Morrison, 1992) and am now in the zolpidem/ zopiclone zone (e.g. Lader, 1997; Gericke & Ludolph, 1994) and would have valued rather more discussion on non-pharmalogical interventions, possibly along the line of Morin *et al* (1994). May I ask for an article on non-pharmacological treatment of sleep disorders in adults, particularly those with substance misuse problems?

- Gericke, C. A. & Ludolph, M. D. (1994) Chronic abuse of zolpidem. Journal of the American Medical Association, 272, 1721-1722.
- Lader, M. (1997) Is there any dependence and abuse potential? *Journal of Neurology*, **244** (suppl. 1), S18-S22. Morin, C. M., Culbert, J. P. & Schwartz, S. M. (1994) Non-
- Morin, C. M., Culbert, J. P. & Schwartz, S. M. (1994) Nonpharmalogical interventions for insomnia. American Journal of Psychiatry, 151, 1172–1180.
- Ruben, S. M. & Morrison, C. L. (1992) Temazepam misuse in a group of injecting drug users. British Journal of Addiction, 87, 1387-1392.
- Wilson, S. & Nutt, D. (1999) Treatment of sleep disorders in adults. Advances in Psychiatric Treatment, 5, 11-18.

Dr Andrew Robinson Consultant Psychiatrist, Substance Misuse Service, Fulton Clinic, Royal Cornhill Hospital, Aberdeen AB25 2ZH

Dentistry and psychiatry

Sir: I find it astonishing that in a recent issue of *APT* the paper on 'understanding the importance of oral health in psychiatric patients' completely ignored the problem of bruxism or tooth grinding – arguably one of the most common problems linking dentistry with psychiatry.

Cormac, I. & Jenkins, P. (1999) Understanding the importance of oral health in psychiatric patients. Advances in Psychiatric Treatment, 5, 53-60.

Dr Raj Persaud Consultant Psychiatrist, Westways Rehabilitation Unit, 49 St James's Road, West Croydon, Surrey CR9 2RR

Changes in suicidal ideation and psychomotor retardation during electroconvulsive therapy

Sir: Porter & Ferrier (1999) describe the clinical impression that, during the early stage in treatment of depression, a reduction in psychomotor retardation may lead to patients with depression acting on suicidal thoughts. Consequently, this early stage in treatment is often viewed as the time of highest suicide risk. Slater & Roth (1969) and Himmelhoch (1987) raised similar concerns. However, as Mann & Kapur (1991) observed, no data exist to confirm or refute this.

If this stage of treatment of depression is the time of highest risk, one possible explanation is that the reduction in suicidal ideation lags behind the improvement in psychomotor retardation. We were interested in this issue with particular respect to electroconvulsive therapy (ECT) and prospectively studied changes in suicidal ideation and psychomotor speed in a group of 20 in-patients meeting DSM–IV criteria for major depression who were being treated with ECT. Prior to starting ECT and on the day after each application of ECT, subjects were assessed using the Montgomery–Asberg Depression Rating Scale (MADRS; Montgomery & Asberg, 1979), a modified version of the Suicidal Ideation Scale (SIS; Beck *et al*, 1979) and a test of psychomotor speed derived from a cognitive testing battery by Coughlan & Hollows (1985).

We studied changes in SIS and psychomotor speed scores over the first six applications of ECT in the subgroup of 16 patients who recovered or improved. With the overall changes expressed as percentages, a 92% reduction in suicidal ideation was observed during the first three treatment sessions, with only an 8% reduction over the next three sessions. Psychomotor speed improved 64% over the first three sessions and by 36% over the next three sessions.

Our results are similar to those reported by Rich et al (1986), who measured changes in the suicide ideation, decreased energy and decreased work/ activities subscores of the Hamilton Rating Scale for Depression in 37 patients receiving ECT. They reported that the mean maximal improvements in suicidal ideation occurred significantly sooner, and after significantly fewer treatments, than the improvements in energy symptoms.

It would be naïve to suggest that suicide risk could simply be equated with the balance between suicidal ideation and psychomotor retardation, as various other factors unique to the individual patient are likely to affect any decision to attempt suicide. However, the hypothesis that improvements in suicidal ideation might lag behind improvements in psychomotor retardation appears to be incorrect the opposite is the case. If the early stages of ECT treatment are really the time of highest risk, this may simply be due to suicidal ideation being at its highest then. Risk of suicide should be considered throughout the course of ECT while there is any evidence to suspect continuing suicidal ideation. What our study and that of Rich et al (1986) demonstrate, however, is that ECT is a remarkably effective treatment for rapidly reducing suicidal ideation in depression.

Beck, A. T., Kovacs, M. & Weissman, A. (1979) Assessment of suicidal intention: The Scale for Suicide Ideation. *Journal* of Consulting and Clinical Psychology, 47, 343–352.

- Coughlan, A. K. & Hollows, S. E. (1985) The Adult Information Processing Battery. Leeds: St James's University Hospital. Himmelhoch, J. M. (1987) Lest treatment abet suicide. Journal
- of Clinical Psychiatry, 48, 44–54. Mann, I. L. & Kapur, S. (1991) The emergence of suicidal
- Mann, J. J. & Kapur, S. (1991) The emergence of suicidal ideation and behaviour during antidepressant pharmacotherapy. Archives of General Psychiatry, 48, 1027–1033.

- Montgomery, S. A. & Asberg, M. (1979) A new depression scale designed to be sensitive to change. *British Journal of Psychiatry*, 134, 382-389.
- Porter, R. & Ferrier, N. (1999) Emergency treatment of depression. Advances in Psychiatric Treatment, 5, 3-10.
- Rich, C. L., Spiker, D. G., Jewel, S. W., et al (1986) Response of energy and suicidal ideation to ECT. Journal of Clinical Psychiatry, 47, 31–32.
- Slater, E. & Roth, M. (eds) (1969) Clinical Psychiatry (3rd edn). London: Ballière, Tindall & Cassel.

Dr J. D. Laidlaw, Dr P. Bentham, Dr C. Fear, Dr V. Staples, Dr A. Dhariwal (Birmingham ECT Project) Brownhill Centre, Swindon Road, Cheltenham GL51 9EZ

Author's reply: As Laidlaw et al point out, there is little evidence to support the theory that increased suicide early in treatment with ECT occurs because of an earlier and 'larger' improvement in psychomotor retardation compared with mood symptoms and suicidal intent. Two previous studies have looked at this question. Rich et al (1986) did not measure psychomotor retardation at all but used modified items from the Hamilton Rating Scale for Depression, of reduced energy and reduced work/ activity, to compare with suicidal intent. In contrast, Browning & Cowen (1986) using a small group of 10 patients receiving ECT, report an earlier improvement in psychomotor retardation as measured by a subscale for psychomotor retardation (Asberg et al, 1973) than in mood symptoms measured using the Montgomery-Asberg Depression Rating Scale (Montgomery & Asberg, 1979) but did not report directly on suicidality.

Laidlaw et al report an encouraging early reduction in suicidality during a course of ECT and attempt to compare this with changes in scores on a test of psychomotor speed. The results, however, raise important questions. First, the Coughlan Information Processing Test (Coughlan & Hollows, 1985) used measures not only psychomotor speed but also other aspects of attention, which may be adversely affected by ECT. This may provide an explanation for the slow rate of improvement in this measure. The error score would help to determine whether this is the case, but this is not given. Second, no detail is given of the methods used to control for practice effects, which are a particular problem when assessing rate of change. Third, it is questionable whether percentage changes can be validly used for a scale such as the Beck Suicidal Ideation Scale (Beck et al, 1979) which is not a fixed ratio scale or a fixed interval scale. Even if percentage decrease provides a rough measure for comparison within a non-fixed interval scale, it is doubtful whether it is valid to make a comparison in this way between two different scales. Finally, it would be interesting to know what happened to the subgroup of four patients who did not meet criteria for "recovery or improvement" and whether there was an improvement in psychomotor speed in this group, who by virtue of lack of global improvement may be at particular risk of suicide.

Many other factors may be important in determining risk of suicide during ECT treatment and research is difficult since the rate of suicide and attempted suicide is low. None of the three studies discussed reports any cases in whom a suicide or attempt took place. Only a very large prospective study of patients receiving ECT is likely to shed light on the issue of emerging suicidality and the underlying reasons for this. Psychomotor retardation is a relatively rare symptom which is difficult to rate reliably. A recent development is the measurement of motor activity with a wrist activity monitor, the results of which correlate well with scores on the Salpêtrière Retardation Rating Scale (Raoux et al, 1994), a clinical rating scale for psychomotor retardation.

- Asberg, M., Kragh-Sorensen, P., Mindham, R. H., et al (1973) International reliability and communicability of a rating scale for depression. *Psychological Medicine*, **3**, 458–465.
- Beck, A. T., Kovacs, M. & Weissman, A. (1979) Assessment of suicidal intention: The Scale for Suicide Ideation. *Journal* of Consulting and Clinical Psychology, 47, 343–352.
- Browning, S. M. & Cowen, P. J. (1986) Changes in mood, appetite and psychomotor retardation in depressed patients given ECT. British Journal of Psychiatry, 149, 371– 373.
- Coughlan, A. K. & Hollows, S. E. (1985) The Adult Information Processing Battery. Leeds: St James's University Hospital.
- Montgomery, S. A. & Asberg, M. (1979) A new depression scale designed to be sensitive to change. *British Journal of Psychiatry*, **134**, 382–389.
- Rich, C. L., Spiker, D. G., Jewel, S. W., et al (1986) Response of energy and suicidal ideation to ECT. Journal of Clinical Psychiatry, 47, 31–32.
- Raoux, N., Benoit, O., Dantchev, N., et al (1994) Circadian pattern of motor activity in major depressed patients undergoing antidepressant therapy: relationship between actigraphic measures and clinical course. Psychiatry Research, 52, 85–98.

Dr Richard Porter School of Neurosciences, University of Newcastle upon Tyne, Division of Psychiatry, The Royal Victoria Infirmary, Queen Victoria Road, Newcastle upon Tyne NE1 4LP