Should we stop using electroconvulsive therapy?
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Should we stop using electroconvulsive therapy to relieve symptoms of severe depression? Experts debate the issue in The BMJ today.

Electroconvulsive therapy (ECT) involves sending an electric current through the brain to trigger a seizure. The treatment is given under general anaesthetic with muscle relaxants, so the body does not convulse during the seizure.

No-one is entirely sure how it works, but it is thought to change the way brain cells interact in parts of the brain involved in depression. ECT use in the UK continues to fall, but remains controversial.

Professor John Read at the University of East London, who has published several reviews of the ECT research literature, and Sue Cunliffe, a patient who has had ECT, say it has no long term benefits compared with placebo and can cause brain damage.

They argue that the many evidence reviews claiming that ECT works are based on only five studies that found a temporary lift in mood during treatment only, in about a third of patients. What's more, none of them identify any placebo controlled studies showing that ECT reduces depression beyond treatment or prevents suicide.

Some studies also suggest that ECT causes long lasting or permanent memory damage, they add, although ECT advocates claim this memory loss is caused by depression not ECT itself.

"Despite this lack of evidence psychiatry remains so adamant ECT works that no studies to establish efficacy have been conducted since 1985," they write.

Sue Cunliffe, who was a paediatrician before having ECT, says she was told ECT was safe, but suffered catastrophic brain injury, leaving her unable to perform basic tasks. Yet despite a diagnosis of ECT induced brain damage, psychiatrists rejected her complaint, thereby denying her adequate support and preventing closure.

But Dr. Sameer Jauhar at the Institute of Psychiatry, Psychology and Neuroscience, King's College London and Professor Declan McLoughlin at Trinity College Dublin, argue that evidence shows ECT is effective and safe in depression and that adverse side effects can be managed.

"ECT is still used 80 years on because evidence shows it is effective for treatment resistant depression, which is often severe and sometimes life threatening, as well as resistant mania and catatonia," they write.

ECT is approved for these indications by the National Institute for Health and Care Excellence (NICE) and in international guidelines, and worldwide about a million people have ECT each year, they add.
They say the evidence reviews by Read and colleagues included underpowered, flawed studies, and argue that the scientific debate about ECT has been over for decades.

They acknowledge that ECT is associated with deficits in short term memory and executive function compared with performance before ECT, but say "these resolve within weeks, and most people have significantly improved function compared with that before ECT."

They argue that no robust evidence shows ECT causes brain damage at cellular or macroscopic level, and that relapse rates after ECT are similar to antidepressants and are a function of the illness, "reinforcing need to continue with antidepressants, ECT, or both after a successful acute course of ECT."

They also point out that media representations of ECT "have been mostly negative and poorly informed" and believe that such characterisations "perpetuate stigma around ECT and may contribute to denying some of our sickest patients one of the most effective treatments."

More information: John Read et al, Should we stop using electroconvulsive therapy?, BMJ (2019). DOI: 10.1136/bmj.k5233