Efficacy and tolerability of duloxetine in elderly patients with generalized anxiety disorder: a pooled analysis of four randomized, double-blind, placebo-controlled studies

**Introduction**

Generalized anxiety disorder (GAD) is common in the elderly. Symptoms of GAD often develop earlier in life, but in a substantial number of elderly patients, GAD appears for the first time after age 60. The symptoms in elderly patients may include insomnia, hypervigilance, and difficulties with cognition, and may be confused for depression or dementia. Treating GAD or high-trait anxiety symptoms in the elderly is important because GAD can affect physical health and psychological health. These patients may be at a greater risk for mortality and suicide. Treating elderly patients can be difficult because they may have higher rates of polypharmacy, including benzodiazepine use. Furthermore, the efficacy and tolerability of medications in the elderly may differ from those in younger patients because of age-related changes in drug metabolism.

Duloxetine is a selective serotonin and norepinephrine reuptake inhibitor (SNRI) that is efficacious and well tolerated in treating patients with GAD and elderly patients with major depressive disorder; however, its efficacy and tolerability in elderly patients with GAD have not been investigated.

**Objective**

To assess the efficacy and tolerability of duloxetine in elderly patients with generalized anxiety disorder (GAD).

**Methods**

The authors conducted post hoc analyses on acute-phase data from a subset of patients (≥65 years) with GAD were pooled from four randomized, double-blind, placebo-controlled trials of duloxetine (3 flexible, 1 fixed dosing). Patients were treated with duloxetine 60–120 mg once daily or placebo for 9–10 weeks. The primary outcome measure was the mean baseline-to-endpoint change in Hamilton anxiety scale (HAMA) total score. Secondary measures included the HAMA psychic and somatic anxiety subscales and the Hospital Anxiety Depression Scale (HADS). The studies represent all of the Lilly-conducted double-blind, placebo-controlled trials.

**Results**

Of 1491 patients randomly assigned to treatment, 4.9% (duloxetine, n=45; placebo, n=28) were ≥65 years old.

Compared with placebo-treated patients, duloxetine-treated patients experienced significantly greater improvements on the HAMA-total (p=0.029), the HAMA-psychic anxiety factor (p=0.034), HADS-anxiety (p=0.049) and -depression scales (p=0.028), but not the HAMA somatic anxiety factor (p=0.074). Nausea was reported significantly more often in duloxetine-treated patients (30.0% vs. 7.1%, p=0.023); duloxetine-treated patients experienced greater weight loss (p=0.018). The incidence of other TEAEs did not significantly differ between the treatment groups. More duloxetine-treated patients discontinued treatment due to an adverse event (22.2% vs. 0%; p=0.006). The treatment groups did not significantly differ in mean baseline-to-endpoint changes in pulse (p=0.976), supine systolic blood pressure (p=0.831), or supine diastolic blood pressure (p=0.317).

**Conclusion**

Duloxetine was effective in an elderly patient subset with GAD, although there was a high rate of discontinuations due to adverse events.