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Increased suicide risk in depressed patients predicted by long-chain fatty acids

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Abstract

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P-04.120 Evaluation of personality traits in depression and in remission

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Objective: The purpose of the present study was to evaluate the effects of depression symptoms on personality traits.

Methods: Eighteen patients who met DSM-IV-TR criteria for unipolar major depression were enrolled in this 24-week prospective study. All patients were classified as endogenous with the Newcastle Scale showing scores up to 6 points. Patients were evaluated at baseline and after 4, 8, 12, 16, 20 and 24 weeks using Hamilton Scale for Depression (HAM-D). They were also evaluated with Eysenck Personality Questionnaire (EPQ) at baseline and after 24 weeks. The HAM-D at baseline was up to 18 points. All patients were treated with escitalopram at required doses, except one patient who was treated with nortriptyline owing to side-effects. The mean of escitalopram dose was 27 mg/day.

Results: HAM-D significantly improved from baseline to endpoint (24.1 to 3.4, $p < 0.0001$). Items of Neuroticism showed a significant difference from baseline to endpoint (17.94 to 13.61, $p = 0.028$). Extraversion also showed a significant difference (9.2 to 10, $p = 0.048$). Additionally, patients with recurrent depression showed significant higher levels of neuroticism at baseline than patients with a first episode of depression (20.20 to 14.62, $p = 0.035$). There was not significant difference at the endpoint. Extraversion scores did not show differences between patients with one or more episodes at baseline or endpoint.

Conclusion: Overall, depression symptomatology increased neuroticism and decreased extraversion. Levels of neuroticism in current depression were higher than levels at first episodes.

P-04.121 Quality of life and social functioning in depressed patients

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Objective: The aim of this study was to assess quality of life, social functioning and residual symptoms in a sample of unipolar major depression patients.

Methods: 58 patients who met DSM-IV-TR criteria for unipolar major depression were evaluated (30 without psychotic symptoms and 28 patients with psychotic symptoms). All patients were considered to show an endogenous depression with the Newcastle Scale score up to 6 points. One year follow-up was performed. Patients were treated naturalistically, and they did not present relapses during the last six months. All patients were evaluated with the SADS-Life (Schedule for Affective Disorders and Schizophrenia), Hamilton Depression Rating Scale (HDRS), social functioning (SASS), quality of life (QLDS), perceived stress (PSS) and Eysenck Personality Questionnaire (EPQ).

Results: Symptoms of depression measured with HDRS correlated negatively with items about quality of life (Pearson's correlations of -0.739 , $p < 0.0001$) and social functioning (-0.505 , $p < 0.0001$) and positively with perceived stress (0.748, $p < 0.0001$). Those correlations were significant even when corrected for neuroticism and extraversion. Moreover, there were not differences between the number of past episodes and the overall functioning and residual symptoms, indicating that residual symptoms should be independent of the number of past episodes. Neuroticism correlated with perceived stress and quality of life but not with social adaptation, and this correlation were significant when for depression symptoms were controlled.

Conclusion: Presence of residual symptoms is correlated with worse quality of life, worse social functioning and more level of stress. Residual symptoms did not show correlation with the number of previous episodes. After controlling personality traits these correlations were still significant.

P-04.122 Improvement in functioning and quality of life measures in patients with major depressive disorder treated with desvenlafaxine

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Objective: To evaluate outcomes related to functioning and well being with desvenlafaxine (administered as desvenlafaxine succinate) in patients with major depressive disorder (MDD).

Methods: Data from the Sheehan Disability Scale (SDS) and 5-item World Health Organization Well-Being Index (WHO-5) were pooled from 4 double-blind, placebo-controlled, 8-week desvenlafaxine clinical trials (ie, all fixed-dose

trials that evaluated these outcomes) in outpatients with DSM-IV MDD. Patients were randomized to fixed doses of desvenlafaxine (50, 100, 200, or 400 mg/d: $n = 1205$) or placebo ($n = 551$). Final on-therapy data were compared between groups using analysis of covariance; adjusted mean differences (desvenlafaxine vs placebo) are presented here.

Results: Desvenlafaxine was associated with significantly greater improvement versus placebo in the SDS total score in the pooled data set (-2.8 ; $P < 0.001$) and in the 50-mg (-2.6 ; $P < 0.001$), 100-mg (-2.6 ; $P < 0.001$), 200-mg (-2.7 ; $P < 0.001$), and 400-mg (-3.2 ; $P < 0.001$) dose groups. Significant improvement ($P < 0.01$) in each of the 4 SDS domains compared with placebo (work, social life/leisure activities, family life/home responsibilities, and work/social disability) was also found for the pooled data set and each of the individual dose groups. For the WHO-5 total score, desvenlafaxine was associated with significantly greater improvement versus placebo in the pooled data set (2.0; $P < 0.001$) and in the in the 50-mg (1.7; $P < 0.001$), 100-mg (2.0; $P < 0.001$), 200-mg (2.3; $P < 0.001$), and 400-mg (2.4; $P < 0.001$) dose groups. Significant improvement ($P < 0.05$) compared with placebo was also found for the pooled data set and the individual dose groups for each of the WHO-5 individual items (good spirits, calm/relaxed, active/vigorous, fresh/rested, and interested in activities).

Conclusion: Desvenlafaxine effectively improved functioning and well being in patients with MDD across a wide range of doses, including the low dose 50 mg.

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P-04.123 Increased suicide risk in depressed patients predicted by long-chain fatty acids

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Objective: A relationship between omega-3 fatty acid intake and depression is suggested by data from epidemiological cross-national comparisons of fish consumption and case control studies. A significant risk factor from depression is suicide, and population studies in Finland and Japan have established that suicide risk decreases with increased fish consumption. In China, patients admitted to hospital for a suicide attempt were found to have significantly lower n-3 fatty acid levels compared to matched controls, with this depletion conferring an eight fold increased risk of suicide. Follow-up studies report omega-3s predict suicide attempts. There are few studies of clinically depressed patients' suicide risk with respect to fatty acid status. This study aimed to assess the relationship between suicide risk and fatty acid levels in clinically depressed patients.

Methods: 60 treatment seeking outpatients suffering a current episode of DSM-IV diagnosed major depression were studied. Half the patients had no suicidal ideas, whereas the other half ($N = 31$) had current suicidal attempts, gestures and/or ideation assessed by a trained psychodiagnostician and measures from the Hamilton Rating Scale for Depression. Fatty acids in red blood cell membranes were analysed and compared between groups.

Results: The overall model found that total n-3 and n-6 fatty acid levels predicted 14% of the variance in suicidal intentions. Further analysis found that Docosapentaenoic Acid (DPA) 22:5n-3 levels predicted severity of suicidal intentions ($r = -0.26$, $p = 0.04$). Lower levels of DPA and total very long chain omega-6 (VLCn6) fatty acids differentiated groups ($F = 3.80$, $p = 0.05$ and $F = 4.89$, $p = 0.03$, respectively). Data from clinical interview was cross-validated against patient self-report using the Beck Depression Inventory-Suicide item. Lower VLCn6 levels also predicted higher self-reported suicidal ideation ($r = -0.25$, $p = 0.04$). Unlike some other studies, lower cholesterol did not predict increased suicide risk.

Conclusion: Low polyunsaturated long-chain fatty acid levels in red blood cell membranes confer a higher risk of suicidal ideation, gestures, and attempts in clinically depressed outpatients. Further study of the clinical significance of these findings is warranted.

P-04.124 Major depression and suicidal ideation in cancer patients

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Objective: Major depression is frequently observed, however, it is underestimated in cancer patients. Major depression is a major risk factor for suicide and for requests to hasten death in cancer patients. Suicidal ideation should prompt a comprehensive evaluation. The purpose of this study was to develop a simple battery for screening major depression and suicidal ideation in cancer patients. The aim of this study was to investigate the prevalence of and factors associated with major depression in cancer patients.