

① Ref: J.O. Cole

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J. Lewis 89

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Dear Dr. Young,

ECT produces a systematic amnesia which is proportional to patient age, frequency and number of treatments, electrode placement, intensity of currents, waveform, and associated medications. The amnesia is reversible, with an improvement in time after the last treatments such that patients no longer show measurable deficits from 6-12 weeks after the last treatment. There are some patients, however, who consistently complain of amnesic disturbances and these have been associated with specific currents and electrode placements, and some modified frequencies of treatment (like multiple treatments in one session).

The animal model (Electroconvulsive shock- ECS) has an extensive literature as the effects of drugs on ECS induced amnesia in rats or mice is a standard pharmacological test for almost any psychoactive substance. In man, there have been systematic trials of some putative anti-amnesic agents on the ECT process, notably with pemoline (Cylert), ACTH 4-10 (ORG 2766), piracetam, etiracetam, vasopressin, and l-tryptophan. Many of the studies have been well designed with adequate controls, but the results have generally been disappointing, i.e., the effects on ECT induced amnesia have been modest.

The most recent trial, a collaborative study of pramiracetam, has not yet been published or officially presented, but the 'grapevine newsletter' states that the experimental and control groups were not distinguishable in the effects on tests in a cognitive battery but that the experimental group fared better on improvement scores.

A report on hydergine and ECT in press in the J. clin. Psychiatry finds an effect on improvement scores for the experimental group but not an effect on memory tests.

The ECT DATABASE is a service of the editors of CONVULSIVE THERAPY to its readers and authors. Culling the 4500 citations for memory enhancing, nootropic, and specific drugs elicited the citations which are attached. These should give you a basis for deciding whether the ECT model may be useful in the assessment of your compounds.

As for the usage of ECT in the U.S., we lack any good assessment. The last measurement was done in 1977 by the APA Task Force; similar assessments were done in Great Britain in 1980 and Ireland in 1982. These find that usage is about 4.1 to 4.5 patients treated annually per 10,000 population. These figures should be corrected for the fact that ECT is rarely given to persons under 20 years of age, and more often in patients over 50 years of age. It is my impression that usage is increasing, although my impression may be faulty, resulting from the number of inquiries about ECT which I get each day.

I trust these comments are useful.

Sincerely yours,

Max Fink, M.D.
Editor

cc: J.O. Cole