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Chapter 4

Shock Treatment III: Resistance in the 1980s

As the 1970s ebbed, the economy ebbed with it. Inflation and unemployment impacted on national and world economies. Insurance companies and governments began to look at medical costs. Malpractice insurance rose as consumers became more aware of personal iatrogenic effects. Reimbursement decreased for less than major diagnoses or recognized major treatments. ECT was discussed for a comeback strictly for economic reasons. Psychologists objected, presented their data and were laid off. ECT is a big moneymaker and a dramatic hedge against inflation for entrepreneurial physicians. It is cheap, easily administered and 100 percent reimbursable.

Time (November 19, 1979) ran a story entitled "Comeback for shock therapy? It's unsavory reputation may be changing." In the article, no new ideas or data were introduced to change that reputation, however, and it was acknowledged that ECT was well on its way to becoming obsolete (e.g., in New York State, a bastion of ECT practice, use of ECT dropped 38 percent between 1972 and 1977). Similar articles followed in Newsweek, Your Health and other national magazines. An aggressive customer campaign by a California hospital included a community fair, balloons, and a pamphlet recommending ECT for "pregnant women, patients in their nineties and even patients who had recently undergone heart surgery." "If given early in the day," the pamphlet stated, "ECT does not prevent the patient from going to work an hour or two afterwards." Side effects? "Much research has been done over the last thirty-five years to investigate the possibility of permanent memory changes occurring with ECT. Research now suggests that such changes are not likely regardless of the number of treatments given." No research is specifically cited.

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The national and international campaign for a renaissance of ECT and psychosurgery generally may be a cynical grab for money or it may reflect the reactionary political turn of events marking the beginning of the decade. However, the resistance has reformed as well. Legislation guarding informed consent and limiting abuses continues to accumulate. My own preferred model code would guarantee an independent assessment of any patient before and after treatment in any facility. Such a code, some colleagues fear, would push malpractice insurance higher. In the long run, I think it would lower it by putting malpracticers out of business. And, on the way, we might learn something about the effects of varying treatments — successes as well as iatrogenic failures.

*The leader of the resistance for the 1980s was Peter Breggin. An articulate physician, careful scholar and forceful tactician, he wrote *Electroshock: Its Brain-Disabling Effects* (1979) to launch the decade's ECT debate. The following chapter is from his significant and controversial book.*

—R.F.M.

Are the Patients Lying?

Pro-ECT articles and books often acknowledge frequent complaints about memory loss from their patients, but they dismiss or rationalize them as manifestations of “mental illness” and especially “neuroticism.” As in so many other aspects of justifying ECT, Kalinowsky has led the way in dismissing patient complaints about the treatment. In 1959, he wrote:

More insistent complaints of memory impairment are sometimes heard from neurotic patients who are overconcerned with all side effects of the treatment, and many complain of forgetfulness long after tests have shown a return to normal memory function.

Kalinowsky has repeated this viewpoint throughout the era of modified ECT (see Kalinowsky & Hoch 1961; Kalinowsky & Hippisus 1969). In the 1975 edition of the *American Handbook of Psychiatry*, he again called the complainers “neurotics” and said, “Many complain of forgetfulness long after tests have shown a return of normal memory function.” In the same year, in the *Comprehensive Textbook of Psychiatry* he took the position that “Some patients complain more than others, and neurotics are often overconcerned with these temporary memory difficulties.”

Perhaps the most revealing statement in all the electroshock literature was made by Kalinowsky and Hoch in the 1952 edition of their textbook when they wrote, “All patients who remain unimproved after ECT are inclined to complain bitterly about their memory difficulties” (p. 139). The sentence (one of the few edited out of later editions) merits careful reading. The authors said that *all* patients who remain unimproved complain about amnesia and, furthermore, they admitted that these people complain *bitterly*

How then could Kalinowsky and Hoch argue, on the same page, "No evidence has been brought forward to indicate that permanent mental sequelae are caused by the treatment"? In order to make this claim they must disregard the report of *every patient* who does not respond to ECT in their prescribed manner. These patients are "unimproved" or "neurotic" and therefore cannot be trusted. Why *all* such patients complain *bitterly* about memory loss is left to the imagination. Is there some inexplicable ECT effect that always brings about a subjective feeling of memory loss in patients whom it fails to help, although it never does so in the patients whom it succeeds in helping? Instead, could it be that those patients who complain about memory loss are labeled "unimproved" or "neurotic" in order to invalidate their opinions, while all those patients who make no complaints are labeled "improved" or "cured"?

Refusing to accept that so many consistent complaints must be taken seriously, other apologists for ECT have suggested variations on the theme that patients who complain about memory loss are irresponsible and "mentally ill," whereas patients who don't complain are "trustworthy" and "improved." Schwartzman and Termansen (1967) concluded from their research that patients are so upset about "subjective" memory loss that intensive ECT should be largely abandoned, yet they raised the possibility that these complaints have no basis in reality. Squire (1977) concluded from his own systematic follow-up studies that, "it seems quite clear that individuals judged clinically appropriate for bilateral ECT do have memory complaints long after ECT." Then he went on to suggest that memory loss is an "illusion."

Faced with insurmountable evidence that patients complain about memory loss years after ECT, the American Psychiatric Association Task Force on ECT (1978), with Squire as its research consultant, rallied around the suggestion that former ECT patients are suffering a "persistent illusion of memory impairment" (p. 68). The theory states that bilateral modified ECT (but not unilateral, non-dominant ECT) does produce a "lingering sense of memory impairment" which then causes "some individuals to be more sensitive to subsequent failures in recall, even if they occur at a normal frequency." This is not ascribed to neuroticism in the patients, but to the treatment itself, so that the "illusion" of memory loss can occur "with or without psychiatric illness." This is the final suggestion made by the Task Force at the conclusion of its skimpy review of the literature on mental dysfunction following ECT.

But why would patients experience this illusion following bilateral modified ECT but not following nondominant unilateral ECT? The advocates of this theory must claim that nondominant unilateral ECT does not produce an acute organic brain syndrome and acute memory loss, a position wholly at odds with the literature and clinical observation. The position also seems faulty as a defense against liability. Should not a patient be able to

sue a psychiatrist for using a treatment that commonly produces an emotionally upsetting and disabling "illusion"? The advocates of the illusion theory seem to be hoping for a switch from bilateral to unilateral ECT, accompanied by a new cycle of claims that this form of ECT is harmless.

The illusion theory was stated in a less elaborated form by Noyes and Kolb (1973) and by Kolb (1977) in recent editions of *Modern Clinical Psychiatry*. The patients, they said, cannot be "trusted" in evaluating their own memory loss. Their thrust was clear: the patients unaccountably *exaggerate* their losses. Noyes and Kolb cited a study by Cronholm and Ottosson (1963a) to support their assertion that the patients cannot be trusted. But, on reading the Cronholm and Ottosson study, we find to the contrary that the patients who have the *most memory loss tend to complain the least*. This is why they cannot be trusted—they tend to *deny* the degree of damage they have suffered. Gomez (1975) found in regard to the treatment period that "those who remembered least of this period complained least of memory loss."

This denial of mental impairment is exactly what can be expected and what typically is found after brain damage. Instead of exaggerating their mental defects after brain damage, patients *almost always* tend to deny or to downplay them. They do this out of fear and shame over their mental condition (Goldstein 1975). The phenomenon of denying mental dysfunction after brain damage is so commonplace that it has a name: confabulation. If post-ECT patients cannot be trusted in evaluating their mental function, it is because they do not wish to acknowledge their impairments. Confabulation is such a well-known phenomenon in clinical neurology and psychiatry that it is usually discussed, in separate chapters, in the very books in which it is claimed that ECT patients, for some unaccountable reason, like to *exaggerate* their mental losses and dysfunction.

In the 1959 edition of the *American Handbook of Psychiatry*, in which Kalinowsky claimed that patients who complain about memory defects after ECT are "neurotic," two excellent discussions of confabulation were presented in other chapters (Brosin; Weinstein & Kahn). Both chapters made clear that patients with brain trauma, including ECT, tend to deny or hide the extent of their brain dysfunction. As Weinstein and Kahn put it, the confabulations are "seemingly designed to amplify the denial, minimize the traumatic implications of the illness, and explain away the manifestations." Weinstein and Kahn went so far as to relate the confabulations and euphoria to the alleged "improvement" seen in post-ECT patients—a subject that will receive further attention in regard to the brain-disabling hypothesis.

Weinstein and Kahn made clear the difference between retrograde amnesia based on brain disease and fake or neurotic amnesia. Retrograde amnesia following brain trauma is general and rubs out a broad spectrum of memories, both trivial and significant, without regard for their symbolic importance to the individual. Fake amnesia is usually highly symbolic. Typically, a painful loss or traumatic event is forgotten, such as the death of

a comrade in battle. Global memory will be unaffected and the amnesia will not be retrograde. The patient forgets what he *wishes* to forget. But in memory loss following damage to the brain, the person cannot remember things he wishes to remember. As described in my six cases and in the psychiatric literature, post—ECT patients have very global losses that follow the classic pattern of true retrograde amnesia, with the greatest losses occurring nearest to the trauma. Rarely if ever do such patients report symbolic losses.

Weinstein and Kahn also described another well-known diagnostic difference between real, or retrograde, amnesias and fake, or neurotic, amnesias. The patient who is consciously or unconsciously faking wishes to forget his forgotten memories, so he rarely displays eagerness to recover them. When he is reminded of his forgotten memories, he is rather indifferent to the revelation. By contrast, the individual with retrograde amnesia is very upset about his losses and often works very hard, much as my cases, in order to recover them. When Kalinowsky admits that his patients complain “bitterly” about their losses, he adds validity to their complaints.

Brosin’s chapter (1959) confirms the observations of Weinstein and Kahn. He described the Korsakoff-like syndrome that develops after trauma to the brain, pointed out that it can occur after lobotomy and electroshock, and emphasized the confabulation and euphoria with which patients try to cover up or to deny their defects.

Questions designed to reveal the functions of mental status, such as perception, recent memory, orientation, attention, ability to handle abstractions, arithmetic, and proverbs, will usually reveal marked defects. This may be true in other acute brain disorders, including patients operated on for brain tumor, lobotomy, and post-electric shock. In the Korsakoff syndrome, we often have the opportunity to see many of the psychodynamic defenses described by Goldstein and some of the psychoanalysts. As in other organic cerebral disorders, the patient is unconsciously, if not consciously, aware of many of his defects and tries to overcome them. compensate for them, or avoid them in many waysSome patients are placid and even euphoric, but the delicately defensive nature of this facade can usually be quickly proved by questions.

Brosin’s observations help destroy the hypothesis that the patients are exaggerating their defects. The reality that most brain-damaged people cannot bear to acknowledge or face their deficits was portrayed in various ways by each of my six patients. Their losses were almost always greater than they were willing to admit. While all acknowledged some degree of retrograde amnesia, they were especially reluctant to talk about any ongoing mental disabilities, such as difficulties remembering new material or a lack of mental dexterity. One patient denied any ongoing mental defects despite a long course of ECT treatment, until I mentioned his good fortune offhand-

edly a year after we had gotten to know each other. Only then did he confess with great shame that he felt less able to think and learn. He was very guarded and very embarrassed about this, and I chose for lack of information or confirmation not to include him in the group of four of six patients having anterograde defects. He is listed in my study as suffering from retrograde amnesia alone.

In long-term relationships with three of the six post-ECT patients, I had begun to assume that their lack of complaints about ongoing dysfunction meant a full recovery, only to realize from the expressions on their faces and from subsequent discussions that they were hiding their dysfunctions out of shame and frustration. As further confirmation of the confabulation in the six cases, the two most obviously damaged individuals were the ones who most adamantly and strenuously denied any losses other than retrograde amnesia. In one case, I, too, was misled and only realized the degree of confabulation when the neurologic tests and psychological tests were returned with significant defects.

I am not the only investigator who has discovered that ECT patients, however much they complain of memory loss, are nonetheless hiding many of their deficits. In his painstaking and elegant research, Janis (1948) came to the same conclusion. Here is his classic illustration of confabulation in a post-ECT patient:

Sometimes a patient will deny that a given event or series of events has occurred, and he will fill in the amnesic gap, as in the following example. The patient, a 37-year-old borderline schizophrenic, reported in the pretreatment interview that he had been unable to work for several months before coming to the hospital, during which period he would spend his time riding around in subways, wandering about the city, sitting in churches, etc. (These facts were confirmed by information from members of the family in the patient's case history record.) Four weeks after a series of twelve electroshock treatments, the patient was unable to recall this period of unemployment and claimed: "I worked right up till I came to this hospital?" After many detailed questions, the patient was finally told about his former statement and he replied: "I don't recall that. My wife would know because she has to take care of the bills. You could ask her. It might have been for a few days .

There are some things I can't remember. But I think I did support the family right up till I came to this hospital." [eipses in original]

Other clinicians have made similar observations. Dedichen (1946) was aware that patients "often do not spontaneously complain" of amnesia. He believed the complaint is withheld because the patient "interprets this defect as an aftermath of the psychosis from which he has just suffered and not as a sequel to the treatment?" Indeed, as Kalinowsky exemplifies, the *doctor* is

likely to attribute any such complaint to mental illness, or to a failure to improve. The complaining patient may be forced to receive more treatment because her complaints "show" she is unimproved. This could very well encourage a patient to withhold complaints out of fear.

To whatever degree patients do confuse their ECT brain-damage with psychosis, they are most likely to make this error in regard to anterograde dysfunction, such as difficulties in thinking rapidly, concentrating, or learning. Similarly, their physicians will more easily dismiss these ongoing symptoms as manifestations of "mental illness" rather than consider them organic illness. This may be the main reason why clinical reports concerning post-ECT effects rarely mention continuing mental dysfunction. Even "Practising Psychiatrist" (1965) had difficulty in interpreting his own post-ECT dysfunction. He described unpleasant olfactory sensations and could not determine if they were caused by his depression or by ECT.

Addressing himself to "the marked impairment of memory in a large number of patients after shock treatment," Braatoy (1948) summed up the problem accurately:

It seems to be generally agreed that this deficiency can be detected in ordinary clinical examination in some patients for a couple of months after the conclusion of the treatment. (N.B.: The examination must then be made with a special view to this matter. Many of these patients will, like other persons with impaired memory, be somewhat reserved in conversation and therefore the defect may easily be overlooked on cursory inspection, just as all psychiatrists and neurologists know that presenile dementia may advance remarkably far without any changes being noted by the patients associates -precisely because the person affected seeks to evade test situations.)

Fink (1957, 1958), Fink, Kahn & Green (1958), and others have described the frequency with which post-ECT patients use denial as a mechanism of defense. This further verifies the probability that these patients are denying their brain damage as well as their psychological problems. The euphoria described by Fink, Kalinowsky, and dozens of others as a frequent sequela of the treatment is in itself a form of denial. It is entirely consistent with a refusal to admit mental defects of any kind.

Euphoria is most common in the face of catastrophic losses, such as severe, general central nervous system disease, or lobotomy and ECT. As already noted, euphoria is defined in medical dictionaries and medical usage as an abnormal state in which the individual exaggerates his state of well being, or conversely, denies his state of ill health. In the earlier electroshock literature (see, for example, Levy et al. 1942), it was openly recognized that euphoria was a serious indication of brain damage and dysfunction. Only in the hands of modern advocates of ECT has an abnormal reaction been redefined as an indicator of improvement.

Because detailed case reports are rarely presented in the ECT litera-

ture, it is usually impossible to judge for oneself the actual losses of patients presented as proof of the harmlessness of ECT. One especially detailed self-report was offered anonymously by "Practising Psychiatrist" (1965) and, as already described, his claim to no significant memory loss was in sharp contrast to his actual description of labored attempts to relearn the subway system and his filing cabinets, despite years of familiarity with them before ECT. Similarly, Watkins, Stainbrook, and Lowenbach (1941) described the disastrous reaction of another physician to one subconvulsive ECT and reported that those who knew him were largely unaware of his impairment. As Dedichen (1946) originally observed, it is not only easy for the patient to hide his defects; it is easy for others to overlook them.

ECT and Psychological Testing

I have already noted that no reputable neurologist would rule out the existence of brain damage, even *severe* brain damage, on the grounds that psychological tests failed to detect any objective evidence. Because this question is so crucial, I want to return to it again. The question is this: If post-ECT patients report classic symptoms of permanent retrograde amnesia, can negative psychological tests be used to invalidate their claims or even to cast doubt about them?

As in one of my six cases, psychological tests are occasionally useful in documenting serious organic defects, especially in the presence of more objective physical findings. But they are not reliable or sensitive enough to rule out serious organic defects. In other words, the tests are useful when they find something definitive, but they are not meaningful when they fail in this task.

In his discussion of trauma to the brain, Brosin (1959) addressed himself to the question of psychological testing, noting that a great deal of evidence had been generated pertaining to its usefulness in regard to measuring organic brain damage. He observed that "the high hopes which existed from 1920 to 1945" concerning the development of reliable and sensitive objective tests had failed to materialize. He affirmed the position taken by all experts on psychological testing—the objective psychological tests "have not provided the clinician with readily available, reliable measures of loss of cortical function owing to brain-tissue damage." In his own detailed analysis of the mental effects of brain damage, Brosin relied almost wholly on clinical evaluations of the patient's subjective reports.

Neurologist Robert Grimm (1978) has addressed himself specifically to the matter of psychological testing for amnesia following electroshock therapy.

Experimentalists who find no significant lasting changes in ECT memory studies must be concerned with the question of whether

or not their measures are sensitive enough or aimed in the right direction ...In addition to losses of familiar recall items, it is the small, intermittent, or subtle changes in memory or its processes that may be at risk - intrinsic events which go undetected to external observers or formal testing. In personal matters, small lacunae in memory can be very consequential. After the fact, recalling a missed appointment ordinarily engenders elaborate social responses to repair the situation. But not to know that a memory has been dropped is infinitely more troublesome to those embarrassed by the event and puzzled as how to respond.

In memory, as in intellect, it is the "little things" that count. Given the current lack of data, it is inappropriate to be blithe or argumentative about a patient's concern over alleged memory troubles or to be too comfortable with experimental findings that fail to reveal losses.

In the light of these generally accepted medical truths, it is dismaying that advocates of ECT use negative psychological tests to invalidate the patient's symptoms, and even more dismaying that they often use tests of their own creation with no known relevance to any clinical manifestations of brain disease.

The Lessons of Lobotomy

In animal studies, human autopsies, and EEG reports, the frontal lobes take the brunt of the damage inflicted by ECT. This is consistent with the placement of the electrodes and the flow of electric current. We have noted comparisons between ECT and lobotomy effects in the clinical literature, and in the following chapters we will find this comparison made more systematically, especially in regard to intensive ECT. We can therefore gain further insight into the question "Are the patients lying?" by examining the reaction of lobotomy patients to their deficits.

All lobotomized patients tend to underestimate their losses; none tends to exaggerate them. Lobotomy patients do distort a great deal, but wholly in the interest of denying their massive, overwhelming psychological deficits. Though obviously damaged, they often label themselves "better than ever," and frequently deny that they have been operated on, even when confronted with their surgical scars (Freeman & Watts 1950; Tow 1954).

A clinical experience cruelly illustrates both the losses and the process of denial. A man in his 30s had been lobotomized in the 1950s at the age of 20 and twice again in the mid-1960s. He and his mother brought a malpractice suit against the surgeon, not only because of the patient's mental deficits, but because of a partial paralysis following the third operation. He denied any impairment of intellectual function and believed that his IQ was

higher than ever. He confabulated about reading the newspapers and staying abreast of current events. On clinical examination, he had massive losses in abstract reasoning, judgment, insight, and planning for the future. He could not initiate simple activities, and had to be supervised in his self-care, such as dressing and eating. He was apathetic and his emotions were shallow and almost nonexistent, except for occasional displays of inappropriate levity. However, after hearing me testify in court about his psychological deficits, he approached me during recess and in hesitant, broken sentences thanked me for my efforts. He agreed for the first time that his mind had been impaired by the surgery and he reported that he felt very sad, although his face remained stiff and emotionless. I asked him if he felt like crying, and he said with unusual firmness, "I am crying" though his eyes remained dry and his face masklike. After this very short exchange, he retreated again into apathy and denial.

The lobotomy studies not only confirm the denial and confabulation typical of individuals with frontal lobe damage, but they also suggest the direction in which to search for post-ECT mental deficits. The most comprehensive clinical analyses of postlobotomy patients were reported by Freeman (Freeman & Watts 1944, 1950), and the most thorough psychological studies were provided by Tow (1954).

The two reports are wholly in agreement. The patients suffer global psychological losses in all the higher human functions: abstract reasoning, judgment, insight, imagination, creativity, emotional sensitivity, moral awareness. The losses are not always obvious on a standard IQ test, which may show an artifactual improvement when previously rebellious and unruly patients become more willing to sit down and to follow instructions following lobotomy. But the losses will show up grossly when the patients are asked to demonstrate initiative, autonomy, or spontaneously generated activity. When the patients are asked to perform fully unstructured and self-determined tasks, such as writing a brief autobiography, a rich and sensitive prelobotomy production will be replaced by a sterile, mechanical, and sometimes more grossly psychotic postlobotomy production (Tow 1954).

Freeman & Watts, and Tow, strong advocates of the treatment, reported that the patients do best in structured, supervised and simplified environments after surgery. Tow (1954) observed, "One generalization which is fairly consistently true is that his performance is considerably better in a structured situation?" He elaborated:

Where the test is completely unstructured for him as in the autobiographies, the verbal fluency tests and abstract words, the deterioration in performance of the frontal subject was so gross as to be obvious without quantitative comparison. Where the situation is structured for him so that he only has to perform to a certain set pattern, within certain narrow limits, his performance approximates more nearly to his pre-operative.

Similar observations were made in the modern era of psychosurgery

by Andersen (1972), who found that amygdalotomy⁷ produced more docile, tractable individuals requiring a supervised environment:

Typically the patient tends to become more inert, and shows less zest and intensity of emotions. His spontaneous activity appears to be reduced, and he becomes less capable of creative productivity, which is independent of the intelligence With these changes in initiative and control of behavior, our patients resemble those with frontal lesions Presumably he will make the most of this gain in well-structured situations of a somewhat monotonous and simple character.

A similar lack of self-determination, initiative, and spontaneity becomes grossly apparent during the acute brain syndrome that develops routinely after three or four ECT. This phenomenon is usually called apathy. That this reaction can last for months was demonstrated by the extensive use of ECT to subdue or quiet difficult, unruly, or uncooperative mental patients on a large scale in the state mental hospitals in the 1940s and 1950s. Two of my six cases, one in the short-course group, described a permanent loss of initiative, spontaneity, and overall energy years after ECT. A third was unsure if ECT caused this same feeling, since he had suffered a similar psychological reaction prior to ECT. A fourth felt he had more energy than ever, but he had a long course of ECT, showed clinical signs of an organic brain syndrome, and confabulated. His energy level seemed to reflect an ineffective, irrational euphoria. Finally, two patients in the short-course group felt and displayed no loss in this area, although one did have demonstrable brain damage.

The typical ECT patient suffers less damage to the frontal lobes than the typical lobotomy patient, and so we would expect to find a less severe clinical reaction. But any loss of self-determination, initiative, or spontaneity in a human being is a significant loss. Difficult to define subjectively and almost impossible to measure objectively except in grossly disordered cases, this loss is nonetheless of very great importance. It is therefore surprising that no ECT research study or textbook has raised the possibility of such a defect following ECT, even though many clinical studies indirectly describe the defect when reporting on the use of ECT to pacify or calm state mental hospital wards.

Throughout the United States and around the world today, former psychiatric patients have begun to organize to publicize their concern about the damaging and humiliating treatment they have received in psychiatric hospitals (Frank, 1978). Much of their energy has been devoted to describing the devastating effects of electroconvulsive therapy. What they have to say about the treatment corresponds exactly to the cases I have reported and to the many clinical and research studies in the literature. Are we to believe with Kalinowsky that these people—one and all—are “neurotics” who have not been helped by their ECT?

Because the existence of brain damage following ECT is also confirmed through animal research, autopsy reports, brain-wave studies, neurological examinations, and systematic psychological research, it is both rational and imperative to acknowledge that ECT frequently produces severe mental dysfunction in the form of both retrograde amnesia and ongoing mental disabilities.

Footnote

- I *Amygdalotomy* is a psychosurgical operation that damages or destroys the amygdala, a portion of the temporal lobe which plays a key role in the regulation of emotion. It lies close to the heaviest concentration of electric current during ECT.

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