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INFLUENCES OF IMIDAFENACIN ON COGNITIVE FUNCTION IN PATIENTS WITH OVERACTIVE BLADDER

Hypothesis / aims of study

The influence of imidafenacin on cognitive function was investigated in the nation-wide Drug Use Survey with a monitoring period of one year, because it has recently been reported on occurrences or aggravation of cognitive disorder due to administration of medications which have similar anticholinergic effect to imidafenacin.

Study design, materials and methods

The patients from medical institutions all over Japan who were newly administered imidafenacin (Staybla tablets) for the treatment of overactive bladder were prospectively registered by using central enrollment system. Along with this, the Mini-Mental-State Examination (MMSE) was performed in all patients. We followed this cohort of patients in a period of one year.

Results

Report forms of 94 patients (40 men, 54 women, age 76.0 +- 8.2 years) were collected from 32 medical institutions, mainly from departments of neurology, neurosurgery, and internal medicine because of the MMSE procedure. Among them, efficacy on the overactive bladder was obtained in 75.6% of the patients. Adverse Drug Reactions (ADRs) were registered in 7 (7.45%) patients for safety analysis, including dry mouth, voiding difficulty, urinary incontinence, etc. In terms of cognitive function, no significant difference was noted in MMSE scores between before and after treatment (25.5 +- 2.5 to 24.5 +- 2.6) in a period of one year. Before starting imidafenacin, 65 patients have had presumable Mild Cognitive Impairment (MCI) in this cohort. Cognitive progression to dementia was confirmed in 3 of the 65 MCI patients, with an annual conversion rate of 5.9%, and this rate did not exceed those reported in the past epidemiological studies (6.8 – 16.1% per year).

Interpretation of result

This is the first such study confirming that imidafenacin, an anticholinergic agent, ameliorated overactive bladder in an elderly cohort without significant worsening of cognitive function in a period of one year. The results of the present study are in accordance with the facts that imidafenacin did not worsen water maze performance in rats¹, and that imidafenacin did not penetrate the blood-brain barrier in macaque monkeys by PET².

Concluding message

Based on the present survey results, imidafenacin can be used safely for cognitively vulnerable elderly patients with overactive bladder.

References

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Disclosures

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