Misunderstood Medicine

The common impression of electroconvulsive therapy, or ECT, often does not do the medical treatment justice. Although globally practiced for roughly a century, ECT endures as a misconceived enigma to physicians, patients, and the general public alike. Controversy shrouding ECT includes its unknown cause of efficacy, the possible memory loss that patients may experience as a side effect, and the public’s wrong notion of ECT—that of a mad doctor electrocuting unwilling patients into submission. Due to its past barbaric methods and present mysterious mechanism, the treatment of electroconvulsive therapy remains stigmatized and controversial despite its high success rates and widespread use.

With the connection between head trauma, convulsions, and fevers and the mental health of psychiatric patients made, physicians began attempting to cure the mentally ill. The 20th century dawn of innovative psychology and psychiatry provided new treatments with the intent of curing instead of merely subduing patients. Treatments to cure depression, schizophrenia, and other mental illnesses began with malaria-induced fevers, insulin comas, and camphor or metrazol convulsions (Cyrzyk 23). Each of these treatments was replaced for better results and safer methods due to numerous adverse side effects; prolonged insulin comas resulted if patients did not respond to glucose quickly while metrazol convulsions caused spine fractures. Invented in 1938 by neurologist Ugo Cerletti, electric shock therapy electrically induced seizures and aimed to treat patients with schizophrenia (Bazemore and Soreff). However, initial trials of ECT
performed similar dangerous methods of previous cures: physicians would ‘shock’ restrained, awake patients without anesthesia or muscle relaxants. Rudimentary medical equipment unable to monitor electric current did not allow doctors to carefully control how much electricity passed through patients’ brains. Subsequently, vertebral fractures, broken teeth, and severe memory loss resulted and doctors often misused ECT, leading to the treatment’s fall from repute (Kotin). Nowadays, many patients have the option of a safe ECT treatment. Patients receive anesthesia to remain still and unharmed during the seizure, monitoring machines provide doctors the ability to supervise the electric current and check vital signs, and treatments are given at least forty-eight hours apart to reduce memory loss. “[T]he one agreed-upon requirement for effectiveness is that ECT must cause an electrically induced grand mal seizure” (Bazemore and Soreff). The current process involves an electric current passing into the brain from electrodes attached to the patient’s scalp. Treatments take approximately fifteen minutes with the shock lasting a few seconds and the seizure for thirty to sixty seconds (Kotin). Up to twelve treatments are given over a course of several weeks along with medication and counseling. Current side effects include disorientation, retrograde and anterograde amnesia, and long-term memory loss.

Despite its improved safety measures and high success rate of treating some forms of mental disorders, public opinion differs on the practice of electroconvulsive therapy and its benefits. Physicians and psychiatrists often laud the efficacy and fast results of ECT but many civilians possess horrifying images of convulsing patients writhing to the torturous electric shock in the back of their minds. Many still believe that the unsafe procedures prevail, doing more harm than good; those who know of the current methods still hold reservations due to the fragility of the brain. Tomasz Cyrzyk, a registered nurse, discusses the reasons for the continuing controversy surrounding electroconvulsive therapy. He believes that people object to ECT
because, “[o]ur brains and minds are vulnerable and personal: they represent much of who we are” (Cyrzyk). Submitting the delicate brain to electric shocks seems fatal and reminds many people of electrocution by electric chair. However, as MDs Stephen Soreff and Patricia Bazemore point out, “…ECT employs approximately 100 volts for 0.3 seconds while the electric chair uses 2,000 volts for approximately 20 seconds” (Bazemore and Soreff). Misconceptions of ECT proliferate due in part to Hollywood depicting macabre scenes in movies such as *One Flew Over the Cuckoo’s Nest* and *A Beautiful Mind* and limited circulating information about the actual treatment. However, the general public is not alone in the dark. Physicians themselves do not know exactly why ECT works. Much of the fear and distrust of the treatment stems from the unknown mechanism of action. ECT increases cerebral blood pressure, releases excitatory amino acids, activates their receptors, and possesses many other cerebral effects (Cyrzyk 26). Even though ECT incontrovertibly works, no one knows what changes in the brain account for the healing. The unknowns of ECT do not help its image. Moreover, potential and past patients vilify memory loss, the most common side effect of ECT. With all of the negative aspects of ECT circulating and few of the positive ones, society continues to regard the treatment as highly controversial and taboo.

Despite the multitude of mental disorders that ECT reverses symptoms of, most present-day patients who must resort to ECT generally suffer from depression with severe psychosis (loss of reality) and a suicidal threat. After attempting the prescribed antidepressants with no signs of improvement, patients may be given the option of electroconvulsive therapy by their doctors. ECT is usually a treatment of last resort after exhausting medication and counseling. Lauren Gray, a local middle school teacher, recounts the year when her husband experienced depression at age 41. He first showed symptoms of depression in August, 1996 after he lost his
job. Staying at home only exacerbated the problem and Robert Gray finally checked into Smyrna, GA’s Ridgeview Institute, a hospital known for treating the mentally ill, in March, 1997. Gray went on a regimen of medication and counseling but nothing helped; his apathy grew and the couple switched to Peachford Hospital. Robert and Lauren Gray first heard about electroconvulsive therapy as an available option in late June from a new doctor. They both had misgivings about the treatment but felt that by then, “What else can you do?”

The treatment was a last resort but the process never felt coercive for the Grays. “If anything, I [Lauren] was coercive. I didn’t give him a choice. I couldn’t have stayed married to him if he hadn’t changed. He was wary about it until we did it. He had ran away the day before [the ECT despite giving] his own consent. That night he kept on repeating, ‘I don’t want to go, I don’t want to go.’ I fell asleep for ten minutes, and he ran away.” After withdrawing most of the money out of their bank account to permit Robert the bare minimum for lodging and gas, Lauren Gray could only wait until her husband came back. He came back the next night and was admitted to the hospital for the ECT” (Interview 2).

The informational process may be skewed towards ECT as physicians generally approve of the treatment more; patients usually report a lack of information and that they did not give their full consent, instead choosing to blindly trust their doctors. Doctors warn their patients the common side effects that include disorientation, retrograde amnesia (forgetting memories made before the ECT), and anterograde amnesia (difficulty of keeping memories made after the ECT). Approximately thirty percent of treatments result in permanent memory loss (Cyrzyk 24). Informed that memory loss usually lasts less than six months, many do not fully expect the extent of memory setbacks and may feel outrage over their cognitive impairments (Smith, et. al. 555). Disgruntled over the treatment’s harm rather than help, a minority of patients view the
ECT and the physicians that recommended it bitterly and focus on criticizing the their experience. “The professionals seem to acclaim the good news of this powerful treatment while the consumers often point to its negative consequences and uncertainties” (Cyrzyk 26).

After the first treatment, Lauren Gray noticed an immediate change as Robert requested that she bring his razors to shave: “He wondered why he looked like this.” Looking back, Ms. Gray remembers the doctor providing more of the positive than the negative effects of ECT. However, she does not regret the decision at all despite the minor memory loss, stating, “The difference was astounding [after the ECT]. He doesn’t remember events around the time [but he] didn’t lose short term memory as they thought he would. It reset something; whatever wasn’t connected in the synapses became connected again. It was like overnight, how different he was. I feel very lucky.”

Due to her positive experience with the treatment’s effect, Lauren Gray disfavors the stigmatization of ECT and sides with the practice. She does not consider the treatment bad and criticizes that movies make people gain the wrong impression of how it is done (Interview 1). Nevertheless, she asserts that patients should not automatically do ECT. “There are different types of depression. [ECT] doesn’t work for every single kind. It’s not a first step, but after everything else, it’s the right thing to do.” Lauren Gray credits the treatment to saving him and their marriage (Interview 2).

The majority of ECT patients give their informed consent, but some may be too psychologically impaired to seek or consent to treatment. Because physicians administer ECT to mentally ill patients and those who suffer extreme depression, many patients may initially refuse treatment due to their disorders. The competence of the person to refuse or give informed consent is then debated among his or her treating psychiatrists (Cyrzyk 24). In bioethics,
physicians must choose to either respect or overrule the patient’s treatment refusal. They first evaluate whether or not the treatment refusal is caused by the mental disorder by noting the differences in treatment preferences made during normal and depressed episodes (Rudnick). The common action is to override the treatment refusal for the patient’s own good if psychiatrists deem the patient mentally incapable of refusing treatment. Continuing today, laws permit the involuntary treatment of patients without their consent if it is deemed necessary for their health and/or the safety of others around them. This nonconsensual treatment directly violates autonomy, the independence and freedom of the individual. During involuntary treatment, paternalism, or the coercion of someone for his/her own good, comes into play with doctors holding all of the power over their reluctant patients. However, the principle of beneficence, the moral obligation to act in the person’s best interest, outweighs autonomy when the stakes consist of boundaries vs. life. When determining whether it is morally right to treat patients without their consent, many factors come into play. Various bioethical legislations ensure patient protection and that both ethical and necessary actions are performed; they are updated constantly as psychiatry, law, and society progresses.

Unfair representations of electroconvulsive therapy hinder widespread use of the treatment; however, its success has garnered more recommendations and implementations from experts and ongoing research to fully understand its mechanisms. While the practice remains denounced as misleading and an invasion of autonomy by unsatisfied patients and their family members, ECT provides almost immediate relief to those with suicidal intents. Granted, memory loss remains one of the worst side effects of ECT but usually lasts only a few months and is a small price to pay when compared to the life of the patient. The same argument also applies to those who condemn performing ECT on non-consenting individuals—while autonomy is
violated, the principle of beneficence ranks much higher. Overall, electroconvulsive therapy remedies a vital organ to favorably alter mental disorders, providing many a return to normalcy. Robert Gray continues to take medication. He goes to his psychiatrist every six months. But he has not fallen back into depression. “He did the ECT and was like a new person. He came back” (Interview 1).
Works Cited


Gray, Lauren. Interview 1. 31 Jan 2014.

Gray, Lauren. Interview 2. 20 March 2014.

