

Design: We studied 107 consecutive bariatric surgery candidates immediately before and six and twelve months after the operation (adjustable gastric band). All participants completed the Eating Disorder Examination (EDE 12.0D, Fairburn and Cooper, 1993), the Body Dysmorphic Disorder Examination (BDDE, Rosen and Reiter, 1994), the Binge Eating Scale (BES, Gormally *et al.*, 1982), the Shame and Guilt Susceptibility Scale (SSCV, Battacchi *et al.*, 1998) and the Body Uneasiness Test (BUT, Cuzzolaro *et al.*, 1999). EDE 12.0D and BES were used to evaluate binge behavior and to support the diagnosis of *BED*. BDDE was used to exclude a double diagnosis of *BED* and body dysmorphic disorder and to assess negative body image through a semistructured interview. SSCV evaluates guilt and shame emotions on eleven subscales. The BUT is a new self-report questionnaire: higher scores (Global Severity Index) indicate greater body uneasiness. BUT provides moreover scores on five subscales: *Weight Phobia*, *Body Image Concerns*, *Avoidance*, *Compulsive Self-Monitoring*, *Depersonalization*.

Results: At baseline, the subjects with binge eating disorder presented a significantly more negative body image (BUT and BDDE) with more intense feelings of shame and guilt (SSCV). At 6-month follow-up weight reduction was frequently, but not constantly, associated with less body uneasiness. Body dissatisfaction insignificantly increased at 1-year follow-up.

Discussion: Body image may not change in tandem with weight modification and weight loss is not always a sufficient solution of body image concerns in obese subjects (*vestigial body image*, according to Cash). It will be essential to know longer term effects of weight loss on body image and to analyse predictors of outcome.

FC12. Schizophrenia III

Chairs: A. Laurent (F), K. Hynek (CZ)

FC12.01

RISPERIDONE FOR CHRONIC SCHIZOPHRENIC PATIENTS ON DEPOT NEUROLEPTICS: A DETAILED CLINICAL AUDIT AND SWITCH STUDY

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Background: Data on the efficacy of novel antipsychotics in schizophrenia is largely a series of open multicentre and non randomised trials on schizophrenic subjects where representation remains unclear. The aims of the study were to (i) carry out a clinical audit of all patients on depot neuroleptics and from this identify those patients who would be eligible for a switch to oral risperidone (ii) to conduct a trial of Risperidone in all eligible and consenting patients.

Method: A detailed clinical audit of patients on depot neuroleptics was performed and included assessments of symptomatology, side-effects, quality of life, insight and attitude to medication. Eligible and consenting patients participated in a 6 month open trial of Risperidone and all consenters and non-consenters were followed up to 12 months assessing clinical status, side-effects and quality of life.

Results: Of 143 patients audited on depots in a service area of approx 100,000 population 69 were eligible for the trial and of these 33 consented to switch. 23 (76.7%) completed 6 months of treatment with Risperidone and all had a good outcome. Reasons for early dropout comprised non-compliance (4), adverse events (3), withdrawal of consent (2) and insufficient response (1). At 12 months 19 patients were still taking risperidone.

Conclusions: The study suggests that about 50% of consenting patients from amongst these with chronic schizophrenia receiving depot neuroleptics will do well when switched to oral Risperidone. Audit and 6 and 12 month follow-up data will be presented.

FC12.02

COULD THE SCHIZOTYPAL FEATURES EXPLAIN THE EQUIVOCAL FINDINGS OF THE WISCONSIN CARD SORTING TEST IN THE FIRST-DEGREE RELATIVES OF PATIENTS WITH SCHIZOPHRENIA?

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Even though the Wisconsin Card Sorting Test (WCST) has been proposed as an indicator of vulnerability to schizophrenia, no agreement can be found in the WCST studies of first-degree relatives of patients with schizophrenia. The aim of this study was to evaluate whether these equivocal findings could be reconciled if one takes into account the schizotypal features of the first-degree relatives.

Twenty four patients with schizophrenia, 49 of their first-degree relatives and 40 controls performed the computerised version of the WCST and were evaluated by the Social Anhedonia (SA), Physical Anhedonia (PA), Perceptual Aberration (PAS) and Magical Ideation (MI) scales. Non parametric Kruskal-Wallis and Mann-Whitney tests were used since the variables were not normally distributed.

The number of categories achieved was lower ($p < 0.03$) and the number of trials to complete the first category was higher ($p < 0.01$) in the schizophrenic than in the control group; none of the 8 WCST indexes studied was significantly different between the first-degree relative and control groups. The four scores of schizotypy were significantly higher in the patient group than in the control group (SA: $p < 0.01$; PA: $p = 0.0001$, PAS: $p < 0.0005$; MI: $p < 0.01$); in the first-degree relative group, the SA score tended to be higher ($p = 0.15$) than in the control group and the PA and PAS scores were intermediate between those of the patient and control groups. The number of perseverative responses (PR) and the number of perseverative errors (PE) were significantly higher in the subgroup of first-degree relatives whose SA score was 2SD above the mean of the control group ($p < 0.05$) than in the subgroup of the other first-degree relatives; a similar trend was found for the PA scale (PR: $p = 0.09$; PE: $p = 0.08$).

In conclusion, this study shows a link between the WCST performance and the negative dimension of schizotypy and supports the hypothesis that the lack of agreement between studies of first-degree relatives of patients with schizophrenia could be explained by discrepancies in schizotypal features.

FC12.03

RECENT DERMATOGLYPHIC STUDIES IN TWIN SAMPLES: FURTHER EVIDENCES FOR AN ENVIRONMENTAL RISK FACTOR IN SCHIZOPHRENIA

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Introduction: Examination of dermatoglyphic abnormalities as ridge dissociation (RD) and abnormal palmar flexion creases (APFC), may constitute enduring evidence of a prenatal insult occurred during the first or second trimester of intrauterine life. These measures can provide an indirect means to examine hypotheses relating abnormal CNS developmental processes to later psychoses.

Twin studies constitute a good adequate strategy to evaluate the importance of genetic and environmental effects.

Method: RD and APFC were studied in three independent samples of MZ twins discordant and concordant for psychosis. Samples were: i) 24 pairs with one or two affected twins (10 pairs and 14 pairs respectively) and 13 pairs of well control twins held in the Department of Genetics at the Institute of Psychiatry; ii) 19 MZ pairs concordant, 31 pairs discordant drawn from the recent NIMH twin sample; iii) 27 pairs of MZ twins concordant and discordant for psychosis and related disorders (17 and 10 pairs, respectively) and 10 pairs of well control MZ twins from the ongoing Maudsley twin study.

Dermatoglyphic analysis was conducted blind to concordance and diagnostic status in all the cases.

Results: The first study reported higher risk of APFC and RD in MZ affected compared to non-affected twins (O.R = 6.8, 95% CI: 2–23.5) (Van Os *et al. Biol. Psychiatry, 1997*). These results have been replicated again in the NIMH twin sample (O.R = 2.4, 95% CI: 0.8–7.1) (Rosa *et al., Am. J. Psychiatry, in press a*) and in the twin sample from the Maudsley Hospital in London (O.R. = 3.25, 95% CI: 1.03–10.31).

Conclusion: These results confirm previous work suggesting that non-genetic factors acting early during pregnancy contribute towards the liability to develop psychosis in later.

FC12.04

MAY P300 HELP DIFFERENTIATE THE SYNDROMATIC PATTERNS IN SCHIZOPHRENIA?

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Abnormalities in P3 amplitude and latency in schizophrenia have been extensively replicated. They seem to reflect some kind of defective information processing, probably relating to problems in attention and/or "working memory". In order to address the problem of the relation between P3 and clinical and cognitive dimensions of the disease we selected 15 medicated, stable, schizophrenic patients (according to DSM-IV) and compare them with 16 healthy volunteers with no previous history of psychiatric disorders in measures of P300 latency and amplitude. Mean age in the patient group (n = 15, 11 m., 4 f.) was 27.7 (±5.08) and 27.6 (±5.6) years for the controls (n = 16, m.). Mean illness duration was 7.43 (±5.2 years) beginning at 20.3 (±3.56) years. The PANSS (Kay *et al., 1987*) was used to assess the psychopathologic profile and the WAIS was performed by all patients. The results from P300 was obtained using the "odd-ball" paradigm. EEG recordings were made using the 10–20 I.S. with 16 electrodes. Statistical analysis was performed using the Mann-Whitney test for the comparison of the independent samples. Spearman's correlation coefficient was used to compare the P300 measures and clinical and cognitive variables. Values of p ≤ .05 were considered statistically significant. As could be expected schizophrenics displayed diminished amplitudes (6.69 μV ± .08 vs. 12.41 μV ± .07) and longer latencies (299 ± 22.6 vs. 197 ± 16.8; p = .02). No significant correlations were found between age of onset, illness duration, the PANSS scores and P300 measures, despite the negative association between P300 amplitude and "affective flattening" (–.518, p = .048) and WAIS results.

Concl.: Schiz. had longer latencies and diminished amplitudes when compared to a healthy control group; Patients present low cognitive performance. Absence of correlations between ERPs results and psychopathology and cognitive performance could mean that P300 might represent some sort of neurophysiologic

"endophenotype" present through the schizophrenic spectrum, independent of its syndromatic presentation.

FC12.05

SMOKING IN SCHIZOPHRENIA: PREVALENCE AND ASSOCIATED FEATURES

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Background: The prevalence of cigarette smoking is very high in patients with schizophrenia (SCH), which are quite heterogeneous. The aim of the present study was to determine the prevalence of cigarette smoking and its association to other clinical features in SCH, taking into account the distinction between moderate and heavy smoking.

Subjects and Method: A sample of 250 consecutive out-patients with SCH were assessed in their symptomatology (on the PANSS), extrapyramidal signs or symptoms, all current medications, and current use of illegal drugs, alcohol, caffeine, and tobacco. According to their score on the Fagerström Test for Nicotine Dependence (FTND), they were classified as non-smokers (NS), moderate smokers (MS; ≤7 on the FTND), and heavy smokers (HS; >7 on the FTND). The groups were compared by χ² tests, Kruskal-Wallis tests, and by logistic regression two by two.

Results: The patients' mean (±SD) age was 36.1 (±9.5) years (range, 17–71), and their age at diagnosis 21.9 (±6.0; range, 10–40). Out of the 250, 195 (78%) were males; 77 (30.8%) were NS; 92 (36.8%), MS (median, 20 cigarettes/day); and 81 (32.4%), HS (median, 40). The prevalence rate of smoking was significantly higher in our sample than in the general population of Andalusia, in both males (75% vs. 37%) and females (49% vs. 23%). Caffeine, alcohol, and cannabis consumption were significantly associated to moderate and heavy smoking (linear association). Both the number of psychiatric hospitalizations and the mean daily antipsychotic dose (in chlorpromazine equivalents) were significantly higher in HS than in the two other groups. The PANSS total score was lower in MS than in both NS and HS. These main differences were confirmed by logistic regression.

Conclusions: An increased prevalence of smoking is associated to SCH. Among the patients with SCH, HS are an especially deteriorated group.

FC12.06

ALIEN VOICES: DOES DYSFUNCTIONAL SELF-MONITORING EXPLAIN AUDITORY HALLUCINATIONS IN SCHIZOPHRENIA?

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Introduction: Disordered verbal self-monitoring is characteristic of patients with schizophrenia with active auditory hallucinations. We have investigated this dysfunction in an event-related functional magnetic resonance imaging (fMRI) study in which overt verbal self-monitoring is engaged.

Method: Subjects read aloud adjectives and heard their voice which were either: (i) undistorted; (ii) distorted (by a pitch change); (iii) replaced by another ("alien") voice or; (iv) by a distorted voice ("distorted alien"). Subjects were male patients with schizophrenia with active hallucinations, patients in remission, and controls. T2*-weighted images were acquired in 12 non-contiguous axial planes on a 1.5 Tesla GE Signa System, retrofitted with Echo