study aimed to clarify the changes in lower urinary tract symptoms (LUTS) and quality of life (QOL) status in frail elderly living in A City, Yamagata Prefecture in Japan over a one-year period.

Study design, materials and methods

Subjects comprised 1,575 frail elderly remaining after exclusion of the deceased, institutionalized, hospitalized, or those with unknown addresses from the 1,719 residents registered in A City, Yamagata Prefecture as of October 1, 2008 who were approved for nursing care insurance as Care Needed Level 1 or 2. An inventory survey based on self-administered anonymous questionnaires was conducted by post in 2008 and repeated one year later. Questionnaire items comprised subject background (sex, age, and family structure); certified Care Needed Level; LUTS parameters (diurnal frequency, nocturnal frequency, decreased urinary force, feeling of residual urine, cystalgia, urgency, urge incontinence, and stress urinary incontinence); and effects of LUTS on QOL parameters (work and housework, going out and travel, mood, sleep, social interactions, and overall lifestyle). LUTS and QOL parameters were measured on 6- and 4-point evaluation scales¹⁾, respectively.

Written statements were distributed with the questionnaires regarding subjects' right to withdraw at any time, the voluntary nature of participation and permanent protection of personal data. Return of the questionnaire was taken to signify participation consent.

Results

Of the 1085 questionnaires (collection rate 68.9%) returned at the two survey points, 816 constituted valid responses (52.7%). Subject mean age was 82.6±7.3 years, 70.8% were women and 85.3% were considered very elderly (≥75 years old). A total of 20.7% of subjects lived alone, 20.9% in two-person (spousal) households, and 50.8% in multiple-person households. Over the one-year period, the Care Needed Level got worse for 12.3% of subjects. With regard to changes in LUTS, no significant differences were observed in complaint rates for any of the evaluated symptoms. However, Wilcoxon's signed rank test analysis of the effects of LUTS on QOL revealed significant differences in scores after one year for effects on work, going out and travel, mood and mental state, and social interactions ($p<0.001$) and on overall lifestyle ($p<0.05$), demonstrating that QOL decreased over time due to LUTS.

Interpretation of results

The present study found no marked changes or significant differences in LUTS micturition symptoms, cystalgia, and storage symptoms in frail elderly over a one-year period. However, a significant decrease in QOL was observed due to the effects of LUTS.

Concluding message

Further investigation is required to clarify LUTS-related factors affecting decreased QOL in frail elderly over a one-year period.

References

1. Homma Y, Kakizaki H, Gotoh M, et al.: Epidemiologic survey on lower urinary tract symptoms in Japan, Journal of the Japanese Neurogenic Bladder Society 2003;14:266-277.

Disclosures

Funding: the Ministry of Health, Labour and Welfare **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** the Ethics Review Board of Yamagata University Faculty of Medicine **Helsinki:** Yes **Informed Consent:** Yes