

# Jury out on electroshock

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say it is sometimes the most effective method of battling depression which is non-responsive to medication, psychotherapy or other therapeutic methods.

A more favorable reviewer of Fink's book has this to say:

"Electroshock therapy has long suffered from a controversial public image, effectively removing it as a treatment option for many patients. Here, Dr. Max Fink draws on fifty years of clinical and research experience to argue that ECT is a safe, painless, and often life-saving treatment for emotional and mental disorders."

The New England Journal of Medicine in its Feb. 10, 2000 issue has this to say about Fink's book:

"Psychiatrists unfamiliar with electroconvulsive treatment may be embarrassed to discover that concern about its risk is greatly exaggerated and that relapse after electroconvulsive treatment indicates a need for maintenance treatment, not a lack of efficacy. Even authorities on drug treatment are puzzled by the broad spectrum of efficacy of electroconvulsive treatment. For example, all antidepressants can cause mania, but only electroconvulsive treatment can treat it, and no antidepressant drug has been shown to be as effective as electroconvulsive treatment for treating schizophrenia. In bipolar disorder, electroconvulsive treatment is often effective when mood stabilizers fail."

In other words, the Journal argues, ECT may, in some cases, actually have less deleterious effects than antidepressants which have been found, in some cases, to lead to manic episodes.

ECT, or electroconvulsive therapy as it is properly called, is the inducing of an epileptic seizure by electrically shocking the brain.

The use of electricity on people with mental illness traces its origins back to ancient times, when electric eels were used to treat people with mental illness or headaches, according to a special produced by the Public Broadcasting Service in 1998.

In modern times the use of electricity on the mentally ill traces its origins to Ugo Cerletti (b. 1877) and Lucino Bini (b. 1908) who based their ideas on a Hungarian psychiatrist who theorized that a relationship existed between epilepsy and schizophrenia.

Earlier research had found that epileptics experienced a sense of calm and well-being following a seizure.

The Russian author, Fyodor Dostoyevsky chronicles his experiences of euphoria following an attack of epilepsy in "The Idiot."

Early neuro-psychiatrists the-

orized that if they could induce a seizure, they could create the same effect.

Initially chemicals were used. Usually insulin, as with John Nash, the mathematician featured in *A Beautiful Mind*.

"(The early psychiatrists) found that epileptics got less depressed after they had a seizure," said a ranking psychiatrist in the Philadelphia area who asked not to be named.

Using this theory, Cerletti and Bini started working with dogs and other animals. They killed a lot of animals in the process but the two researchers eventually discovered if they applied the electrodes to either side of the head they could avoid passing the electric field through the heart, causing a seizure without electrocuting the animal.

In 1938, the two men conducted their first electroshock experiment on a human subject, a man suffering from severe schizophrenia. The treatment seemed to work and a new practice was born.

By the early 1940s, the practice became widespread and was

commonly used for victims who had been hospitalized for depression.

Meanwhile, the outcry against the use of ECT was also gaining ground, particularly as evidence mounted that patients suffered permanent memory loss as a result of the treatments.

There were also reports of patients suffering fractures and broken teeth as a result of the violent contortions which they underwent during the seizures.

The practice received more bad press when it became apparent that certain German psychiatrists had experimented on hapless victims during the Nazi regime.

There were also bad rumors surrounding celebrities who had undergone ECT, such as, author Ernest Hemingway who reportedly shot himself after undergoing shock therapy at the Mayo clinic in 1961.

While the reasons for Hemingway's demise could also be traced to years of excessive alcohol use and his numerous physical ailments, the fact that the famous author expressed

despondency over his memory loss did not help the cause of those who advocated the use of ECT in treating victims of mental illness.

Today, despite decades of bad publicity and the introduction of psychotropic medications, the use of ECT has experienced a comeback although in a modified form.

Modern ECT uses a pulsing system rather than the application of consistent current for an extended period of time, according to one local expert.

Another variation is the placement of the electrodes. Previously the electrodes were placed on either temple, with the electrical current running directly through both frontal lobes. Now, according to the same expert, one electrode is placed on the forehead while the other is placed on one temple so that the current only runs through one temporal lobe.

Usually the non-dominant hemisphere of the brain is the one that is shocked, as neurologists have found that the

patient's primary memory tends to reside in the dominant hemisphere.

In other words, if someone is right-handed, the right hemisphere of the brain would be exposed to ECT as the left hemisphere is the one that is dominant — if you are right-handed you are usually left-brained, and visa versa.

"You still induce a seizure but it is less likely to cause memory loss," said one psychiatrist who worked at a leading Philadelphia mental health facility.

Unfortunately, whether memory loss is permanent or not is still a matter of debate. The problem is as difficult to determine as whether an individual who suddenly "remembers" he or she was molested by a priest 20 years ago while undergoing hypnosis is telling the truth or just fabricated the experience.

"Permanent memory loss is still controversial," the same Philadelphia psychiatrist said. "We just can't say for sure how much occurs."

The jury is still out on ECT.

As long as some doctors believe it works and some patients still experience relief when nothing else, including drugs, works, it will likely continue to be used.