S19.04
PSYCHOPHARMACOLOGY AND PSYCHOTHERAPY AFFECT THE SAME BRAIN STRUCTURES

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The learned helplessness model of depression first described by Seligmann and co-workers shows both face validity, with changes in sleep, HPA axis function, libido, appetite and learning ability in helpless animals. The model also shows predictive validity in that treatments, which are effective in reversing depression in clinical situations, are also effective in reversing helplessness in animals. This makes learned helplessness a useful model to utilize in attempting to understand the common pathways of antidepressant action. Our studies have shown that with the development certain systems in the rat brain attain new set points. This is true of the NE system and is reflected in the upregulation of the β adrenergic receptor, the 5HT system where up regulation of the $5HT_{1b}$ receptor is one indication of altered function and in the HPA axis in which corticosterone is up regulated. Our current view is that for helplessness to result from exposure to uncontrolled aversive stimuli the modulating amine systems and HPA axis change their input to specific cells in the hippocampus and gene expression is altered leading to structural changes which result in long term changes in behavior. We wondered if treatment of the helplessness would result in a reversal of these pathological pathways and if there were common features to antidepressant action. Here we report on a variety of antidepressants, ECT and cognitive training as treatments to reverse helplessness. Using one measure of helplessness, elevated β receptors in the hippocampus, we can show that all the treatments which result in changing helpless behavior also result in a down regulation of the β receptor. This includes antidepressants thought not to act on the β receptor as well as psychological inputs such as cognitive training. When animals are allowed to recover over six weeks with no treatment there is also an excellent correlation between behavior and β receptor levels. Our data suggest that medication and psychological manipulation can both influence the same neurobiological systems.

S20. Treatment of sexual disorders and dysfunctions: from psychotherapy to psychopharmacology

Chairs: R. Balon (USA), Z. Zemishlany (IL)

S20.01
SEXUAL DISORDERS: DIAGNOSTIC AND EPIDEMIOLOGICAL ISSUES

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Studies of the prevalence of sexual disorders in the general population suggest that approximately 30–40% of the population complained of a sexual problem with the past 6 months. Among males, rapid ejaculation was the most common complaint. The second most common male complaint was erectile dysfunction, which triples in prevalence between ages 40 and 70. In females, hypoactive sexual desire disorder was the most common problem. There is considerable co-morbidity between sexual disorders and affective, anxiety, and substance abuse disorders. Patients with certain disease such as diabetes mellitus, multiple sclerosis, and renal failure has a high prevalence of sexual disorders. Damage to the genital autonomic nervous system innervation to the genitals by trauma, surgery, or radiation is associated with a high incidence of sexual disorders. Diagnostic evaluation centers on determining first if the problem is mainly psychogenic, mainly organic or mixed. Although variety of assessments such as cavernosography, nocturnal penile tumescence, somatosensory evoked potentials are available, the determination is usually made by a careful history. Organic problems usually are generalized to all situations, usually occur in the presence of a disease known to cause sexual problems, and have a gradual onset. The presence of turgid erections upon awakening are highly suggestive of a psychogenic etiology. If the problem is organic, one first wants to eliminate reversible factors such as drug-induced sexual dysfunction. Among psychiatric patients, one wants to certain that psychotropic agents have not caused the sexual problems as sexual dysfunction has been reported with antipsychotic, antidepressant, and antianxiety drugs.

S20.02
SEXUAL DYSFUNCTION AND PSYCHOPATHOLOGY IN THE ELDERLY

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Studies of sexual function in the elderly have reflected societal biases about sexual activity in older people. In recent years there is a growing interest in sexuality and sexual function in the elderly. In the following presentation several studies in healthy and psychiatric elderly patients will be reviewed.

An Israeli study (Weizman R 1987) in healthy elderly married men, had shown a decrease in coital activity and an increase in masturbation with age. About one third of the subjects reported on erectile dysfunction. Another Israeli study performed in urogenycological outpatient clinic (Aizenberg et al., IPA. 1997), compared sexual function of young vs. elderly female patients. Sexual activity was reported by more than half of the women above the age of 60. Sexaul dysfunction was more prevalent in the areas of desire, arousal and orgasm, but similar rates of satisfaction were reported for both groups.

In a small scale study, evaluation of sexual attitudes among elderly residents of old age home demonstrated that about two thirds of both men and women, expect an openly discussion of sexual matters. Subjects also expressed willingness to receive medical consultation and treatment for sexual dysfunction as needed (Aizenberg et al, IPA 1999). Finally the results of a recent study which compared sexual attitudes and function between healthy subjects and elderly schizophrenics will be presented.

It appears that there is a decline in sexual interest and activity with old age but sex is considered an important need for a significant proportion of the elderly subjects.

S20.03
PSYCHOLOGICAL ASPECTS OF SEXUAL DISORDERS

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Effective diagnosis and treatment of sexual disorders is often a challenging albeit a rewarding aspect of one's clinical practice. For many individuals, sexual functioning has a major influence on how a person experiences their sense of self and personal adequacy. Within a relationship, sexual behavior may be a major vehicle for the expression of intimacy and contribute significantly to the

https://doi.org/10.1016/S0924-9338(00)94066-5 Published online by Cambridge University Press