

**Tues-P101**

<sup>123</sup>I-IOMAZENIL SPET REVEALS INCREASED PREFRONTAL BENZODIAZEPINE RECEPTOR DENSITY IN PANIC DISORDER

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Some evidence points to an involvement of the benzodiazepine receptor complex in the pathogenesis of panic disorder. Since the introduction of <sup>11</sup>C-Flumazenil for PET and of <sup>123</sup>Iodine-Iomazenil for SPET imaging, the in vivo measurement of the regional receptor density in vivo has become possible. Two studies using the SPET method revealed contradictory results.

Therefore we investigated 12 outpatients (6 M, 6 F; 22–53 y) with panic disorder according to DSM-III-R criteria without any benzodiazepine medication before. Six of them got antidepressants, mostly SSRI, and TCA. In addition 9 healthy controls (4 M, 5 F; 22–47 y), who also never had taken benzodiazepines, were included in the investigation. Besides a neuropsychiatric workup, patients and volunteers got ratings with the Hamilton depression rating scale (HAMD) and Spielberger's State Trait Anxiety Inventory (STAI). All patients got an intravenous injection of 185 MBq <sup>123</sup>I-Iomazenil followed by Single Photon Emission Tomography (SPET) with an interval of 90 minutes. Eight regions of interest (ROI) were defined each on the right and left hemisphere according to the stereotactic system of Talairach and Tournoux. Right/left ratios and ratios to an "internal standard" were calculated. Computerised statistical analysis was performed using SAS software.

The results showed a significant ( $p < 0.05$ ) increase of benzodiazepine receptor density in the right prefrontal cortex and a trend for higher values in the right temporal cortex in the patient group. The other ROIs (frontal, parietal, occipital, medial and lateral hippocampal) showed no differences compared to the control group.

The increase of benzodiazepine receptor density in the prefrontal cortex points to an involvement of this receptor system in the disease process.

**Tues-P102**

PROLACTIN RESPONSE TO TRH IN PATIENTS WITH PANIC DISORDER

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The aim of this study is to assess prolactin response to thyrotropin-releasing hormone (TRH) in patients with panic disorder (PD).

The effects of TRH administration on the release of prolactin were examined in 15 patients who met DSM-III-R criteria for PD and compared their test results with those of 15 normal control subjects. Blood samples were taken before (baseline) and at 15, 30, and 60 minutes after TRH (400 µg) IV injection.

Baseline prolactin levels were similar in PD patients ( $8.12 \pm 9.50$  ng/ml) and control subjects ( $9.60 \pm 7.53$  ng/ml). No significant group effect was observed on the prolactin responses ( $F = 2.14$ ,  $df = 1.26$ ). Although the  $\Delta_{\max}$  prolactin levels were higher in the PD group ( $47.41 \pm 37.10$  ng/ml) than the control group ( $29.79 \pm 13.51$  ng/ml), the difference between them was not statistically significant.

When men and women were evaluated separately,  $\Delta_{\max}$  prolactin levels were found to be higher but not significant in women of the PD group ( $71.72 \pm 35.74$  ng/ml) than the women of the control group ( $34.88 \pm 16.39$  ng/ml), ( $p < .1$ ).

In conclusion, the results demonstrate that prolactin responses to TRH did not differ between PD patients and normal control subjects. When only women were evaluated, the findings indicate that women with PD tend to show excessive prolactin responses to TRH.

**Tues-P103**

A CROSS-SECTIONAL SURVEY OF SEXUAL DYSFUNCTION IN PATIENTS TAKING ANTIPSYCHOTIC MEDICATION

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**Background:** Conventional antipsychotics prevent the suppression of prolactin by dopamine. The resultant hyperprolactinaemic state is associated with menstrual irregularities, erectile and ejaculatory failure and infertility. Therefore, sexual dysfunction may be a common side effect of neuroleptic medication and thus a cause of patient non-compliance with the resultant risk of relapse.

**Method:** Sexual functioning was assessed in 75 outpatients taking antipsychotic medication and compared with patients from a Sexual Dysfunction Clinic ( $n = 55$ ) and normal controls ( $n = 60$ ).

**Results:** 50.7% of the subject group scored highly on the Sexual Dysfunction Questionnaire (SDQ), indicating moderate to severe dysfunction, compared with 18.2% of normal controls and 56.0% of the sexual dysfunction group. The mean SDQ score (99.95) for the patient group was significantly higher than that of the normal controls (81.45);  $p < 0.001$ , (95% CI 14.2 to 22.7), but no different to that of patients with known sexual dysfunction (99.69);  $p = 0.903$ , (95% CI -3.99 to 4.52).

**Conclusion:** Patients taking antipsychotic medication have a level of sexual dysfunction comparable to patients attending a sexual dysfunction clinic. Most subjects were convinced that medication was the cause of their sexual difficulties and felt it affected their ability to comply with medication regime. Sexual history prior to the prescription of neuroleptic medication will allow baseline estimation of sexual function and follow-up should include regular inquiry with regard to sexual function.

**Tues-P104**

TESTESTERONE & PITUITARY HORMONES IN SEXUAL DYSFUNCTION

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**Background:** sex is organized within a genetically determined neuro-endocrinal framework (Fuller, 1960).

**Methods:** 200 patients with erectile disorder were compared to 100 controls. Middlesex Hospital Questionnaire was introduced in addition to measurement of plasma levels of testosterone, prolactin, follicle stimulating hormone (F.S.H.) and leutinizing hormone (L.H.).

**Results:** 72% of the patients had obsessions, anxiety was found in 50.5% of the patients while depression was detected in 52% of the patients.

No difference in hormonal levels was found except that testosterone was lower in the patients group ( $P < 0.05$ ). Prolactin was increased in the age group 50–60 years ( $P < 0.05$ ), F.S.H. was lower in the age group 20–30 years ( $P < 0.05$ ), while testosterone

was lower only in the age group 30–40 years ( $P < 0.05$ ), prolactin was lowered in the first month ( $P < 0.05$ ), F.S.H. and L.H. were lower in the first month and first year ( $P < 0.001$ ). Also F.S.H. and L.H. were lower in patients with Hypoactive sexual desire ( $P < 0.01$ ).

**Conclusions:** hormonal therapy of sexual dysfunction may be tailored according to our findings using either androgens, bromocryptine or a combination of F.S.H. & L.H. according to the age, duration of the disorder or if hypoactive sexual desire is present.

### Tues-P105

#### A SEXUAL BEHAVIOUR CORRECTION OF YOUNG PHYSICALLY HANDICAPPED MEN

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A comparison studies of the principal sexuality characteristics in physically handicapped men of 18–29 years old with motor disorders were performed in two groups. The first group was consisted of the invalids with inborn or early occurred motor lesions, namely, cerebral palsy (CP), spina bifida (SB) and heredoneurologic diseases (HND) mostly including myopathies. The second group involved the patients, who were invalidated after puberty in consequence of an amputation of extremities or different lesions of joints. Totally 96 patients were examined.

The peculiarities of libido, erection, ejaculation and orgasm were established by means of interview and questionnaire analysis. Furthermore we carried out a clinical examination of patients, during which the erectile function was estimated by nycturnal penial tumescence registration using Rigiscan-machine and by ultrasound flowmetry of penial arteries using simple or bidirectional dopplerography. The instrumental urodynamic methods served for an evaluation of a functional status of lower urinary tract.

The prominence of libido was not decreased in the great majority of examined persons. The sexual disorders in invalids of the second group were imaginary whereas in the first group the erectile dysfunction and ejaculatory problems were associated with organic abnormalities, particularly, in patients having HND and SB. Almost all members of both study groups showed high sexual activity and therewith the most part of patients preferred also physically defective persons as sexual partners.

It might be concluded that psychotherapeutic programmes is sufficient for a sexual behaviour correction of patients with gained invalidation. On the contrary a sexual rehabilitation of CP, HND and especially SB patients requires additional examinations and cooperative help of psychologists, andrologists and sexologists.

### Tues-P106

#### PECULIARITIES OF SEXUAL DYSFUNCTION IN MEN OF DECLINING YEARS

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The purpose of the investigation was a comparative assessment of sexual dysfunction in men of two age group: aged patients and patients in declining years.

148 aged men (from 46 to 74 years old) and 20 declining years men (from 75 to 89 years old) have been observed. The results of the investigation make it possible to come to the following conclusions:

1. For the moment of addressing for medical care the aged persons had twice as much protracted sexual dysfunction than the declining years patients.
2. Sexual function preservation and its psychological significance in the declining years patients depend predominantly on patient's sexual constitution.
3. Sexual problems differ in two groups: the declining years patients complains were less variative and concerned mostly erection problems and aspermatism.
4. The main feature of sexual dysfunction development in the declining years patients was absence of psychogenous and somatical factors of sexual function impairment.
5. Neurotic-like disturbances are typical in psychological background of sexual dysfunction in the declining age patients; psychological reactions are predominant in the aged persons.
6. Psychological capacity of sexual function in the declining years patients depends on marriage retaining.
7. Sexual function maintenance in the declining years patients correlates with active way of life, work and social activity, physical exercises.

### Tues-P107

#### AGING PECULIARITIES OF DEVELOPMENT OF THE SEXUAL DYSFUNCTIONS

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During research of the age factor in clinic of sexual disorders, it is necessary to find out the reasons of disease, and attempt of rational explanation of the reason of its own sexual insolvency. For young age (before 25), important role in development of sexual dysfunction's play such moments, as presence of the psycho-physical infantilism, hysterical and epileptic marks of character, violation of the tempo of sexual ripen. In young age violations of sexual functions are combined with hypochondriac manifestations, deep affective experience with anxiety, fear, ideas of masturbation hypochondria, self accusation, self humiliation. In middle age group (25–55 years old) maximal importance became situation factors, related with matching of sexual function. In the basis of ideas about presence of sexual dysfunction lies wrong evaluation of present sexual possibilities which relate with age changes of rate of sexual manifestations. Disharmonical relations in family, more often cause by psychotraumatic influence of sexual partner. In response to psychotrauma there is development one-sided exaggerated in affect reaction. In basis of such acute developed, situational provoked reaction lies feeling of loneliness, accompanied by thoughts of self uselessness, low importance which related with absence understanding from surround people, distance from the family, all those things could be reviled during deep clinical-psychological investigation. In elder age group (after 55) there is prevalence of persons with epileptic and infantile-primitive features of character. In person characteristic we can see such features as sensitiveness, hypotimness with high level of claims, pessimistic attitude to life. The age reduce of sexual possibilities, loss of usual stereotype of sexual manifestations and related with it loss of self conceit in prestigious for this type of person sphere, all this results in development of steady depressive states with loosing of life perspective, sense and aim of life. Definite importance in this have situational circumstances, such as loneliness, related with the death of one of partners in marriage, somatic diseases, especially in cardiovascular and urogenital spheres, which hinder from manifestation of sexual activity and causing socio-sexual isolation.