The Return of ECT

by Peter R. Breggin

THE PRACTICE OF ELECTROCONVULSIVE THERAPY: RECOMMENDATIONS FOR TREATMENT, TRAINING, AND PRIVILEGING. Task Force Report of the American Psychiatric Association. 1990. 200 pp. $22.00. American Psychiatric Association, Washington, D.C.

The last decade has seen a resurgence in the promotion and use of electroconvulsive therapy (ECT), a technique that originated in Italy in 1938 and that has been referred to variously as electroshock treatment (EST), or simply shock treatment, and (because the aim is to produce a grand mal seizure) convulsive therapy. Nowadays ECT is generally recommended for major (severe) depression. All other indications remain subject to disagreement, even among advocates of the method. At present, probably more than 100,000 patients a year in the United States receive this treatment. The majority are women; increasingly, they are elderly women. In California, for example, two-thirds of shock patients are reported to be women, more than half of whom are sixty-five or older.[33]

The recent reflowering of ECT has its roots in the early to mid-1970s, when psychiatry experienced a steep and unprecedented economic decline. The American Psychiatric Association (APA) was in financial trouble and many psychiatrists were finding it difficult to compete for patients with a burgeoning field of nonmedical therapists, including clinical psychologists, social workers, counselors, family therapists, nurse practitioners, and mental health associates.

Organized psychiatry, spearheaded by APA and the National Institute of Mental Health (NIMH), put into action a national program to revitalize psychiatry based on the "re-medicalization" of the profession. It called for the redefinition of psychosocial problems as almost wholly genetic and biological in origin. Despite an absence of evidence to support this new biopsychiatric dogma, genetic and biochemical speculations served to justify a renewal of psychiatric authority within the mental health professions, and to rationalize the use of physical treatments, such as drugs and electroshock. As by far the most remunerative treatment in psychiatry, shock holds a special place in the financial recovery of many psychiatric units and individual practitioners.[12]

Psychiatry's economic crisis was compounded in the 1970s by growing public criticism, much of it aimed directly at ECT itself. This helped motivate APA to publish its 1978 Task Force report,[2] to which the present volume is a successor. The challenge to ECT was launched by neurologist John Friedberg,[26] whose book was soon followed by a volume edited by "shock survivor" Leonard Frank,[22] and a book by the present reviewer.[8] Critiques have continued to be published in professional journals.[9,10,23] In 1985, criticism issued from within the heart of the establishment itself, when the NIH/NIMH Consensus Conference on Electroconvulsive Therapy called the treatment controversial and estimated that, on average, patients endure memory loss extending from six months prior to the treatment to three months afterward.[14]

Former patients have become an increasingly active force. In addition to writing and appearing in the media, many who have undergone ECT continue to protest at national psychiatric conventions and shock symposia, and even chain themselves to the gates and doors of "shock mills." A shock survivor in Alexandria, Virginia, has formed the Committee for Truth in Psychiatry, with a membership of several hundred individuals who feel damaged by the treatment.

Many states have passed legislation to monitor ECT, set limits on the number of sessions or the age at which it can be given, and require second opinions and informed consent. While these efforts have proved almost impossible to enforce in the face of psychiatric resistance, they have raised further questions about the use of shock treatment. As criticism has grown, so have the number of lawsuits against ECT. (It is not coincidental that the present Task Force report thanks APA's legal consultants for their contribution.)

The most dramatic threat to shock treatment became known as the Berkeley Ban. Ted Chabasinski, who had been subjected to electroshock as a child, organized a grassroots citizens' movement in support of a referendum to ban ECT in Berkeley, California. After the proposition was overwhelmingly approved by the electorate, the psychiatric establishment, led by APA, intervened and had the ban overturned in court—but not before a "power outtage" of forty-one days in the winter of 1982.

In 1979, the FDA classified shock devices as demonstrating "an unreasonable risk of illness or injury."[21] This would have embarrassed psychiatry by requiring renewed animal testing. However, under pressure from APA, the FDA gave notice of its intent to reconsider its original decision and to reclassify ECT machines as safe. The APA Task Force report was timed to come out in the midst of the FDA's political squirming over ECT. While not formally issued until 1990, it was hurriedly presented as an unpublished manuscript at an APA press conference in mid-December 1989. Meanwhile,

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hundreds of injured ECT survivors wrote to the FDA protesting its intention to relabel the devices as safe.

Not surprisingly, APA and organized psychiatry won the contest with the former patients and the critics of the therapy. The FDA's final report reads remarkably like the APA's report. Although no large animal studies have been done with shock devices since the 1950s, and although those earlier studies consistently demonstrated brain damage, the FDA defined ECT devices as safe for depressed patients. Curiously, and without any apparent logic, the FDA reclassified the treatment as safe *only* for depressed patients. However, psychiatrists will not find it difficult to diagnose their patients to fit the treatment.

The political nature of the report under review is made clear by the composition of the committee—largely staunch advocates of ECT. The chairperson, Richard Weiner, was APA's official representative in defense of ECT at the FDA hearings, and has for some time been APA's chief spokesperson on the subject. Two of the other six members are psychiatrist Max Fink and psychologist Harold Sackeim, among the nation's most zealous defenders of the treatment. By contrast, the Task Force sought no input from the several patient organizations that oppose it, and none from psychologists, psychiatrists, neurologists, and other professionals who are critical of the treatment.

The APA Task Force report thanks the manufacturers of electroshock machines for their contributions; company advertising handouts are listed as useful sources of public information; and the names, addresses, and phone numbers of these companies are provided in the report. The Task Force is particularly positive toward Somatics, Inc., whose sole function is to manufacture the electroshock machine, Thymatron,* although the report nowhere mentions any link between this company and Richard Abrams, who would appear to be the Task Force's most valued expert. One of Abrams's articles is recommended under "Materials for Patients and Their Families" and another under "Materials for Professionals." Nine of his publications are cited in the general bibliography, making him by far the most heavily represented author. Abrams is also listed among those individuals who "provided comment on the draft of the ECT Task Force Report." However, his most interesting affiliation is absent: Abrams owns Somatics, Inc., which, in a recent deposition,[16] he acknowledged to be the source of fifty percent of his income.

Although there have been numerous controlled studies comparing ECT to sham ECT, in which the patient is anesthetized but not shocked, APA did not review the literature. Crow and Johnstone,[15] in a review of controlled studies of ECT efficacy, found that both ECT and sham ECT were associated with "substantial improvements," and that there was little or no difference between the two, concluding: "Whether electrically induced convulsions exert therapeutic effects in certain types of depression that cannot be achieved by other means [placebo] has yet to be clearly established" *(p. 27)*. Crow and Johnstone's critical review, which was presented at the largest conference of "shock doctors" in recent years and included in the proceedings of the New York Academy of Sciences, goes unmentioned and unlisted among the approximately 300 references compiled by the APA Task Force on ECT. (Nor is it included in the 105 references in the FDA's document,[21] which also fails to review the controlled studies.) Against all evidence, and in the absence of even a single scientific study showing significant benefit, the APA Task Force's proposal for a "Sample Patient Information Sheet" declares that "ECT is an extremely effective form of treatment" *(p. 160)*.

Studies that attempt to evaluate ECT and suicide uniformly show that ECT has no beneficial effect on the suicide rate. Yet these same studies are cited—in the Task Force report and by other presumably authoritative sources, notably the FDA report—as showing a positive effect. For example, a retrospective study by Avery and Winokur,[5] which found no improvement in the suicide rate compared to matched controls who had no shock treatment—"In the present study, treatment was not shown to affect the suicide rate" *(p. 1033)*—is presented in the Task Force report as supporting the position that ECT results in "a lower incidence of suicide" *(p. 53)*. The Task Force also mentions three other studies as supporting a beneficial effect on suicide, yet two of them[5,30] specifically find *no* such beneficial effect and the third[29] doesn't even deal with suicide.

Although elderly women have become the single largest target population for ECT, despite the absence of controlled studies on its usefulness in the elderly, there is little attention to this issue in the report. The Task Force advises that ECT can be used "regardless of age" *(p. 15)* and cited the successful treatment of a patient aged 102 *(pp. 71–72)*. It does warn, however, that "some elderly patients may have an increased likelihood of appreciable memory deficits and confusion during the course of treatment" *(p. 72)*.

The aged are, in fact, gravely at risk when exposed to any form of head trauma, including electrically-induced, closed-head injury from ECT. There are a growing number of reports of special dangers to the elderly that are not mentioned by the APA or the FDA reviews.[17,31] In an especially interesting twist, an article by Burke et al.[13] is listed in the bibliography of the APA report but *not* cited in the actual discussions of the elderly. Burke and his colleagues found a high rate (35%) of complications among the elderly, and noted that, "Common complications in the elderly include severe confusion, falls, and cardiorespiratory problems" *(p. 516)*.

Elderly women have many reasons—psychosocial and economic, some of them rooted in the ageist and sexist attitudes of our society—for feeling depressed. Often, these women need improved medical care, social services, family interventions, and loving care from friends and volunteers. They are in a poor position to resist a doctor's proposal that they undergo shock treatment. For many, there are no family

* Thymatron is thanked for providing "input into these guidelines" *(p. 150)*. Under "Materials for Patients and Their Families" *(p. 161)*, the Task Force cites a pamphlet by Richard Abrams and C. Swartz and a videotape by Max Fink, both of which are advertising materials for Thymatron and can only be obtained by writing to the manufacturer.

members available to protect them from such an eventuality. Yet, the last thing the elderly need is *more* brain cell death, mental dysfunction, and memory deficits.

Electroshock advocates argue that more women than men become depressed and so more women need the treatment. But *why* do more women become depressed? Multiple research studies have now connected depression in women to patriarchal oppression, including outright sex abuse.[3] Warren's study[34] of ten women provides further evidence of ECT's damaging effects and points to its special function in suppressing resistance to abuse. Most of the women studied suffered serious memory problems and some showed signs of generalized mental deterioration (dementia). Several of the women and their families related ECT's effect to the suppression of protests against childhood sexual abuse and against more recent abuse at the hands of their husbands.

Typically, electroshock produces delirium or an acute organic brain syndrome. Abrams,[2] though an advocate of the treatment, has himself observed that:

> . . . a patient recovering consciousness from ECT understandably exhibits multiform abnormalities of all aspects of thinking, feeling, and behaving, including disturbed memory, impaired comprehension, automatic movements, a dazed facial expression, and motor restlessness. *(pp. 130–131)*

Neurology recognizes that relatively minor head trauma—even without the delirium, loss of consciousness, and seizures associated with ECT—frequently produces chronic mental dysfunction and personality deterioration.[6] If a woman presented at an emergency room in a confusional state from an *accidental* electrical shock to the head, perhaps from a short circuit in her kitchen, she would be treated as an acute medical emergency. If the electrical trauma had caused a convulsion, she might be placed on anticonvulsants to prevent a recurrence of seizures. If she developed a severe headache, stiff neck, and nausea—a triad of symptoms typical of post-ECT patients—she might be admitted for observation to the intensive care unit. Yet ECT delivers the same electrical closed-head injury, repeatedly, as a means of improving mental functioning. Given that ECT routinely produces acute, marked brain dysfunction, there can be no real disagreement about its damaging effects. The only legitimate question is: "How complete is recovery?" As already suggested, basic neurology warns that it will frequently be incomplete.

The APA Task Force report, as does the FDA report, disregards all of the relevant research on memory loss, except for one study that the APA Task Force mentions and then grossly misrepresents. Freeman and Kendell's 1986 study[25] asked patients to assess their memory function a year or more after electroshock treatment. The authors themselves pointed out that the study was biased toward a low reporting of memory dysfunction because the patients were interviewed by the same doctor who had treated them. Nonetheless, seventy-four percent mentioned "memory impairment" as a continuing problem, and "a striking 30 percent felt that their memory had been permanently affected." In defiance of the facts, the APA Task Force cited Freeman and Kendell as indicating "a small minority of patients, however, report persistent deficits."

Squire and Slater's 1983 study,[32] omitted by the Task Force, found that, seven months after treatment, patients report an average loss of memory spanning twenty-seven months. Squires, in a personal communication to this reviewer, noted that one patient lost the recollection of ten years of her life. The Task Force also ignores older controlled studies showing extensive, permanent loss of important personal memories and life history following routine ECT.[27] These and other studies have been reviewed in detail elsewhere.[8]

I have seen numerous post-ECT patients who have been deprived of years of their lives, their professional careers, and their mental competence following the treatment.[8] Often, the personality is changed, becoming more shallow, and less restrained or self-controlled. Many post-ECT patients suffer from irreversible generalized mental dysfunction with apathy, deterioration of social skills, trouble focusing attention, and difficulties in remembering new things. I have worked with a number of people who suffer from dementia, confirmed by neuropsychological testing. Several have developed partial complex seizures or psychomotor epilepsy, permanently abnormal EEGs, and atrophy on brain scans.

Most damaged ECT patients minimize or deny their real losses. This is because damage to either half of the brain, but especially the nondominant, tends to induce anosognosia—psychological denial associated with brain damage.[20] Advocates of ECT are well aware that shock patients suffer from anosognosia and therefore cannot fully report the extent of their memory losses and mental dysfunction.[19] Yet these same advocates claim that patients exaggerate their post-ECT problems. Interviews with family and friends of patients often disclose that they are painfully aware of the damage done to their loved ones. Often, the psychiatrist is the only one who consistently and unequivocally denies the patient's damaged state.

There is an extensive literature on brain damage from ECT as demonstrated in large animal studies, human autopsy studies, brain wave studies, and an occasional CT scan study. Animal and human autopsy studies show that shock routinely causes widespread pinpoint hemorrhages and scattered cell death. While the damage can be found throughout the brain, it is often worst beneath the electrodes. Since at least one electrode always lies over the frontal lobe, it is no exaggeration to call electroshock an electrical lobotomy. In 1976, Friedberg published the first review of brain damage from ECT. This was followed by my own detailed critique in 1979[8] and, more recently, by others.[9,10,23] None of the important studies and none of the reviews on brain damage are mentioned in the APA Task Force report.

The original animal studies are from the 1940s and 1950s, but they are still valid. If anything, as we shall see, the newer methods of shock are more dangerous. So much so that, if medical ethics were applied to psychiatry, shock treatment would be prohibited, at least until new studies were conducted with large animals. While few psychiatrists

are willing to say in public that ECT causes brain damage, an anonymous survey of U.S. psychiatrists in the late 1970s showed that forty-one percent of them believed that ECT produces at least slight or subtle brain damage; only twenty-six percent stated that it does not.[2]

For the past two to three decades, a modified form of ECT has been standard, involving sedation with a short-acting barbiturate, muscle paralysis with a curare derivative, and artificial respiration with oxygen. The purpose of these modifications was not, as is nowadays suggested, to reduce memory loss and brain damage. Muscle paralysis was intended to prevent fractures from severe muscle spasms, while the artificial respiration kept the paralyzed patient breathing.

Many advocates of ECT did not want to make the treatment less harmful to the brain, because they consider brain damage necessary for the cure. Fink, himself a member of the APA Task Force, has for decades argued that the therapeutic effect is produced by brain dysfunction and damage. He pointed out in his 1979 textbook[19] that "patients become more compliant and acquiescent with treatment" *(p. 139)*, and he connected the improvement with "denial," "disorientation," and other signs of traumatic brain injury and an organic brain syndrome *(p. 165)*.

Fink was even more explicit in earlier studies. In 1956, he stated that the basis for improvement from ECT is "craniocerebral trauma."[28] In 1966, Fink cited his own research indicating that "there is a relation between clinical improvement and the production of brain damage or an altered state of brain function. . ."[18] He does not, however, make such statements in public or in court—or in the Task Force report.

Nowadays electroshock advocates frequently claim that recent alterations have made the treatment much safer, and that its negative public image is unfairly based on the older methods. However, the most basic modifications—anesthesia, paralysis, and artificial respiration—are not new at all. I prescribed and administered such modified treatment almost thirty years ago (1963–64) at Harvard's Massachusetts Mental Center. The public's "mistaken" image of ECT is in reality based on modern modified ECT, which is *more* dangerous than the older forms. The patient is exposed to the additional risk of anesthesia, and the electrical currents must be more intense in order to overcome the anticonvulsant effects of the sedatives that are given during modified ECT.[8] Other modifications include changes in the type of electrical energy employed and the use of unilateral shocks applied to the nondominant (nonverbal) side of the brain. However, these modifications remain controversial. Since the APA Task Force does not exclusively endorse them, the claim that modern ECT is somehow much safer is again undercut.

There is no reason to believe that shocking the nonverbal side of the brain is less harmful. As Blakeslee[7] has pointed out, damage and dysfunction on the nonverbal side are more difficult for the individual to recognize or to describe (anosognosia), but they are no less devastating. Injury to the nonverbal side impairs visual memory, spatial relations, musical and artistic abilities, judgment, insight, intuition, and the coloration of personality. It is ironic that biopsychiatry promotes sacrificing the nonverbal side of the brain, while humanistic psychology is emphasizing its importance to the full development of human potential.

The new APA Task Force report notes that low-dose unilateral ECT is often less effective. This observation tends to confirm that efficacy depends on the degree of damage. No matter how ECT is modified, one fact is inescapable: evolution has assured that human beings do not easily fall victim to convulsions, and sufficient damage must be inflicted to overcome the brain's protective systems.

The 1978 APA Task Force[2] labeled electroshock treatment as controversial. The 1985 Consensus Conference report[14] stated, "Electroconvulsive therapy is the most controversial treatment in psychiatry" and referred to forty-five years of dispute surrounding issues such as efficacy and "possible complications." In the opening sentence of the introduction to Abrams's 1988 book,[1]

Fink referred to the "More than 50 years of controversy" surrounding ECT. By contrast, the 1990 APA Task Force says not a word about controversy. ECT is presented as if no one in the profession had ever criticized it. Since a number of psychiatrists have been sued for failing to inform patients about the controversial nature of the treatment, the present APA report may be intended as a step toward cleansing the treatment of controversy.

Recently, California again became the center of public criticism of electroshock. Inspired by a coalition of former patients and concerned professionals, Angela Alioto, a member of the San Francisco Board of Supervisors, held hearings on ECT. About two dozen "shock survivors" testified about permanent damage to their brains and minds, and although both sides had ample time to organize, no shock patients showed up to offer testimonials in favor of the treatment.

The recommendations of Alioto's committee were adopted by the city's governing body and signed by Mayor Art Agnos on February 20, 1990. The resolution declares the opposition of the Board of Supervisors to the "use and financing" of ECT in San Francisco. It also calls for the state legislature to develop more strict requirements for informed consent, including the exposure of potential patients to live or videotaped presentations by critics of the treatment. The resolution, which follows the recommendations made in this author's testimony before Alioto's subcommittee, are not legally binding. While the resolution has been a great moral and educational victory for the coalition against electroshock, its actual impact may be negligible.[11,24]

The present APA Task Force report represents a disillusioning and disappointing watershed for my own reform activities around ECT. I have long argued that ECT is an ineffective, dangerous, anachronistic treatment that should be abandoned by modern psychiatry. Yet, despite the urging of many victims of ECT, I have heretofore declined to endorse public or legislative efforts to ban it. Rather, it has been my position that liberty and the rights of patients would be better served by insisting on informed consent—by holding liable those psychiatrists who fail to convey to their patients the controversial nature of ECT and its potentially damaging effects.

Unfortunately, the report under review makes clear that organized psychiatry and leading electroshock advocates are determined not to tell patients about the risks of ECT. As long as those in control and authority paint so benign a picture of so dangerous a treatment, psychiatrists and mental health practitioners in general are not likely to feel obliged to warn potential patients about its hazards. This report provides a shield for those who administer ECT—an "official" APA report that maintains there is no serious risk of harm—behind which they can hide from all manner of personal responsibility. In these circumstances, informed consent becomes a mirage. Thus, after much hesitation, I am now endorsing public efforts to ban ECT. This position needs the support not only of other psychiatrists but of all concerned mental health professionals.

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