

URGE INCONTINENCE IN ALZHEIMER'S DISEASE: A POPULATION-BASED COHORT STUDY IN TAIWAN

Hypothesis / aims of study

Urinary incontinence (UI) is more prevalent in elderly populations with dementia than without dementia, and Alzheimer's disease (AD) is the most common cause of dementia. [1-2] UI may complicate AD morbidity and mortality. [3] Therefore, this study aimed to evaluate the prevalence, annual incidence, and determine the risk possibility of urge incontinence, which is the main type of incontinence in AD patients in Taiwan.

Study design, materials and methods

A total of 977 AD patients were included in the study cohort. 2931 patients without AD by 1:3 proportion compared to the study cohort were used as a matched cohort. All participants were selected from National Health Insurance Research database in 2000 sample population. We utilize competing risk analysis to evaluate the risk of urge incontinence and cumulative incidence ratio curve to analyze cumulative incidence function. Prevalence and annual incidence rate are calculated in individual medication including Rivastigmine, Donepezil, Galantamine, Memantine only be initiated in AD patients.

Results

The risk of urge incontinence is higher in AD cohort. (HR: 1.34, 95%CI 1.12-1.61) The cumulative incidence ratio of urge incontinence event between AD cohort and matched cohort presents statistical significance. ($P = 0.006$) Annual incidence and prevalence of urge incontinence in AD patients are 3% and 4.5% respectively.

Interpretation of results

The present results suggest the risk of urge incontinence is higher in AD patients than in the general population.

Concluding message

AD is a progressive neurological disorder leading to difficult moving and cognitive dysfunction, so UI in AD patients will aggravate medical problems. In order to decrease an impact of health and economic burden, treatment of UI is an important issue, especially in AD patients.

References

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3. Alcorn G, Law E, Connelly PJ, Starr JM. Urinary incontinence in people with Alzheimer's disease. *Int J Geriatr Psychiatry.* 2014 Jan;29(1):107-9.

Disclosures

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