mental disorder episode they can be hospitalized for a short time in a penitentiary psychiatric hospital.

Although Switzerland has never been criticized for this system by international organizations like the Committee for the Prevention of Torture and Inhuman or Degrading Treatment, we consider that the lack of specific institutions creates, in health and security standpoint, an unsatisfactory situation for these patients.

## SES05.03

PSYCHOTHERAPY PROCESS RESEARCH IN THERAPIES WITH SEX OFFENDERS IN FORENSIC SECURE UNITS

F. Pfäfflin

No abstract was available at the time of printing.

#### SES05.04

FORENSIC CARE IN SWEDEN

F. Hagelbäck-Hansson

No abstract was available at the time of printing.

# FC04. Anxiety disorders

Chairs: D. Lecic-Tosevski (YU), E. Libigerová (CZ)

### FC04.01

RESPONSIVENESS OF CENTRAL SEROTONIN RECEPTORS IN PANIC DISORDER: EFFECTS OF CLOMIPRAMINE TREATMENT AND EXERCISE

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**Background:** The study addresses the question whether antidepressant medication (clomipramine) or a nonpharmacological treatment (aerobic exercise) will modulate central serotonergic responsiveness in patients with panic disorder.

**Design:** 45 patients with panic disorder and/or agoraphobia were randomly allocated to a ten-week period of endurance training, clomipramine or placebo treatment. Before and after treatment, the psychobehavioral and neuroendocrine effects of orally-administered m-Chloro-phenylpiperazine (m-CPP; 0.4 mg/kg), ipsapirone (0.3 mg/kg) and placebo were examined.

Results: In comparison to the baseline challenges, the psychological responses to m-CPP and ipsapirone, as measured by the NIMH rating scales were significantly reduced both after exercise and clomipramine treatment. Neuroendocrine responses to m-CPP were also reduced in these two treatment groups; in contrast, administration of ipsapirone was associated with a trend towards increased cortisol secretion both after clomipramine and exercise treatment.

Conclusions: A ten-week protocol of aerobic exercise leads to similar changes in 5-HT2C and 5-HT1A receptor responsiveness as does pharmacological treatment with clomipramine in patients with panic disorder. These results are in agreement with a study in marathon runners, indicating that regular endurance exercise is associated with downregulation of central 5-HT2C receptors.

#### FC04.02

DEEP BRAIN STIMULATION FOR SEVERE REFRACTORY OBSESSIVE-COMPULSIVE DISORDER: A NEW LAST-RESORT THERAPEUTIC OPTION?

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Patients with severe, medically intractable obsessive-compulsive disorder (OCD) may benefit from psychosurgery. Ethical considerations concentrate around the irreversibility of lesioning procedures, against the ethical obligation to present al appropriate options for treatment. In Parkinson's disease, deep brain stimulation (DBS) is accepted as more advantageous to creating permanent brain lesions.

Objective: To test the hypothesis that DBS can lead to a long-term improvement of OCD symptoms.

Method: A prospective crossover study was performed in 3 Belgian patients, with an initial six-month period where patients and evaluating psychiatrist are blinded for stimulation conditions, and a following six-month period where patients are continuously stimulated (CS). Psychiatrist-rated Yale-Brown Obsessive-Compulsive Scale (Y-BOCS-psy) prior to surgery, after a period of stimulation ON and OFF, and after CS, as well as weekly Y-BOCS self-rating scales (Y-BOCS-SRS) were completed.

Results: Patient 1: Y-BOCS-psy: 38/40 before surgery; 30/40 in ON; 35/40 in OFF; 31/40 after CS. Y-BOCS-SRS remained 40/40 throughout the whole protocol. Patient 2: Y-BOCS-psy: 33/40 before surgery; 20/40 in ON; 29/40 in OFF; 27/40 after CS. Mean Y-BOCS-SRS was 35/40 before surgery; 24.5/40 in ON; 28/40 in OFF; 21/40 after CS. Patient 3: Y-BOCS-psy: 30/40 before surgery; 18/40 in ON. Patient refused OFF after the symptom-relief in ON, but with empty batteries Y-BOCS-psy soared to 30/40. After CS Y-BOCS-psy was 16/40. Mean Y-BOCS-SRS: 28.8/40 before surgery; 20.4/40 in ON; not available in OFF; 15.8/40 after CS.

Conclusions: Further research is warranted, but treatmentrefractory OCD patients may benefit from DBS, alleviating OCD symptoms without unwanted side effects.

### FC04.03

MEDICAL UTILIZATION AND COSTS IN PANIC DISORDER G. Megale\*, A. Lo Balbo, C. Collazo. Department of Investigation, Instituto de Postgrado del Cono Sur, Pueyrredón 1625, Ciudad de Buenos Aires (1118), Argentina

Background: There is a high prevalence of panic disorder in medical patients, as well as an association between panic disorder and high rates of utilisation of medical services and excessive medical costs incurred from extensive medical workups. Palpitations, shortness of breath, chest pain, faintness and dizziness are the most frequent symptoms reported by these patients at the emergency units and other hospital services. Screening instruments for panic disorder are underused in primary care settings; so unnecessary medical tests are performed for those complaints. Panic disorder imposes a significant burden on those with the illness and that it is a seriously under diagnosed condition in primary care practice.

Design: A total of 38 cases of panic disorder who contacted an out-patient clinic, were assessed by an experienced interviewer. The assessment instruments included the Structured Clinical Interview for DSM-IV and a retrospective scale to determine panic characteristics, medical-mental health service use and costs involved. They were compared with a random sample of patients without panic disorder.

Results: People with panic disorder had significantly higher utilisation rates and incurred substantially higher costs (p < .01),