

**Objective:** To assess and compare the quality of life in HIV patients with and without depression.

**Methodology:** 100 HIV positive subjects were interviewed in a case control study. Subjects were interviewed by a psychiatrist to diagnose depression and HAM-D was used to rate the severity of depression. HAT-QOL was employed to assess Health related Quality of Life in these patients.

**Results:** 50 HIV patients were diagnosed to be depressed. 23% were mildly depressed, 19% were moderately depressed, 7% were severely depressed and 1% was very severely depressed. Mean QOL scores in depressed HIV patients were found to be significantly lower than that in non-depressed patients in all 9 dimensions.

**Conclusion:** HIV itself impairs QOL in HIV patients. Depression further worsens the QOL in these patients. Diagnosing depression in this set of HIV patients is the first step towards improving their Quality of Life.

## P0253

Depression and Parkinson's disease: Frequency and treatment

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Parkinson's disease represents the affection of extrapyramidal system-part of the central nervous system. Dominating clinical signs are tremor, rigor, bradykinesia, and postural instability. It is widely known that Parkinson's disease is connected with psychical symptoms, which can precede the neurological symptoms or appear during the illness itself. These symptoms are represented by psychomotor retardation, symptoms of depression, or dementia in Parkinson's disease.

This study was conducted at Neuropsychiatric Ward of Military Hospital Nis in a period January - September 2007. It included all the patients diagnosed with Parkinson's disease, treated in this ward in a period January - September 2007. We tried to establish appearance of comorbid psychiatric symptoms / syndromes, especially depressive syndrome, within the basic neurological disorder. Investigators followed patients' neurological status through regular neurological examination and symptoms of depression were assessed with Hamilton's Depression Scale (HDRS) that was used as instrument of clinical assessment.

Results of this study confirm previously reported facts that depression is one of the most common psychiatric syndromes connected to Parkinson's disease, whether as prodromal symptom or as comorbid disorder. Results of the study indicate that depression is rarely recognized as prodromal symptom of Parkinson's disease, which has its negative influence considering successful treatment of this disorder. Patients treated at this ward were treated with antidepressants (SSRI and SARI group), all along with causal treatment, which improved their psychological, but also neurological condition.

## P0254

Variability of oral Methadone dosages in three outpatient clinics in Paris

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**Aims:** The mean oral methadone dosage is reported to be 60-100 mg per day (Vazquez 2006).

**Methods:** We measured methadone oral dosages in three methadone clinics in Paris (Espace Murger, Marmottan, Horizons). The number of patients evaluated was 197. They were all at the steady state of methadone treatment. The influence of sex, center, age and retention in the program on prescribed oral dosage was tested with  $\chi^2$  and spearman tests.

**Results:** The mean dosage was 52 mg/d (+/- 28). The mean retention in the methadone program was more than three years. The dose range was [5-130]. The dosage was not different according to sex ( $p=0,388$ ), retention ( $p=0,744$ ), and age ( $p=0,144$ ). But the dosages were statistically different according to the center: 60 mg/d in Horizons ( $N=37$ ), 54 mg/d in Murger ( $N=104$ ), and 44 mg/d in Marmottan ( $N=56$ ) ( $p=0,022$ ).

**Conclusion:** This study confirms the great variability of methadone oral dosages in France, with a center-effect. Dosages that were found are still lower than what is found in other countries [5-350 mg/j] (Eap 2000). Other variability factors are to be considered: clinical, pharmacokinetic and pharmaco-dynamic factors.

## References:

- [1]. Vazquez V, Gury C, Laqueille X. Méthadone : de la pharmacocinétique à la pharmacologie clinique. *L'Encéphale* 2006 ; 32 : 478-86
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## P0255

Escitalopram and Duloxetine in the treatment of major depression

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**Purpose:** To compare the tolerability and efficacy of escitalopram and duloxetine in the treatment of patients with major depressive disorder over 8 weeks.

**Methods:** Data from two randomised, multi-centre, double blind studies in specialist or psychiatric and general practice settings were pooled and analysed for all patients and for severely depressed patients (baseline MADRS at least 30). The primary efficacy measure in both studies was the MADRS total score.

**Results:** Patients were randomised to either escitalopram (10-20mg/day) ( $n=280$ ) or duloxetine (60mg/day) ( $n=284$ ). Escitalopram was statistically significantly superior to duloxetine with respect to mean change from baseline in MADRS total score at Weeks 1, 2, 4, and 8 (LOCF). The mean treatment difference at Week 8 was 2.6 points ( $p<0.01$ ). For severely depressed patients, a mean treatment difference at Week 8 of 3.7 points ( $p<0.01$ ) was seen. Response to treatment at Week 8 was statistically significantly greater for patients treated with escitalopram, as was remission when defined as MADRS  $\leq 10$  or 12. The percentage of escitalopram-treated patients that withdrew (12.9%,  $n=36$ ) was significantly ( $p<0.001$ ) less than in the duloxetine group (24.3%,  $n=69$ ). Significantly fewer ( $p<0.001$ )

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

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**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

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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

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**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.