References

ABUZZAHAH, S. R. F. S. (1982) Gilles de la Tourette syndrome or multiple tic disorder. In *Extraordinary Disorders of Human Behaviour* (eds Claude T. H. Friedmann and Robert A. Faguet). New York: Plenum Press.

STAHL, S. M. (1980) Tardive Tourette syndrome in an autistic patient after long-term neuroleptic administration. *American Journal of Psychiatry*, **137**, 1267–1269.

SIR: I haven't encountered a barking patient, but I vividly recall one who mooed.

Again, like Dr Buchanan's patient it was a lady in late middle age who was admitted to hospital for assessment following her complaint that she was unable to control an urge to make a mooing noise during normal speech. I saw her as a trainee clinical psychologist, and found that she, too, exercised some voluntary control, but she asserted that she was unable to control the behaviour completely, since she was liable to moo in most embarrassing circumstances.

Unfortunately my training soon required me to move from this hospital, so I am unable to report the outcome of the assessment, or whether any treatment was effective.

If any other clinicians have encountered similar symptoms, might this represent a syndrome which could be called the MacDonald syndrome – or, in the senile, the Old MacDonald syndrome?

ALLAN J. NORRIS

Greybury House
Bridge Street
Walsall WS1 1ET

SIR: A case was described recently in these columns of a patient whose principal symptom was barking. What is less well-known is that barking can be an effective form of therapy. I myself have used the technique on several occasions. The patient must be fully conscious, agitated, obstreperous, and canine. It would be interesting to know if psychoanalytical or behavioural explanations are more appropriate.

BERNARD INEICHEN

1 Helena Road
Plaistow
London E13 0DZ

Screening for Hepatitis B in the Mentally Handicapped

SIR: The importance of screening for hepatitis B in both the hospital and community population of the mentally handicapped was pointed out by Jancar (*Journal*, September 1987, **151**, 417–418). As an infection control nurse, I recently compiled a study evaluating screening of patients before movement from hospital into the community, and further, to what degree vaccination is offered to patients and staff.

A questionnaire was sent to 25 Mental Handicap Units in the United Kingdom, with 76% response. The findings show that 37% of patients are not screened for hepatitis B markers, 37% are screened if in contact with a known carrier, 21% on admission, and only 5% of patients are screened before transfer into the community. It was established that vaccine was given to 32% of patients and 53% of staff having contact with a known carrier.

While only a selective sample, the study demonstrates that action is taken generally only in response to known carriers. Locally, screening for hepatitis B markers is considered a priority for those patients whose transfer into the community is imminent; moreover, a policy of screening all patients is in operation to enable preventative measures of infection control to be undertaken.

The financial implications of implementing this plan to screen and vaccinate patients and staff when appropriate are recognised. However, the recent reduction in cost of the hepatitis B vaccine should encourage a more appropriate response to this important issue.

R. CARTER

Groby Road Hospital
Groby Road
Leicester LE3 9QE

Maternity Blues and Post-Partum Euphoria

SIR: I think Valerie Levy (*Journal*, September, 1987, **151**, 368–372) is right in maintaining that the maternity blues is related to the dysphoria which follows surgery and other stress, but she has omitted to mention an important psychological factor – post-partum euphoria. This, in my view, explains the difference between childbirth and surgery, and the gap between delivery and the onset of the blues.

The mood changes which follow hysterectomy have been studied by Kendell *et al* (1984) and Kennedy & Gath (1986): there is a steady fall from day one to day ten. Those following childbirth are similar from the fifth day onwards. The difference between the two is that depression scores are low during the first four days after delivery, rising sharply on the fifth day. These findings are compatible with a two-factor theory of the blues, which results from the combined effects of post-partum euphoria and post-traumatic dysphoria. In other words, the relief and joy which usually follow delivery protect against and mask the depression, tearfulness, irritability, and tiredness which would normally follow such an

ordeal. The mother experiences the tail-end of post-traumatic dysphoria as a reaction to the gladness and serenity of the first few days.

This hypothesis predicts that the blues will not be experienced by those for whom childbirth is an unhappy event. In them the only positive element is surviving an ordeal, which is also present in post-operative patients, and one would not expect their pattern of symptoms to differ from the surgical group.

One would expect a greater magnitude of mood change after delivery of the first child, and there is some support for this, at least for depression scores, in the data of Kendell *et al* (1981).

The theory is compatible with the great individual and collective variation seen in the timing of the blues, which has been reported to occur on the third day, the fourth day, the fifth day, the sixth and seventh days, any time during the first ten days, or not at all (references on demand). It is compatible with the association with neuroticism found by Kendell *et al* (1984), if 'neuroticism' is related to strong emotional reactions, with accentuation of both euphoric and dysphoric components. It does not readily explain why the blues predicts post-natal depression independently of neuroticism (Kendell *et al*, 1981, 1984), but studies of this prediction should exclude patients with chronic dysthymic states.

It follows from this interpretation of the maternity blues that we should study the two factors independently. The dysphoric factor may be related to the severity of tissue damage, pain, steroid production, etc., while the euphoric factor is related to emergence from a time of apprehension and suffering, and to pride and pleasure in the newborn. It would be interesting if a syndrome thought to be due to obscure hormone changes was due (in part) to normal happiness and excitement – but it is a reflection on the transience of human joys that the blues occurs so early in the puerperium.

I. F. BROCKINGTON

Department of Psychiatry
Queen Elizabeth Hospital
Birmingham B15 2TH

References

KENDELL, R. E., MCGUIRE, R. J., CONNOR, Y. & COX, J. L. (1981) Mood changes in the first three weeks after childbirth. *Journal of the Affective Disorders*, **3**, 317–326.

——, MACKENZIE, W. E., WEST, C., MCGUIRE, R. J. & COX, J. L. (1984) Day-to-day mood changes after childbirth: further data. *British Journal of Psychiatry*, **145**, 620–625.

KENNERLEY, H. & GATH, D. (1986) Paper read at the Biennial General Meeting of the Marcé Society, Nottingham, August 1986.

Characteristic Plasma Hormone Changes in Alzheimer's Disease

SIR: We read with interest the report by Christie *et al* (*Journal*, May 1987, **150**, 674–681). The paper describes elevated TSH levels in a group of patients suffering from Alzheimer's disease (at three time points) in comparison within an elderly depressed group and, for females only, significantly higher TSH levels in the Alzheimer group compared with the elderly control group. We would like to make the following points.

In the group with Alzheimer's type dementia (ATD), two were still working and three were living alone, indicating probable early mild dementia. The point is made that a younger group was chosen because "younger patients with ATD have a more extensive loss of noradrenaline and somatostostatin". However, this resulting group of ATD is atypical both in terms of age and severity. Consequently, it is questionable whether it is valid to extrapolate from such a group and suggest that these findings provide a generally useful test for Alzheimer's disease.

Although basal TSH levels and the TSH response to TRH can be affected by recent weight change, no mention is made of weight for any of the groups studied.

They fail to point out that the elderly control group is significantly younger ($P<0.05$) than the ATD group, which may be of significance as TSH levels in females may increase with age (Tunbridge *et al*, 1977).

Another point not made in the paper is that the TSH values of the depressed group are significantly lower ($P<0.02$) than those of the elderly control group. This will have the effect of accentuating the difference between the demented and depressed groups.

To draw attention to the raised TSH levels particularly in females is unfortunate. The study cannot really tell whether the effect is present in both sexes or confined to females, since they have studied only two healthy male controls.

The TSH data of Christie *et al* contain a gross outlier. They admit to this, justify its non-rejection, and carry out Mann-Whitney tests, which are not impaired by even such gross departures from the normal model. Nevertheless, they just quote summary statistics leaving this subject in. Also, the paper quotes standard errors rather than standard deviations. When standard deviations are included as well, the grossly skewed distribution becomes even more apparent.

It is clear that the *gross* differences reported in the paper are mainly due to the single outlying value.