the mechanical difficulties encountered with the new apparatus and its application may account for some of these differences.

KUMUD S. BHATNAGAR

High Royds Hospital
Menston, near Ilkley,
West Yorkshire

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DEAR SIRS

Dr Bhatnagar draws attention to the important topic of failed convulsion during ECT and we wish to draw attention to some of the many causes for this. First, the electrical energy may be too low; this was seldom the case with sine waveform but with pulse waveform the setting may be critical. When we first acquired the Ectron Duopulse Constant Current apparatus we routinely used a low energy setting with the high failed convulsion rate referred to by Bhatnagar. We now used the 40 pulse per second (ECT 2) setting for 3 seconds (175 millicoulombs) and bitemporal electrode placement; the failure rate has been reduced but in a recent cohort of 50 patients seven had a failed convulsion at some stage in their treatment and the elderly were particularly at risk which confirms Bhatnagar's experience and also the study of Pettinati and Nilsen.[1]

Electrode placement is the next factor. For unilateral placement the College guidelines on ECT administration recommended the Lancaster position but this requires the second electrode to be placed above the hair line with inevitable increase of impedence; in the temporo-frontal placement the electrode perimeters are too close together and, when we do administer unilateral ECT, we recommend the position in which the second electrode is placed three centimetres above the tip of the mastoid process.[2] Electrode plates encrusted with dried electrolyte solution are another cause of failed convulsion.[3] In the period when low electrical energy was in use in our Unit, Wood[4] studied causes for failure and found that insufficient pressure of the electrodes on the head by the doctor administering ECT was a potent cause for failed convulsion. All doctors administering ECT in our Unit are now instructed to apply firm pressure.

Concurrent drug therapy may be a cause of failed convulsion. In our Unit it was confirmed that the duration of the convulsion was negatively correlated with the level of benzodiazepine metabolite.[5] Carbamazepine is now frequently used as an antidepressant drug and we have regularly observed failed convulsion in patients prescribed this drug. The anaesthetic itself may be the cause. Recently Propofol (Diprivan) was introduced as an anaesthetic with quick recovery and may be widely used in ECT practice. However we noted that the failed convulsion rate was high during its use and one of us (KS) reported that it was not to be recommended for use in ECT anaesthesia; the report will appear in *The British Journal of Anaesthesia*.

We should like to comment that our standard practice, in the case of a failed convulsion, is to re-oxygenate the patient and repeat the application at a higher time setting (usually 4 seconds) although occasionally we have used the maximum (6 seconds) at the same session. Only very rarely has this procedure failed but when it does fail a careful appraisal, including concurrent drug therapy, is recommended to the Responsible Medical Officer.

Incidentally even prolonged pulse waveform administration seems to lead to very little amnesia or post-treatment confusion as compared with sine waveform. This is not surprising since the electrical energy, even at the maximum 6 second setting, is less; we should like to hear from others of their experience. We would bring attention to one recent study[6] which compares the two waveforms in both bilateral and unilateral placement; this concluded that memory defect was considerably less with the pulse waveform and not, in fact, significantly higher than with a non-treatment control group. It is for this reason that we continue the routine use of bilateral electrode placement.

R. P. SNAITH
Consultant Psychiatrist
K. H. SIMPSON
Consultant Anaesthetist
St James's University Hospital, Leeds

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Detained patients

DEAR SIRS

One can only support the views of Drs West and Stanley (*Bulletin*, September 1987, **11**, 300–302 and 314) regarding the problems surrounding the requirement for the second opinion approved doctor (SOAD) to consult with someone who is neither a doctor nor a nurse before completing Form 39. In the *First Biennial Report of the Mental Health Act*

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