ated renal defects could obscure differences in comparisons to control groups when mean values are used. University of California, Davis

## ANTE-PARTUM PSYCHOSIS AND PROGESTERONE TREATMENT

DEAR SIR,

Psychosis occurring *de novo* in the immediate antepartum period is not well described and would appear to be a rare phenomenon.

Progesterone has been used with success in the treatment of pre-menstrual syndrome (Dalton, 1977) and similarly in the management of post-partum psychosis (Bower and Altchule, 1956), which is sometimes believed to be related to progesterone deficiency (Yalom *et al*, 1968), although attempts to correlate hormonal changes with clinical findings have been unsuccessful (Nott, Franklin, Armitage and Gelder, 1976).

A case of ante-partum psychosis in late pregnancy and successfully treated with progesterone is described. The rationale for this treatment is based upon comparisons of the pre-menstrual hormonal environment, that of late pregnancy and also the early postpartum period.

A 25-year-old primiparous woman, was admitted to hospital at 36 weeks of pregnancy with marked agitation, paranoid delusions and ideas of reference. There did not appear to be any disturbance of mood. Her appetite had deteriorated and she was sleeping poorly, although no clear pattern could be elicited. There was no diurnal variation in symptoms and there. was no evidence of any cognitive disturbance. She had no previous physical illness of note and had never been treated for mental illness. However, her husband, and later the patient herself, described how she had always felt distressingly paranoid for one week prior to the onset of her menstrual period, except for one year when she had taken a combined oestrogen/ progesterone contraceptive pill. There was no family history of mental illness.

A review of the normal physiological changes in the levels of oestrogens and progesterone in: (a) the normal menstrual cycle, and (b) normal pregnancy, revealed that an interesting comparison in hormonal environments may be drawn between the latter part of the post-ovulatory phase and late pregnancy. In the first case, there is a sharp fall in progesterone whereas the level of oestrogens remains relatively constant. In the second, there is a significant fall in progesterone and a rise in oestradiol levels (Turnbull, *et al*, 1974). It should be noted that there is a dramatic fall in progesterone in the immediate post-partum period.

In these situations, the endocrine environment is shifted from one of progesterone dominance to one of oestrogen dominance and these changes would appear to be related to the development of psychological symptoms.

The patient was treated with progesterone suppositories 400 mgms b.d., to which her symptoms made a dramatic response within 48 hours. Overall, she remained much improved, if not fully well, at home, for the remainder of her pregnancy, went into spontaneous labour at approximately 40 weeks and delivered a normal healthy girl. She was maintained on the treatment, which was gradually reduced to 200 mgms b.d. prior to the onset of her menstrual periods. There was no recurrence of her symptoms at three months and the baby was still successfully breast feeding.

It is suggested that more widespread use be made of progesterone in the treatment of ante-partum and puerperal mental disorders. In certain cases it may obviate the need for neuroleptics, whilst in others it may reduce the patient's requirement for antipsychotic drugs, which has clear advantages from the points of view of both mother and child.

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## **AN UNINTENDED CASE FOR CLASSIFICATION?** DEAR SIR,

I have witnessed many dicussions between pro- and contra-classificationalists, and a wealth of literature is available (e.g. Rutter, 1977) usually arguing for or against diagnoses.

Recently a paper was published in this *Journal* by Richman (1983) concerned with something quite different, namely a long term follow-up of children receiving intensive therapy in a day centre, compared with carefully matched controls who did not receive treatment. The outcome of both groups was similar.