ECT: Bad reputation, but often effective

Now that we seem to have almost as many antidepressants as antibiotics, and targeted deep brain stimulation can alter mood disorders, it may come as a surprise that psychiatrists still use electroconvulsive therapy (ECT). On page 679 in this issue, Pandya et al review the basics of ECT and the roles of the internist and cardiology consultant in co-managing patients undergoing this therapy.

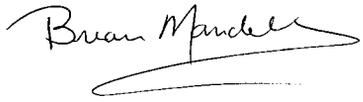
Books and movies have not portrayed the procedure in a flattering light, from Dr. Frankenstein's use of raw electrical power to bring life to the dead (albeit not to treat mental illness) to the vindictive buzzing of McMurphy in *One Flew Over The Cuckoo's Nest* (in response to which he winked and commented: "Next woman takes me on's gonna light up like a pinball machine").

Sylvia Plath, who described battles with depression in *The Bell Jar,* wrote elsewhere of her experience with ECT: "I sizzled in his blue volts like a desert prophet." Small groups of patients and activists have at times labeled the procedure barbaric and have decried its continued use, arguing against claims of its efficacy.

But the procedure remains. Neurotransmitter levels have been shown to change in response to ECT. Electrical circus rhythms likely reset the flow through fragile brain neuronal networks. The mechanism of action remains incompletely understood. But clinicians continue to prescribe ECT for their patients having recalcitrant depression, and sometimes in settings where drugs are hard or impossible to use.

Proponents argue that ECT exerts an antidepressant effect far faster than medications. Side effects and drug interactions can be avoided by minimizing the need for chronic drug therapy. New techniques of delivery limit the postprocedural confusion and memory loss. Use of light anesthesia and muscle relaxation limit the pain and muscle spasms associated with ECT.

We may yet see the time when specific brain neuronal pathways can be treated as we currently treat aberrant cardiac electrical pathways. But until then, as Pandya et al remind us, we have the option to deliver a treatment that may be quite effective at relieving bouts of severe depression.



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