#### S35.02

### GENETIC BASIS OF SOMATOFORM DISORDERS

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Somatization defines a personality dimension correlated with neuroticism and introversion. Like other personality dimensions somatization is under genetic control but not under familial environmental influence according to twin studies. Somatoform disorders and somatization disorder are defining extreme variants of somatization. Again, both disorders are running in families, and a genetic influence was demonstrated for somatization disorder; familiality was also reported for specific somatization disorders as fibromyalgia. However, the familial nature of hypochondria has not yet been demonstrated. The familial pattern of aggregation, however, is missing clear-cut boundaries: familial overlap with depression, anxiety and alcoholism was reported. A particularly strong relationship is found between somatization disorder and alcoholism and antisocial personality disorder. Adoption studies demonstrate the genetic origin of this relationship. Currently, some association studies exploring the influence of genetic variants of serotonin receptor/transporter genes are under way with partly promising results.

## S35.03

## CHRONIC FATIGUE SYNDROME: IS IT A VIRUS OR NOT?

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Chronic fatigue syndrome (CFS) is a complex disorder which is being increasingly recognised, most often in the English speaking world and Scandinavia. There remains considerable dispute about aetiology, but the majority of patients recall an acute infective episode preceding illness. Numerous papers have also implicated a variety of infective agents - viral, bacterial and protozoal, as potential causes as well. In this talk I shall review the evidence for an against a viral aetiology to the illness. I shall conclude that

- a. the evidence that abnormal persistence of an infective agent is important in prolonged fatigue states is not compelling
- b. the evidence that common viral infections are important is likewise not compelling
- c. however, there is no doubt that Some infective agents, such as the Epstein Barr virus, do have a particular ability to trigger chronic fatigue states
- d. but viral infection alone is unlikely to account per se for prolonged disability, and other non infective factors may be important in understanding long term ill health

## **S35.04**

GENETICS AND PATHOPHYSIOLOGY OF THE FIBROMYALGIA SYNDROME

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The serotonergic system has been discussed to be involved in the pathophysiology of fibromyalgia (FM), which is a syndrome of widespread pain. Serotonin, which plays a major role in mood, emotion, cognition and motor functions, has been described to be decreased in serum of FM patients. Since FM is frequently accompanied with psychiatric symptoms such as depression and sleep disturbance, we analyzed genetical and biochemical markers

of the serotonergic system in FM patients and evaluated variables by rating scales. Additionally we measured Substance P (SP) as a parameter of nociception.

- Selfreported Depression: 27% of 100 FM patients declared a BDI score higher than 21 indicating a clinical relevant depression. 23% had a familial history of depression.
- ii. 5-HT transporter promotor polymorphism: We found a higher frequency of the S/S genotype of the 5-HTTP in 62 FM patients compared to 94 healthy controls. Subgroup analysis of the patients showed higher means in the S/S group for depression and psychological distress reaching statistical significance in the subscale 'Interpersonal Sensitivity' (p = .04; Mann-Whitney Test) of the SCL-90-R.
- iii. Concerning the 5-HT2A receptor, a significantly different genotype distribution of the T102C polymorphism has been found. A decrease in T/T and an increase in both T/C and C/C genotypes compared to controls was observed.
- iv. High serum concentrations of 5-HIAA and TRP in 51 serum samples showed a significant relation to low pain comparing high (>50) versus low (<50) pain scores (pearson's correlation: 5-HIAA: p = .030; TRP: p = .014), whereas the relation between high SP and high pain scores trended towards significance (t = -1.82, p = .075). 5-HIAA was additionally strongly related to good sleep (pearson's correlation: p = .000). Moreover, we found a strong negative correlation between SP and 5-HIAA (r = -.482, p = .000) as well as between SP and TRP (r = -.365, p = .009).

The results strongly indicate an involvement of the serotonergic system in pathophysiologic mechanisms of FM. Moreover, we could demonstrate a comorbidity of depression and FM in a subgroup of  $\frac{1}{4}$  of FM patients

# W04. Ethics and research in psychiatry

Chair: G. Sedvall (S)

#### W04.01

INFORMED CONSENT, ETHICAL QUESTIONS

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Informed consent has become one the cornerstones of human research ethics since the Nurenburg trials after the second world war. The principle is laid down in the Helsinki declaration § 9-11. Even if the principle seems simple - persons should get proper information about possible benefits and risks, and should have the right to abstain at any time before and during the trial, there are a number of critical issues involved; When is a person adequately informed? How to inform the best way? How to inform about the use of placebo which is one of the most important tools in the development of new drugs, and maybe the most difficult question - is it ethically acceptable to include persons who are not able themselves to give a reasonably informed consent? It is obvious that it must be possible to do research children with the consent of their parents, but what with psychotic persons and demented persons? I will argue that this is not only ethically demanding, but also possible without disregarding the principles of the Helsinki declaration.