

Assessing HRV, SCR, and IGR under treatment with psychotropic drugs, one can objectify autonomic dysfunction caused by side effects. Maybe, this non-invasive biomonitoring will become a helpful diagnostic tool in the treatment of patients.

FC06.06

DECREASED SEROTONIN 5-HT_{2A} BINDING POTENTIAL IN PATIENTS WITH ANOREXIA NERVOSA

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Background: Indirect evidence through challenge tests has shown decreased serotonergic function in anorexia patients. Neuroimaging techniques offer the possibility to investigate in vivo functional characteristics of the serotonergic system.

Methods: In this study the 5-HT_{2a} receptor of 21 patients with eating disorders (8 anorexia nervosa restricting type, 9 anorexia nervosa purging type and 4 bulimia nervosa purging type; free of psychotropics except for benzodiazepines) was studied by means of the radio-iodinated 5-HT_{2a} receptor antagonist 4-amino-N-[1-[3-(4-fluorophenoxy)propyl]-4-methyl-4-piperidinyl]-5-iodo-2-methoxybenzamide (123I-5-I-R91150). 10 age-matched healthy controls were included. All received an intravenous injection of 185 MBq/70 kg 123I-5-I-R91150 and were scanned with brain Single Photon Emission Computed Tomography (SPECT). Stereotactically realigned images were analysed semi-quantitatively using predefined volumes-of-interest. Serotonin binding capacity was expressed as ratio of specific to non-specific activity. The cerebellum was used as a measure of non-specific activity.

Results: Significant reductions in left frontal binding potential were found in the anorectic group ($p = 0.04$), but not in the bulimia subgroup. In the anorectic group, a significant frontal asymmetry was present with decreases on the left side (frontal lobe ratio R/L = 1.05, $p = 0.001$), most prominent high-frontal and in the subgroup with purging behavior. The left parietal cortex had a significant lower binding potential for the anorectic group ($p = 0.02$).

Interpretation: Brain SPECT of 5-HT_{2a} serotonin receptor system in anorexia patients shows evidence of decreased and asymmetric frontal binding potential of the 5-HT_{2a} receptor, indicating a decrease in number and/or in binding affinity of 5-HT_{2a} receptors.

DE02. Has dynamic psychiatry a future?

Chair: A.W. Clare (IR)

DE02.01

HAS DYNAMIC PSYCHIATRY A FUTURE?

Pro: A.A. Dahl, *Contra:* D. Goldberg

No abstract was available at the time of printing.

SES10. AEP Section "Epidemiology and Social Psychiatry": Dementia and its care in Europe

Chairs: A. Mann (UK), S. Weyerer (D)

SES10.01

EPIDEMIOLOGY OF DEMENTIA AND COGNITIVE IMPAIRMENT: RECENT DEVELOPMENTS

C. Brayne

No abstract was available at the time of printing.

SES10.02

EUROCARE: A CROSS-NATIONAL STUDY OF CO-RESIDENT SPOUSE CARERS FOR PEOPLE WITH ALZHEIMER'S DISEASE

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Background: While there are positive as well as negative elements to the caring role, carers are at high risk of psychological distress and the comprehensive cost of caring has social, economic and health based elements. Co-resident carers, especially spouses, are of primary importance in maintaining people with dementia in their own homes in the community rather than in institutional settings which may be both more costly and have greater environmental poverty. There have, however, been few studies investigating factors associated with carer strain between different countries. We therefore carried out a study aimed at producing a cross national profile of co-resident spouse carers across the EU incorporating quantitative and qualitative elements.

Design: 20 co-resident spouse carers of people with probable AD were recruited from service contacts in each of fourteen out of the fifteen counties of the EU. All completed a semi-structured interview which included: socio-demographic data; health and social service use; the Carer Burden Inventory (CBI); the General Health Questionnaire-12 (GHQ-12); and open ended qualitative questions about the experience of caring.

Results: 280 couples were recruited. There was marked variation in all variables of interest between countries, but consistently high ratings of carer burden (mean CBI scores between 28 and 52) and psychological distress (between 40% and 75% scoring 4 or more on the GHQ-12). Using multivariate analyses to estimate the individual associations of variables of interest with carer strain, controlling for the effects of all other variables in the model: 11.4% ($p = 0.003$) of the variance was accounted for by between country variation; 4.9% ($p < 0.001$) by expressed financial dissatisfaction; 4.5% ($p = 0.001$) by lower carer age; 3.2% ($p = 0.004$) by difficulties with spouse behavioural deficits; and 2.0% ($p = 0.024$) by perceived negative social reactions. Overall, the most commonly expressed difficulties reflected: loss of companionship and reciprocity, and deterioration in their partners' social behaviour. Satisfaction from caring stemmed from: a feeling of job satisfaction; continued reciprocity and mutual affection; companionship; and the fulfilment of a sense of duty.

Conclusions: This study confirms the high level of burden and mental distress in spouse carers for people with Alzheimer's Disease in the EU. These data suggest avenues for the primary and secondary prevention of burden by addressing clinical issues (eg

behavioural disturbance); public attitudes (eg negative social reactions); economic support for carers (eg financial dissatisfaction).

SES10.03

SPECIAL CARE UNITS FOR DEMENTED PATIENTS

G.B. Frisoni

No abstract was available at the time of printing.

SES10.04

THE BURDEN OF CARE AMONG NURSES IN HOMES FOR THE ELDERLY

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Background: Geriatric caregivers are subject to a high level of occupational stress: shift work, understaffing, care of the severely disabled, frequent confrontation with death and dying. Epidemiological studies indicate that these work stressors frequently lead to physical and mental health problems. Due to the changes following the establishment (July 1, 1996) of a program of long-term care insurance in Germany, occupational stress among geriatric caregivers in long-term care institutions is assumed to have increased.

Design: We aimed to test temporal changes in the job conditions and in job strain by a representative follow-up study in 15 residential homes and nursing homes in the city of Mannheim between 1996 and 1998. 304 geriatric caregivers were surveyed before, 243 caregivers one year and 213 two years after long-term care insurance had been established. 80 persons participated in all three waves.

Results: The results confirmed marked changes in the job conditions of geriatric caregivers in the long-term care institutions observed: Within two years, the number of home personnel had been reduced twice: by 6.6 (1996 to 1997) and 7.4 percent (1997 to 1998); discrepancies between the job expectancies of the caregivers and perceived job conditions had increased significantly, whereas organizational resources had decreased. There also was evidence for an increasing prevalence of physical and mental health problems among the caregivers. Regression analyses revealed that the health problems were best predicted by the increasing discrepancies between job expectancies and perceived job conditions.

Conclusions: To prevent existing health problems from deteriorating, intervention strategies must be implemented to improve the staff/residents ratio as well as caregivers' job resources and qualifications.

S24. Is schizophrenia inscribed on the palm of our hands

Chairs: L. Fañanás (E), J. van Os (NL)

S24.01

ARE THE DERMATOGLYPHIC FINDINGS IN SCHIZOPHRENIA SPECIFIC MARKERS OF THE DISORDER? RESULTS FROM A SAMPLE OF MENTALLY HEALTHY ADULT SURVIVORS OF VERY LOW BIRTHWEIGHT

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Introduction: In the last decade, a number of well-designed studies have demonstrated specific dermatoglyphic abnormalities in schizophrenia. Among these, reduced total ab ridge count (TABRC) has been a consistent finding, but increased prevalence of ridge dissociation (RD) and vestigial patterns (VP), and increased abnormal palmar flexion creases (APFC) have also been recently reported. However, the precise nature of these findings is unclear. Do they represent specific markers of the disorder or are they merely markers of prenatal environmental adversity?

Aims: We sought to address the above question by examining these dermatoglyphic traits in a sample of adult survivors of very low birthweight (VLBW, <1501 g) and mentally healthy normal birthweight controls.

Method: TABRC, RD, VP & APFC (single transverse palmar crease, Sydney line, hypoplastic or broken creases) were measured on 72 VLBW subjects and 69 healthy normal birthweight controls. TABRC was analysed by independent-samples t test and the chi-squared test was used for RD, VP & APFC.

Results: VLBW subjects had significantly lower mean TABRC than controls (81.0 (SD 13.8) vs 76.5 (SD 11.5), $P = 0.04$). Subjects also had more VP & APFC than controls (31% vs 8%, $P = 0.03$). No difference in the prevalence of RD was noted (15% vs 19%, $P = 0.64$).

Conclusion: Similar types of dermatoglyphic and palmar flexion crease abnormalities demonstrated in schizophrenia are also evident in mentally well adult VLBW survivors. These findings suggest the possibility that these abnormalities represent a non-specific marker of adverse prenatal environmental factors, rather than specific markers of the disorder.

S24.02

IS THERE RECOGNISABLE NEUROCOGNITIVE PROFILE ASSOCIATED WITH DERMATOGLYPHIC ANOMALIES IN PSYCHOSIS?

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Introduction: A large proportion of schizophrenic patients present neuropsychological impairment detected early in the evolution of their illness. However a debate exists about the nature of these deficits and its relationship with an early developmental brain lesion. Whether or not cognitive decline in patients is prenatal, associated with the onset of the disease, medication or chronicity is a controversial issue, and no satisfactory solution has been found to date.

High levels of dermatoglyphic fluctuating asymmetry (FA) in schizophrenia have been used as a possible marker for develop-