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#### Abstract

**Background:** Previous research has reported evidence that patients with major depressive disorder (MDD) show anxiety symptoms and neurocognitive impairments. However, the influence of anxiety on neurocognitive function in MDD patients during antidepressant treatment is unclear.

**Method:** MDD patients (n=164) completed a 12-week, multi-center, randomized trial assigned in a 1:1 ratio to either tianeptine or escitalopram. Changes of anxiety symptoms were assessed by the Hamilton Anxiety Rating Scale (HAM-A), and the Hamilton Depression Rating Scale (HAM-D), self-rated subjective cognitive impairment on memory and concentration, the Mini-Mental Status Examination (MMSE), Continuous Performance Test (CPT), Verbal Learning Test (VLT), and Raven's Progressive Matrices (RPM) were assessed every 4 weeks.

**Results:** During 12 weeks of treatment, decrease in the HAM-A score was significantly associated with improvement of subjective cognitive impairments on memory ( $p<0.001$ ) and concentration ( $p<0.001$ ), and objective measures on delayed memory ( $p=0.006$ ) and reasoning ability ( $p=0.002$ ), after adjusting for covariates such as baseline HAM-A scores, time, sex, age, education years and assigned medication using the Mixed effects and Generalized Estimated Equation model analysis. However, the other cognitive outcome variables, immediate memory, commission error, and MMSE, which showed significant improvement through 12-week study period, showed no significant association with improvement of anxiety.

**Conclusion:** Improvement of anxiety symptoms was significantly associated with improvement in subjective and objective neurocognitive functions such as delayed memory and reasoning ability in elderly MDD patients during antidepressant treatment, but not significantly associated with improvement of immediate memory and commission error.

#### PS90

Differences in hypochondriasis between Korean and American outpatients with major depressive disorder

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#### Abstract

Prior cross-cultural studies have shown that Americans and East Asians differ with regards to the presentation of hypochondriasis symptoms. However, few studies have attempted to examine the prevalence and nature of hypochondriacal concerns

among both American and East Asian patients with major depressive disorder (MDD). This study aimed to explore hypochondriasis and its correlates, using the Hamilton Depression Rating Scale (HAM-D), among American and Korean MDD outpatients of ages 18 and older. Consistent with previous cross-cultural findings, Korean MDD patients exhibited significantly higher scores for hypochondriasis than Americans after controlling for total HAM-D scores and demographic variables ( $p<0.0001$ ), even though American patients had significantly higher total HAM-D scores ( $p<0.0001$ ). Whereas hypochondriasis appeared to be common among Koreans regardless of age, years of education, and employment status, Americans showed an increased tendency for hypochondriasis with greater age, fewer years of education, and unemployment. Despite the cultural differences, multivariate logistic regression analyses revealed that hypochondriasis is significantly associated with somatic anxiety (Koreans AOR=2.14, 95%CI 1.31–3.52; Americans AOR=1.98, 95%CI 1.69–2.31), suicide (Koreans AOR=0.42, 95%CI 0.24–0.74; Americans AOR=0.81, 95%CI 0.67–0.98), middle insomnia (Koreans AOR=1.95, 95%CI 1.18–3.23; Americans AOR=1.19, 95%CI 1.01–1.41), and psychic anxiety (Koreans AOR=1.62, 95%CI 1.00–2.61; Americans AOR=1.44, 95%CI 1.23–1.70) for both Korean and American MDD patients. Taken together, although hypochondriasis is more prevalent among Koreans, both Korean and American MDD patients with hypochondriacal symptoms appear to display high levels of somatic anxiety regardless of whether they experience actual physical symptoms. These findings suggest that both cultural and personal factors play a role in the presentation of hypochondriasis symptoms among Korean and American patients with MDD.

#### PS91

The effects of fluvoxamine on the steady-state plasma concentrations of escitalopram and desmethylcitalopram in depressed Japanese patients.

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#### Abstract

**Background:** This aim of this study was to determine the impact of fluvoxamine, an inhibitor of CYP2C19, on the pharmacokinetics of escitalopram, a substrate of CYP2C19.

**Methods:** Thirteen depressed patients initially received a 20 mg/day dose of escitalopram alone. Subsequently, a 50 mg/day dose of fluvoxamine was administered due to the insufficient efficacy of escitalopram. Plasma concentrations of escitalopram and desmethylcitalopram were quantified using HPLC before and after fluvoxamine co-administration. The QT and corrected QT (QTc) intervals were measured before and after fluvoxamine co-administration.

**Results:** Fluvoxamine significantly increased the plasma concentrations of escitalopram ( $72.3\pm 36.9$  ng/ml versus  $135.2\pm 79.7$  ng/ml,  $p<0.01$ ) but not those of desmethylcitalopram ( $21.5\pm 7.0$  ng/ml versus  $24.9\pm 12.0$  ng/ml, ns). The ratios of desmethylcitalopram to escitalopram were significantly increased during fluvoxamine co-administration ( $0.37\pm 0.21$  ng/ml versus  $0.21\pm 0.10$ ,  $p<0.01$ ). The CYP2C19 genotype did not fully explain the degree of the change. Fluvoxamine co-administration did not change the QT or QTc intervals.

**Conclusions:** The results of the present study suggest that adjunctive treatment with fluvoxamine increases the concentration of escitalopram. The QTc interval did not change in this condition.