

were randomly assigned to receive olanzapine (dose, 2.5–7.5 mg per day) or risperidone (dose, 0.5–4.5 mg per day). Patients were followed for up to 10 weeks. The main outcomes were the scores of the Clinical Global Impression of Change (CGIC) scale and Brief Psychiatric Rating Scale (BPRS).

**Results:** There were no significant differences among treatments with regard to improvement in risperidone and olanzapine group on the CGIC ( $3.2 \pm 4.3$  vs.  $3.5 \pm 5.8$  & P Value = 0.564) and BPRS scale ( $8.2 \pm 9.2$  vs.  $8.8 \pm 9.2$  & P Value = 0.522). Furthermore, although the number of patients who had left the study cause of side effects, was greater in risperidone group, sedation and headache are more common with olanzapine than risperidone.

**Conclusion:** Both risperidone and olanzapine might be useful and reasonable treatment for patients who suffering from behavioral disturbances due to psychosis in Alzheimer disease

## P0014

The outcome of dementia in Clinical County Hospital of Arad

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**Objective:** The aim of this study is to appreciate the outcome of patients diagnosed with dementia in the Psychiatric Clinic of Arad, Romania.

**Material and Methods:** The study was conducted on 40 patients admitted in the Clinic during January 2006–July 2007. They were diagnosed with Alzheimer and mixed dementia. The diagnosis was established according to ICD-10 and DSM-IV-TR operational criteria.

The patients were evaluated three times, at the admission, at discharge and after 6 months of clinical evolution and treatment through psychiatric exam and psychological assessment (MMSE–Mini Mental State Evaluation and QI–Quotient of Intelligence).

The patients were treated with acetylcholinesterase inhibitors (donepezil) and NMDA (N-metil-D-aspartat) inhibitors (memantine). Some patients ( $n=20$ ) were treated with occupational psychotherapy also.

**Results and Conclusions:** The diagnosis of mixed dementia is more frequent than Alzheimer dementia (26 vs. 14). Almost all the patients were professionally inactive ( $n=34$ ). The QI is in direct relationship with the MMSE scores at the admission and in inverse relationship with the hospitalization period. The hospitalization period is in inverse relationship with the MMSE scores. Almost all the patients present a moderate cognitive impairment, according to MMSE score ( $n=24$ ). Temporal and spatial orientation, registration and recall were affected to all patients. The improvement of cognitive impairment, evaluated at discharge, was minimal. 14 patients presented no improvement at all and the others 26 recorded a 1 or 2 points improvement. After 6 months of treatment, the average of MMSE scores increased with 0.9 points versus 0.4 points after discharge. Those patients who were treated with occupational psychotherapy have had a favorable improvement of average MMSE scores (1.4 points versus 0.3 points).

## P0015

Reduction in brain atrophy associated with Ethyl-Eicosapentaenoic Acid in Patients with Huntington's disease

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**Background and Aims:** Ultra-pure ethyl-EPA, a semi-synthetic, ethyl ester of eicosapentaenoic acid, is associated with clinical improvement in motor functioning in Huntington's disease. The aim was to determine the extent to which it might reduce the rate of progress of cerebral atrophy.

**Methods:** High-resolution MRIs were acquired at baseline, six months and one year in 30 patients with stage I or II Huntington's disease who took part in a randomized, double-blind, placebo-controlled trial of 2 g daily ethyl-EPA. For each subject and each pair of T1 images, the two-timepoint percentage brain volume change was estimated in a double-blind fashion using SIENA (Structural Image Evaluation, using Normalisation, of Atrophy), Version 2.5, part of FSL (version 4.0, <http://www.fmrib.ox.ac.uk/fsl>).

**Results:** Figure 1 shows areas of significant group-level reduction in brain atrophy between patients receiving ethyl-EPA and those receiving placebo (red-yellow: the colour bar shows the p-value under the null hypothesis of no change). Significant changes are observed at the head of the caudate and the posterior section of the thalamus.

**Conclusion:** Treatment with ethyl-EPA is associated with significant reduction in brain atrophy in Huntington's disease, particularly in the caudate and thalamus. No other drug tested in Huntington's disease has shown this effect (fx).



## P0016

Alzheimer's disease – type 3 diabetes?

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The negative influence of diabetes mellitus (DM), both insulin-dependent and non-insulin dependent on the level of cognitive functions has been proven in multiple studies. DM is considered one of the primary risk factors for vascular dementia. The results of epidemiological studies suggest that DM increases the risk of Alzheimer's disease (AD) by 50–100% as well. The effect is largely independent of other, so-called vascular risk factors. The association could be explained by chronic brain hypoperfusion, the toxic effects of hyperglycaemia itself (damage to the blood-brain barrier), and the mediating role of insulin. Since the discovery of insulin and its receptors in the central nervous system, brain has no longer been considered an insulin-independent organ. Physiologic concentrations of insulin exert a beneficial effect on cognition. Too low a concentration of insulin in the periphery as well as hyperinsulinaemia, usually as a result of insulin resistance, both can significantly increase the risk of AD (even in people not suffering from DM!). There are several mechanisms through which central hypoinsulinaemia can accelerate the generation of