## P.1.196 Influence of sertraline treatment on neurophysiological parameters in patients with obsessive-compulsive disorder

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Background: Selective serotonin reuptake inhibitors (SSRI) including sertraline are effective in the treatment of obsessive-compulsive disorder (OCD). However, it is questioned whether this treatment is actually leading to an enhancement of seroton-ergic neurotransmission in OCD. The loudness dependence of auditory evoked potentials (LDAEP, primary auditory cortex) is an indicator of the activity of the brain serotonin system in humans. A high LDAEP in OCD patients should correlate with a central serotonin deficit and should decrease with serotonergic treatment.

**Objective:** To investigate A. the difference in LDAEP between OCD patients and healthy volunteers; and B. the reduction of LDAEP under sertraline treatment.

**Method:** Inpatients with a DSM IV diagnosis of OCD were treated with sertraline (50–100 mg) in combination with multimodal behavioral therapy for 10 weeks followed by outpatient treatment with sertraline for 6 weeks. A comparison with matched healthy controls was performed at baseline. Efficacy was evaluated with the Y-BOCS scale and the Clinical Global Impressions of Change (CGI-C). Auditory evoked N1/P2 activity to tones of increasing intensity was analyzed by dipole source analysis at baseline and after 10 weeks.

**Results:** From 72 enrolled patients (mean age 34.3±10.4 years, 46% female, Y-BOCS 28.4±4.4) 48 (67%) patients completed the inpatient phase and 44 (61%) patients the outpatient phase. The maximum dose of sertraline was 50 mg in 51 (71%) patients and 100 mg in 21 (29%) patients. The Y-BOCS-Score decreased to 14.1±8.0 at week 10 (N=48) and to 12.5±8.2 at week 16 (N=44). 38 (79%) of 48 patients were responders at week 10 (30% Y-BOCS decrease), 35 (80%) of 44 patients at week 16. The corresponding CGI-C responder rates were 65% at week 10 and 71% at week 16.

30 OCD patients (Y-BOCS 28.9 $\pm$ 3.8 at screening) could be analysed at baseline and week 10 with regard to LDAEP. In comparison to 30 matched healthy volunteers they had a higher LDAEP (0.28 $\pm$ 0.24  $\mu$ V/db versus 0.16 $\pm$ 0.14  $\mu$ V/db, p<0.05). After 10 weeks treatment with sertraline, the LDAEP of the tangential dipole decreased compared to baseline (from 0.28 $\pm$ 0.24 to 0.23 $\pm$ 0.21  $\mu$ V/db; t-test: p=0.05) indicating an increase of serotonergic activity with this treatment. The Y-BOCS score decreased to 13.9 $\pm$ 7.0 at week 10.

**Conclusions:** LDAEP in patients with OCD is higher than in healthy volunteers indicating a central serotonin deficit in OCD patients. Treatment of OCD patients with sertraline seems to result in an enhancement of central serotonin which may be rather responsible for the therapeutic response than any secondary process.

## P.1.197 Olanzapine as an add-on treatment for dysphoric mania in bipolar I rapid cycling patients

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**Background:** The simultaneous presentation of manic and depressive symptoms in the same patient is fairly common. The terms dysphoric, mixed or depressive mania have been used as equivalents to mixed states. Pharmacotherapy is less effective in this group of patients. The aim of this study is to determine the effectiveness and safety of olanzapine as an add-on therapy in patients with bipolar disorder with a rapid cycling course during a dysphoric mania episode.

Method: Thirteen patients treated with mood stabilizers during at least one year, and diagnosed of a mixed episode, were included in an open trial. All of them had at least four episodes in the last year. Patients with organic diseases, including altered thyroid function, were excluded from the research. They were all evaluated at inclusion and at day 28. Response was defined as a decrease of 50% in the YMRS and the HDRS, concomitantly with a CGI improvement of 1 or 2.

**Results:** All patients completed the study. The doses of olanzapine were  $16.15\pm5.82$ . There was a reduction in the manic and depressive symptoms in all patients. Ten of the thirteen patients were considered to have responded to the treatment according to the response definition. Adverse effects included somnolence (23.08%) and weight gain  $(0.81\pm1.96 \text{ kg})$  in women,  $2.20\pm2.28 \text{ kg}$  in men).

Conclusions: Our results suggest that olanzapine combined with mood-stabilizers is safe and effective in the treatment of the manic and the depressive symptoms of dysphoric mania with a rapid cycling course. Our sample showed a significant reduction in manic and depressive symptoms after open label treatment with olanzapine added to mood stabilizers. In fact all patients improved in manic and depressive symptoms. Ten of them had sufficient improvements to be considered treatment responders. In conclusion, although the exact mechanism of action is unclear, atypical antipsychotic drugs, and in particular olanzapine may have not only antipsychotic effects but also may have thymoleptic thymoleptic effects on rapidly cycling bipolar patients<sup>31,22</sup>, and also in mixed states.

## References

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