duration) has been under-reported due to the lack of EEG monitoring of seizures (Weiner et al, 1980). Nevertheless, the occurrence of either a prolonged seizure or spontaneously occurring seizures should be treated expeditiously, perhaps with anticonvulsant medication and immediate consultation with a neurologist. (c.f., Strain & Bidder, 1971; Weiner et al, 1980; Weiner, 1981).

WALTER F. DANIEL

Medical Research Service, Veterans Administration Medical Center, 508 Fulton Street Durham, North Carolina 27705

References

BLACHLY, P. H. (1976) Multiple monitored ECT (MMECT). Convulsive Therapy Bulletin, 1, 23–25.

BLACKWOOD, D. H. R., CULL, R. E., FREEMAN, C. P. L., EVANS, J. I. & MAWDSLEY, C. (1980) A study of the incidence of epilepsy following ECT. Journal of Neurology, Neurosurgery, and Psychiatry, 43, 1098-1102.

CHRISTENSEN, P, & KOLDBAEK, I. B. (1982) EEG monitored ECT. British Journal of Psychiatry, 141, 19-23.

MALETZKY, B. M. (1978) Seizure duration and clinical effect in electro-convulsive therapy. Comprehensive Psychiatry, 19, 541– 550.

SØRENSEN, P. S., BOLWIG, T. G., LAURITSEN, B. & BENGTSON, O. (1981) Electroconvulsive therapy: A comparison of seizure duration as monitored with electroencephalograph and electromyograph. Acta Psychiatrica Scandinavica, 64, 193-198.

STATON, R. D., HASS, P. J. & BRUMBACK, R. A. (1981) Electroencephalographic recording during bitemporal and unilateral non-dominant hemisphere (Lancaster position) electroconvulsive therapy. *Journal of Clinical Psychiatry*, 42, 264-269.

STRAIN, J. J. & BIDDER, T. G. (1971) Transient cerebral complication associated with multiple monitored electroconvulsive therapy. *Diseases of the Nervous System*, 32, 95–100.

WEINER, R. D. (1981) ECT-induced status epilepticus and further ECT: A case report. American Journal of Psychiatry, 138, 1237– 1238.

— Volow, M. R., GIANTURCO, D. T. & CAVENAR, J. O. (1980) Scizures and terminable and interminable with ECT. American Journal of Psychiatry, 137, 1416–1418.

SUICIDE IN HOSPITAL

DEAR SIR,

I read with great interest your recent Symposium on Suicide in Hospital (*Journal*, November 1984, **145**, 459–476). I recently carried out a small retrospective survey on all known in-patient suicides at Fulbourn Hospital over the five year period 1979-84. There were fourteen such suicides in a 455 bed mental hospital serving a catchment area of 570,000, giving a rate of 0.49 per 100,000 per year of the general population which seems similar to that found by Langley and Bayatti (*Journal*, November 1984, **145**, 463–467).

I would like to raise two points from the study. Firstly, I found that ten out of the fourteen had

made previous attempts and that in seven cases this involved the use of a violent method. In seven cases (six using a violent method) the attempt was just prior to or during admission. This suggests that attempted suicide by a violent method is an important risk factor in the assessment of in-patient suicides where death by overdosage is more difficult to accomplish. Secondly, I found that in twelve of the fourteen cases the medical notes contained as their last entry little more than a note of the patient's death or of details of attempted resuscitation (the nursing notes were far more complete). This may have resulted from a wish to deny the patient's death or perhaps more simply because the doctor becomes too busy at the time, forgets or thinks it of no value.

Regular audit would improve this practice which, if it is widespread, would make retrospective surveys more difficult.

TIMOTHY GARVEY

Fulbourn Hospital Cambridge CB1 5EF

DIAGNOSTIC ISSUES IN THE HYPERVENTILATION SYNDROME

DEAR SIR.

We would like to take issue with the methods used by Kraft and Hoogduin (Journal, 145, 538-542) to establish the diagnosis of hyperventilation syndrome (HVS). They remark that a patient had to be suffering from "at least 18 out of 45 complaints commonly associated with the hyperventilation syndrome" to qualify for inclusion in their study. The symptoms in their checklist are so non-specific that conclusions based on patient groups satisfying these criteria are bound to be tentative. Grossman and de Swart (1984) have already demonstrated that reported complaints are an unreliable guide to the diagnosis of HVS.

No clinician would diagnose diabetes without measurement of blood sugar: similar objective measures should be used to establish a diagnosis of HVS. Hyperventilation implies arterial hypocapnia. In patients with normal lung function it has long been accepted that end-tidal (equivalent to alveolar) pCO₂ (or PACO₂) is very close to arterial pCO₂ (PaCO₂) (Bannister *et al*, 1954). We believe that objective measurement of PACO₂ is essential before establishing a diagnosis of hyperventilation.

Diagnostic issues are important for two reasons. Firstly, the array of symptoms in HVS and panic disorder is similar (Bass & Gardner, 1983). Diagnostic criteria for panic disorder have been established (American Psychiatric Association,

1980), but as yet there is no satisfactory or widely accepted definition of HVS. Until this deficiency is remedied it will not be possible to determine the relation between hyperventilation, i.e. objective evidence of hypocapnia, and symptoms reported during episodes of panic. Secondly, we need to be much more rigorous in excluding organic disorders that can present with anxiety or panic symptoms (Jacob & Rapport, 1984). We have recently demonstrated that organic lung disorders may provide the initial stimulus for breathlessness in patients with symptomatic hyperventilation (Gardner & Bass, 1984). Elaborate investigations may be required to exclude these disorders. We are not told how organic disease was excluded in Kraft and Hoogduin's patients.

Diagnosis may be difficult in patients with acute, intermittent hyperventilation who may be normocapnic between episodes. We have suggested elsewhere (Bass & Gardner, 1983) that ambulatory CO₂ monitoring may provide useful information in such cases, but this technique is not yet widely available. We have devised a protocol in which PACO₂ is monitored uninvasively in the laboratory over long periods, including sleep. End-tidal pCO₂ is carefully measured whilst the patient is subjected to a number of standardised stressors, including exercise and forced overbreathing. The technique is reliable and acceptable to patients, and provocation of hypocapnia during the procedure is highly suggestive of HVS.

In view of the heterogeneity of HVS (acute and chronic forms occur in clinical practice), we believe it is essential to establish objective diagnostic criteria before subjecting patients with vague and non-specific symptoms to trials of treatment. Otherwise hyperventilation syndrome (or more correctly "symptomatic hyperventilation") is destined to acquire the status of Briquet's syndrome: a clinical entity of dubious validity characterised by a conspicuous lack of positive diagnostic features.

CHRISTOPHER BASS WILLIAM GARDNER

King's College Hospital London SE5 9RS

References

AMERICAN PSYCHIATRIC ASSOCIATION COMMITTEE ON NOMENCLA-TURE AND STATISTICS (1980) Diagnostic and Statistical Manual of Mental Disorders, III. Washington D.C.: American Psychiatric Association.

Bannister, R. G., Cunningham, D. J. & Douglas, C. G. (1954) The carbon dioxide stimulus to breathing in severe excercise. *Journal of Physiology*, 125, 90–117.

Bass, C. & Gardner, W. (1983) Panic disorder. British Medical Journal, i, 1818–1819.

GARDNER, W. & BASS, C. (1984) Unsuspected organic disorders in symptomatic hyperventilation. Presented at the 4th International Symposium on Respiratory Psychophysiology, Southampton.

GROSSMAN, P. & DE SWART, J. C. G. (1984) Diagnosis of hyperventilation syndrome on the basis of reported complaints. Journal of Psychosomatic Research, 28, 97–104.

JACOB, R. G. & RAPPORT, M. D. (1984) Panic disorder. Medical and psychological parameters. In *Behavioral Theories and Treatment of Anxiety* (ed. S. M. Turner). New York: Plenum.

KORO IN NON-CHINESE SUBJECTS

DEAR SIR.

I was interested to read the reports concerning koro symptoms in non-Chinese subjects. I have recently encountered a further case, which I report here:

A 25 year-old previously well single black male presented with acute anxiety and the conviction that his penis was retracting into his abdomen. Onset was sudden, after erectile failure during attempted coitus. Fear of impotence had existed for 8 months, since he had been an unwilling participant in a tribal ritual during which he was circumcised. He was of good intelligence, with no hallucinations or other delusions. His condition deteriorated while being treated with clomipramine 75 mg per day, and he eventually became mute and catatonic. Haloperidol 30 mg per day resulted in rapid improvement, but he remained convinced that his penis was shrinking.

The exact nosological status of this patient's condition is unclear, perhaps best fitting Ang and Weller's description (*Journal*, September 1984, **145**, 335) of an acute anxiety state and delusional belief due to an underlying psychotic illness. However, the clear-cut initial sensitising experience and the ultimate precipitating event are in keeping with the psychogenic syndrome described by Yap (*Journal* 1965, **111**, 43–50).

ROBIN A. EMSLEY

University of Stellenbosch P.O. Box 63 Tygerberg, 7505 Cape, South Africa

DEAR SIR,

I have read with interest the reports of koro-like symptoms in non-Chinese subjects in several psychatric conditions. I here report a relevant case:

A 60 year old Scotsman married with 3 children was referred for withdrawal from lorazepam. He had been treated with 4 mg daily 10 years before, after developing cardiac dysrhythmia. Withdrawal after some months precipitated feelings of restlessness, and ringing in his ears and he was replaced on lorazepam 10 mg daily until 3 years ago when he was admitted to hospital to be withdrawn from it. On the 10th day after discontinuation he was agitated, restless, and tearful; he felt numb around his mouth and thought his whole body was shrinking and his penis and testicles were disappearing almost as though he was changing into a woman. He did not believe the