Clinical and cost-effectiveness of electroconvulsive therapy for depressive illness, schizophrenia, catatonia and mania: systematic reviews and economic modelling studies

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Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
The aim of this report was to establish the clinical effectiveness and cost-effectiveness of electroconvulsive therapy (ECT) for depressive illness, schizophrenia, catatonia and mania.

Authors' conclusions
Real ECT is probably more effective than sham ECT, but as stimulus parameters have an important influence on efficacy, low-dose unilateral ECT is no more effective than sham ECT. ECT is probably more effective than pharmacotherapy in the short term and limited evidence suggests that ECT is more effective than repetitive transcranial magnetic stimulation. Tricyclic antidepressants (TCAs) may improve the antidepressant effect of ECT during the course of treatment. Continuation pharmacotherapy with TCAs combined with lithium in people who have responded to ECT reduces the rate of relapses. Overall, gains in the efficacy of the intervention depending on the stimulus parameters of ECT are achieved only at the expense of an increased risk of cognitive side-effects. Limited evidence suggests these effects do not last beyond 6 months, but there is no evidence examining the longer term cognitive effects of ECT. There is little evidence of the long-term efficacy of ECT. ECT either combined with antipsychotic medication or as a monotherapy is not more effective than antipsychotic medication in people with schizophrenia. More research is needed to examine the long-term efficacy of ECT and the effectiveness of post-ECT pharmacotherapy, the short-term and longer term cognitive side-effects of ECT, and the impact of ECT on suicide and all-cause mortality. Further work is needed to examine the information needs of people deciding whether to accept ECT and how their decision-making can be facilitated. More research is also needed on the mechanism of action of ECT. Finally, the quality of reporting of trials in this area would be vastly improved by strict adherence to the Consolidated Standards of Reporting Trials recommendations. Economic analysis may identify areas in which research would be best targeted by identifying parameters where reducing the level of uncertainty would have the most effect in helping to make the decision on whether ECT is a cost-effective treatment.

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