

EFFECTS OF ANTI-CHOLINERGICS ON COGNITIVE FUNCTIONS, URINARY SYMPTOMS, URINARY FUNCTIONS, AND IMPACTS OF CAREGIVER IN ELDERLY DEMENTIA PATIENTS WITH URINARY INCONTINENCE. -A PROSPECTIVE RANDOMIZED STUDY

Aims of study

According to the increase in the elderly population, the number of elderly dementia becomes almost one million in Japan. One of the most important problems of elderly dementia is urinary incontinence (UI), and the treatment of UI is also important item for QOL of both elderly dementia and caregivers, and from the hygienic point of view. Anti-cholinergic drug is most useful for the treatment of elderly dementia, however, has potential risk of cognitive disorder. In this paper, we evaluated the effects of anti-cholinergic drugs (propiverine-hydrochloride and oxybutinine-hydrochloride) on cognitive function, urinary symptoms, voiding function, and both impact and QOL of caregiver in the management of elderly dementia patients with UI. This study was designed as a prospective randomized trial.

Methods

20 elderly patients (older than 65 years old) with stable dementia and UI were included in this study. The degree of dementia was between 1 and 20 points by Hasegawa's Dementia Scale (HD Scale), and the incidence of UI was at least once a day. These patients could void by themselves or under toileting schedules by caregiver. Patients with verbal capability were excluded, because HD Scale can not be taken. These patients were randomly selected for anti-cholinergics, propiverine-hydrochloride (P) or oxybutinine-hydrochloride (O), for 4 weeks. Only P and O are available anti-cholinergic for urge UI and OAB on the market in Japan. The following points were evaluated before, 2 weeks, and 4 weeks after treatment. 1)Urinary symptoms (UI, voiding frequency, degree of urgency), 2)objective findings of urination (post-void residual urine; PVR), 3)cognitive functions by HD Scale, 4)evaluation by caregiver (number of changing cloth, number of changing pad, difficulty in changing pad, hygienic problems), and 5)both QOL and burden score of caregiver.

Results

9 patients and 11 patients were treated with O and P, respectively. At 4 weeks of treatment, HD Scale was 119.7 % and 119.2 % of pretreatment score in O and P groups, respectively. At 4 weeks of treatment, number of UI was 83.4 % and 89.6 % of pretreatment in O and P, respectively. At 4 weeks of treatment, burden and QOL of caregiver tended to be better than pretreatment in both O and P group.

Conclusions

Either of anti-cholinergic drugs (P and O) has beneficial effects on both cognitive function and UI in elderly dementia population. Burden and QOL of caregiver for elderly dementia patients with UI might be improved by anti-cholinergics. These data imply that anti-cholinergics take important roles for the improvement of QOL of both elderly dementia patients with UI and their caregivers.

Reference

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