escitalopram-treated patients withdrew due to adverse events (4.6%, n=13) than from the duloxetine group (12.7%, n=36).

Conclusions: Escitalopram showed advantages in efficacy and tolerability compared to duloxetine in the acute treatment of patients with major depression. There were additional benefits for escitalopram-treated patients with severe depression.

P0256

Comparative study of the efficacy of acute and continuation treatment with Escitalopram versus Duloxetine in patients with major depressive disorder

A.G. Wade [1], K. Gembert [2], I. Florea [2]. [1] *CPS Clinical Research Centre, Glasgow, UK* [2] *H. Lundbeck A/S, Copenhagen, Denmark*

Purpose: This study evaluated the efficacy and tolerability of escitalopram and duloxetine in the treatment of major depressive disorder (MDD).

Methods: Patients were randomised to 24 weeks of double-blind treatment with fixed doses of escitalopram (20mg) (n=144) or duloxetine (60mg) (n=151). The primary analysis of efficacy was an ANCOVA of change from baseline to endpoint (Week 24) in MADRS total score (last observation carried forward).

Results: At Week 8, the mean change from baseline in total MADRS score was -19.5 for escitalopram-treated patients (n=143) and -17.4 for duloxetine-treated patients (n=151), a difference of 2.1 points ($p<0.05$). At Week 8, the proportion of responders (at least 50% decrease in MADRS) was 69% (escitalopram) and 58% (duloxetine) ($p<0.05$) and remission (MADRS<=12) rates were 56% (escitalopram) and 48% (duloxetine) (NS). For the primary endpoint, the mean change from baseline in total MADRS score at Week 24 was -23.4 for escitalopram-treated patients and -21.7 for duloxetine-treated patients, a difference of 1.7 points ($p=0.055$, one-sided). The difference in mean change from baseline in MADRS total score favoured escitalopram at Weeks 1, 2, 4, 8, 12, and 16 ($p<0.05$). The overall withdrawal rates were 22% (escitalopram) and 26% (duloxetine) (NS). The withdrawal rate due to adverse events was lower for escitalopram (9%) compared to duloxetine (17%) ($p<0.05$) and significantly more patients treated with duloxetine reported insomnia (12.6% versus 4.9%) and constipation (8.6% versus 2.8%).

Conclusion: Escitalopram was superior to duloxetine in acute treatment, and at least as efficacious and better tolerated in long-term treatment of MDD.

P0257

Detection of depressive patterns in neuropsychological performance by artificial neural networks

B. Weber [1], B. Wiebel [2], K. Israel-Laubinger [1], V. Gapp [1], N. Helbing [1], K. Maurer [1], T. Wetterling [3]. [1] *Clinic for Psychiatry, Psychosomatics and Psychotherapy, J. W. Goethe University, Frankfurt/Main, Germany* [2] *Department of Psychological Medicine, Evangelisches Krankenhaus Lütgendortmund, Dortmund, Germany* [3] *Clinic for Psychiatry and Psychotherapy - Gerontopsychiatry, Vivantes Klinikum Hellersdorf, Berlin, Germany*

Neuropsychological impairment in depression is less concise compared to schizophrenia, dementia or other brain disorders. It is varying between patients and over time in the natural course of depression. Furthermore it depends on various co-variables. These characteristics make the detection of depressive patterns in neuropsychological performance very difficult for conventional statistics.

Artificial neural networks are highly parallel nonlinear teachable systems of information processing. They are used for pattern recognition and classification tasks in different fields and can be superior to conventional linear statistics in the analysis of complex data.

The results of 1100 neuropsychological examinations of psychiatric patients with varying diagnoses and healthy controls were used to train different kinds of neural networks. The neuropsychological battery (NEUROBAT) consists of usual test paradigms as optical reaction time, a go-nogo task, recognition and free memory recall, sensorimotor interference and a continuous performance task.

Trained multilayer perceptrons and radial basis function networks allowed a significant recognition of depressive patterns. Patients were classified correctly in up to 71% of cases, whereas up to 64% of depressive disorders were recognized correctly by linear artificial neural networks.

Recognition of depressive neuropsychological patterns seems to be possible by artificial neural networks. But sensitivity and specificity are too low for a possible support of clinical diagnostics. The superiority to linear classification models could not shown clearly. More complex hierarchical neural networks, as they are commonly used in picture recognition, should be tested in future studies in order to improve classification results.

P0258

The correlation of alexithymia, leptin, and depression: A prospective study

T.T. Yang [1,2], G.M. Jow [2], Y.M. Chu [1]. [1] *Department of Psychiatry, Cardinal Tien Hospital, Taipei, China* [2] *School of Medicine, Fu-Jen University, Taipei, China*

Background: We designed a prospective study to determine if an association exists between alexithymia, leptin levels and hopelessness in patients with major depressive disorder, before and after treatment.

Methods: The study included 170 patients suffering from major depressive disorder, and they were divided into 2 groups: 100 subjects with alexithymia (MDD-A) & 70 subjects without alexithymia (MDD-nonA). All patients received 12 weeks of fluoxetine treatment.

Results: After 12 weeks treatment, the MDD-nonA group had a significant increase in leptin levels compared with the MDD-A group (25.7% vs 9.5%). In addition, there was a significant decrease in hopelessness level in the MDD-nonA group compared with the MDD-A group (35.0 % vs 17.6 %). At the index week and follow-up week, the MDD-A group showed significantly higher scores of alexithymia, Beck depressive index (BDI), and hopelessness than the MDD-nonA group; the MDD-A group had significantly lower levels of leptin than the MDD-nonA group. The correlation coefficients between alexithymia and BDI, between alexithymia and hopelessness, and between alexithymia and leptin levels were not statistically significant. However, the correlation coefficients among BDI, hopelessness, and leptin levels were significant.

Conclusions: Our findings supported the premise that alexithymia, decreased leptin levels , BDI, and hopelessness are related and that both decreased leptin levels and hopelessness are strongly associated with severity of depression . These findings further reveal that alexithymia and depression are distinct constructs.

https://doi.org/10.1016/j.eurpsy.2008.01.546 Published online by Cambridge University Press