

binge eating disorder (BED), bulimia nervosa-purging type (BN-P) and bulimia nervosa-non purging type (BN-NP).

Methods: The participants were 102 female patients (34 BED, 34 BN-P and 34 BN-NP), mean age 28.7. Assessment measures included the following tests: EDI-2, BITE, EAT-40, SCL-90-R and TCI-R, and other clinical and psychopathological indices that were collected via semi-structured interview.

Results: When compared all three groups, BED were the oldest group, showed more frequent familial history of obesity and current or lifetime obesity. Regarding psychopathology, BN-P patients showed the most pathological scores, followed by BN-NP patients and BED patients showing the least pathological scores. Specifically, BN-P patients showed statistically higher scores than BED patients on SCL-90-R Paranoid Ideation, EAT-40 total score, EDI-2 Impulsivity subscale, and BITE Severity subscale. No statistically significant differences were observed among groups, on personality traits. A two-step cluster analysis procedure was conducted, to determine the clinical proximity among the three diagnostic groups. The relationship between cluster classification and diagnosis was statistically different ($p < 0.001$), so we can assume that the present classification maybe does not classify accurately eating disorders.

Conclusions: Even when BED patients present differential characteristics with respect to family and personal antecedents when compared to BN patients, clinical and psychopathological overlapping with BN-NP makes them similar. Likewise, our results suggest deficiencies in the current nosological system, since it does not group patients' subgroups which are homogeneous enough.

Poster Session I: Brain Imaging

P0359

Imaging of the serotonin-2A receptor in the canine brain: Before and after pipamperone administration

K. Audenaert¹, B. De Spiegeleer³, E. Buntinx³, V. Vergote³, E. Vandermeulen², S. Vermeire², A. Dobbeleir², F. De Vos⁵, K. Peremans². ¹Department of Psychiatry and Medical Psychology, Faculty of Medicine and Health Sciences, University Gent, Gent, Belgium ²Department of Medical Imaging, Faculty of Veterinary Sciences, University Gent, Gent, Belgium ³Drug Quality and Registration (DRUQUAR), Faculty of Pharmaceutical Sciences, University Gent, Gent, Belgium ⁴Anima Research Centre, Alken, Belgium ⁵Laboratory of Radiopharmacy, Faculty of Pharmaceutical Sciences, University Gent, Gent, Belgium

Background and Aims: Recent publications have drawn attention to the role of serotonin-2A receptors in mood disorders. Low doses of atypical antipsychotics, like the butyrophenone pipamperone, are suggested as an augmentation strategy in the antidepressant treatment of mood disorders, in addition to conventional antidepressant therapies.

Functional imaging studies with highly specific receptor ligands allow quick assessment of drug-receptor occupancy at different doses of drugs - here pipamperone at 5mg and 10mg doses - in a large animal model.

Methods: Three healthy drug-naïve female Beagle dogs, aged 7 years, were included.

Dogs were scanned before treatment and after administration of one dose of pipamperone of 5mg and 10 mg, 90 minutes prior to injection of the tracer. Acquisition was performed under general anaesthesia 90 minutes after injection of the tracer. The acquisition for both investigations was performed with a triple head gamma camera equipped with LEHR collimators. The images were reconstructed with HOSEM iterative reconstruction and application of a Butterworth-postfilter (cut-off 1,2 cycles/cm, order 8).

Results: The mean binding serotonin-2A binding index before treatment in the frontal cortex was 1.47. In the 5 mg pre-treatment condition, the binding index was reduced to 1.29 and in the 10 mg pre-treatment condition, it was reduced to 1.04. Non-parametric statistics (Friedman related-samples test) yielded a p-value of 0.05.

Conclusion: Even in the very low dose range (5mg-10mg) of pipamperone, there was a significant and dose-dependent reduction in serotonin-2A binding index in the three dogs.

P0360

Visual rating and volumetry of hippocampus on magnetic resonance imaging in Alzheimer disease

A. Bartos^{1,2}, P. Zach³, I. Ibrahim⁴, D. Ripova¹. ¹AD Center, Psychiatric Prague Center, Prague, Czech Republic ²Charles University in Prague, Third Faculty of Medicine, University Hospital Kralovske Vinohrady, Department of Neurology, Prague, Czech Republic ³Charles University in Prague, Third Faculty of Medicine, Institute of Anatomy, Prague, Czech Republic ⁴Ikem, Prague, Czech Republic

Background and Aims: Early and focal atrophy of medial temporal lobes on magnetic resonance imaging (MRI) in patients with Alzheimer disease (AD) can be measured in several ways.

Methods: In 20 patients with probable Alzheimer disease and 29 cognitively normal elderly medial temporal lobe atrophy (MTA) was measured by volumetry using manual tracing of the hippocampus. The volume of the hippocampus was also rated into five categories expressed as MTA scores ranging from 0 (no atrophy) to 4 (severe atrophy) using a simple and quick semiquantitative method according to the published combined widths or the height of selected three mediotemporal structures.

Results: In comparison to controls, AD patients had significantly smaller volume of either hippocampus (median volume of the hippocampus Hipp dx: 1,81 vs 2,23 $p=0,001$; Hipp sin: 1,60 vs 2,14 $p=0,003$; Hipp bilat: 3,40 vs 4,31 $p=0,0004$). The total MTA score of both sides were significantly higher in AD patients (median 4) than that in controls (median 1) ($p=0,0004$). Nearly 60 % cognitively normal seniors had the MTA score $\leq 0,5$. A similar proportion of patients with AD (65 %) had the MTA score ≥ 2 .

Conclusions: Hippocampal loss of tissue can be detected by visual rating and volumetry on MRI in patients with AD. Visual MTA rating is the easier and quicker method than more accurate and time consuming volumetry to support the diagnosis of AD on the brain MR imaging.

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P0361

Delta-9-tetrahydrocannabinol modulates parahippocampal and ventral striatal activity during processing of verbal memory