

The Efficacy and Safety of Tolterodine Tartrate in Elderly Patients with OAB: Comparison with Non-Elderly Patients

Introduction and Objective: The efficacy and safety of tolterodine tartrate (T.T.) and implications on quality of life (QOL) were compared between elderly (≥ 65 years) and non-elderly (< 65 years) patients with overactive bladder.

Materials and Methods: From March 2008 to May 2010, 83 patients who were diagnosed as OAB at 6 institutions were administered T.T. for 12 weeks. The efficacy was assessed by the urination diary, overactive bladder symptom score (OABSS), SF-36, and residual urine volume at 2, 12 week after enrollment. Adverse events were also investigated. The primary endpoint is change in OABSS sum score. The secondary endpoints are change in frequency of urination/urinary incontinence, change in SF-36 score, and incidence and grade of adverse events. Student's *t*-test was used to compare before or after medication, and between groups.

Results: Sixty-seven of 83 participants were able to be analyzed. Of the 67 patients, 46 (average age; 74.1 years old) were defined as elderly patients and 21 (average age; 52.5 years old) were defined as non-elderly patients. OABSS was significantly decreased after 2 weeks of treatment in both groups. Although the percent change of score was larger in the non-elderly group at 2 weeks, no difference was seen at 12 weeks ($p=0.898$). QOL was little affected by T.T. administrations in both groups. It seemed that the daily frequency of urination/urinary incontinence improved sooner in the non-elderly group, but significant improvement were observed at 12 weeks in both groups ($p=0.006$ and 0.928). Almost all adverse events occurred just after starting treatment. The discontinuation/dropout rate was higher in the elderly group ($p<0.0001$).

Conclusions: Tolterodine was confirmed to be safe and effective for elderly patients as well as non-elderly patients.