Letter to the Editor

ECT IN TREATMENT RESISTANT SCHIZOPHRENIA

Sir,

We read with interest the report on efficacy of electro convulsive therapy (ECT) in treatment resistant schizophrenia (Goswami et al 2003). A substantial proportion of patients with schizophrenia remain resistant to treatment. Hence a need for additional/alternative treatments in such situations is strongly felt by psychiatrists. Authors' effort to address this issue is therefore timely and welcome.

However, some methodological flaws in the report make authors' claim of ECT being efficacious in treatment-resistant schizophrenia difficult to accept. Although they have used a robust design, randomized, appropriate analysis, two-way RMANOVA, was not applied. Instead they used one-way RMANOVA separately for ECT and sham-ECT groups. Both groups showed about 20% reduction in BPRS scores. This was significant in ECT but not sham-ECT group. This might well be due to a 30% smaller sample size and hence type-II error in the latter group.

Either group did not improve after the trial as indicated by CGI scores. Their findings hence suggest that ECT may not confer advantage in schizophrenia patients who have shown inadequate response to drugs. This supports Paul et al (1997) too reported similar finding from this country in a recent report.

REFERENCES

Goswami U, Kumar U and Singh B. (2003) Efficacy of ECT in treatment resistant schizophrenia: A double blind study. Indian Journal of Psychiatry, 45: 26-29.

Paul Sarita E, Janakiramaiah N, Gangadhar BN, Subbakrishna, DK and Jyoti Rao KM. (1998) Efficacy of combined ECT after two weeks of neuroleptics in schizophrenia: A double blind controlled study. NIMHANS Journal, 16: 243-251.

Jagadisha, Subbakrishna DK, Gangadhar BN* Email: bng@nimhans.kar.nic.in *Dept Psychiatry, NIMHANS, Bangalore, India.

IN REPLY

Sir,

We are pleased that Jagadisha and colleagues have taken an interest in our paper that suggests that ECT add-on may be beneficial to those patients with schizophrenia who do not respond adequately to antipsychotic drugs alone. Quite obviously, the study suffers from being underpowered. Hence, the points raised by these authors are appreciated and we recommend that it should be read and interpreted with caution.

As regards the statistical exercise, we do not have too many troubles with the way we went around assessing the available data using one-way RMANOVA, though we agree that two-way RMANOVA would have been more stylish.

The main reason for us to conclude the way we did, in favour of ECT add-on treatment, is that, apart from the primary measures, even the secondary measures were found to favour the treatment group.

Further, the improvement in patients receiving sham-ECT was restricted to the very first week only. Afterwards, no improvement could be seen in these patients. No clinician expects a sudden and robust change of scores in a population of treatment resistant schizophrenics so early in a course of ECTs. Thus, the improvement seen can be attributed to factors other than therapeutic; these include improvement in EPS, removal of non-compliance through supervised medication, removal of the patient from a high EE environment, among others. On the other hand, the real-ECT group showed consistent improvement over time, but the magnitude of improvement after ECTs was somewhat smaller, thus we did not find changes in CGI.

This observation has several clinical and methodological implications. It shows why it has now become customary, particularly in the context of therapy resistant schizophrenia, to institute a high-potency neuroleptic such as haloperidol. Second, it demonstrates that we cannot expect sharp treatment effects. Perhaps, it also goes to demonstrate and explain the reasons for differences in literature on the subject.

It is extremely difficult to find able and willing patients of rigorously defined treatment resistant schizophrenia, and it is very difficult to keep them going in a study like this. Therefore, pooling of cases across several centres, employing a very similar design may be more rewarding.

UTPAL GOSWAMI, MD
Department Psychiatry, Lady Hardinge Medical College & Hospitals, New Delhi 110 001
gmail_shrink_42@hotmail.com