reaction form model, though it has substantial heuristic value, and merits to be thoroughly scrutinized.

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S39. Affective disorders in the puerperium and the premenstruum: biological mechanisms and treatment

Chairs: A Wieck (UK), G Koren (CDN)

S39-1

AFFECTIVE DISORDERS IN THE POSTNATAL PERIOD AND THE PREMENSTRUUM: BIOLOGICAL MECHANISMS

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Reproductive events are known to trigger an increase of affective disorders in women. In the early postnatal period mild mood swings, depressive episodes and affective psychoses are all more likely to occur and in the premenstruum some women experience changes in mood and behaviour which can be significant enough to interfere with day to day functioning. Because both time points are associated with a marked and rapid decline in circulating female sex steroids it has been suggested that the rapid hormone 'withdrawal' triggers affective disorders in predisposed women by its effect on neurotransmitter systems.

There are only few randomized controlled treatment studies of the effects of ovarian hormones on mood and none have been conducted to test the withdrawal hypothesis. However, studies in animals and neuroendocrine investigations in women have strongly supported a role of ovarian hormones in the pathogenesis of affective disorders. Sex steroids have free access to the brain where they bind to widespread receptors. Intracellular ovarian hormone receptors are present within the serotonergic raphe nuclei and treatment with ovarian hormones has been reported to modulate 5HT activity by altering for example serotonin turnover, monoamine oxidase activity, 5HT2-receptor mRNA levels and the binding characteristics of some 5HT receptors. In women, an increasing number of studies suggest that oestradiol and/or progesterone increase serotonergic neurotransmission in a way which is consistent with an antidepressant effect. In the dopaminergic systems actions of oestrogen and progesterone can be stimulatory or inhibitory depending on the site, the dose and the duration of hormone administration. Preliminary neuroendocrine studies suggest that women predisposed to postnatal manic-depressive illness have increased hypothalamic D2 receptor sensitivity when ovarian hormone production is high.

S39-2

A CONTROLLED STUDY OF FLUOXETINE AND COGNITIVE-BEHAVIOURAL COUNSELLING IN THE TREATMENT OF POSTNATAL DEPRESSION

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Objective: To study the effectiveness of fluoxetine and cognitive-behavioural counselling (CBC) in depressive illness in postnatal women: to compare fluoxetine v. placebo, six sessions v. one session of counselling, and combinations of drugs and counselling.

Design: A randomised, controlled treatment trial, double blind in relation to drug treatment, with four treatment cells: fluoxetine or placebo plus one or six sessions of counselling.

Subjects: 87 women satisfying criteria for depressive illness 6–8 weeks after childbirth, 61 (70%) of whom completed 12 weeks of treatment.

Setting: Community-based study in south Manchester.

Main Outcome Measures: Psychiatric morbidity after 1, 4 and 12 weeks, measured as mean scores and 95% confidence limits on the Revised Clinical Interview Schedule, the Edinburgh Postnatal Depression Scale and the Hamilton Depression Scale.

Results: Highly significant improvement was observed in all four treatment groups. The improvement in subjects receiving fluoxetine was significantly greater than in those receiving placebo. The improvement after 6 sessions of counselling was significantly greater than after a single session. Interaction between counselling and fluoxetine was not statistically significant. These differences were evident after one week, and improvement in all groups was complete after four weeks.

Conclusions: Both fluoxetine and cognitive behavioural counselling given as a course of therapy are effective treatments for non-psychotic depression in postnatal women. Following an initial session of counselling, additional benefit results from either fluoxetine or further counselling but there appears to be no advantage in receiving both. The choice of treatment may therefore be made by postnatal women themselves, who are often reluctant to take medication. The study has led to a training programme in CBC for health visitors in Manchester, and preliminary results from the evaluation of training will also be presented.

S39-3

NEURODEVELOPMENT OF CHILDREN EXPOSED IN UTERO TO ANTIDEPRESSANT DRUGS

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Background: Many women of reproductive age have depression, necessitating therapy with either a tricyclic antidepressant drug or a drug, such as fluoxetine, that inhibits the reuptake of serotonin. Whether these drugs affect fetal neurodevelopment is not known.

Methods: We studied the children of 80 mothers who had received a tricyclic antipdepressant drug during pregnancy, 55 children whose mothers had received fluoxetine during pregnancy, and 84 children whose mothers had not been exposed during pregnancy to any agent known to affect the fetus adversely. The children's global IQ and language development were assessed between 16 and 86 months of postnatal age by age-appropriate Bayley Scales of Infant Development or the McCarthy Scales of Children's Abilities (for IQ) and the Reynell Developmental Language Scales.

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