

The Effects of Venlafaxine on Cognitive Functions and Quantitative EEG in Healthy Volunteers

Antidepressants that selectively block serotonin uptake may cause unwanted effects on cognitive functions such as impairment of vigilance and memory. A double-blind, randomized, placebo-controlled cross-over trial was performed to examine the effects of venlafaxine, a selective serotonin and noradrenaline reuptake inhibitor (SSNRI), on cognitive functions and quantitative EEG (qEEG) in humans. 12 healthy male subjects aged 23 – 32 years (26 ± 3 years mean \pm sd) orally received 37.5 mg venlafaxine b.i.d. for 7 days and subsequently 75 mg b.i.d. for another 7 days. After a 14-day wash-out phase, placebo was administered to the subjects for 14 days under randomized double-blind cross-over conditions. Venlafaxine did not influence cognitive functions such as choice reaction, memory, psychomotor performance and subjective mood. Placebo resulted in an increase in slow alpha power ($p < 0.05$) whereas venlafaxine had no effect on qEEG. In conclusion, multiple dosing with venlafaxine did not influence cognitive functions in healthy humans.