

L. W. Krouner,<sup>1</sup> B.S., J.D.

## Shock Therapy and Psychiatric Malpractice: The Legal Accommodation to a Controversial Treatment

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Medical malpractice litigation in the United States is of increasing concern to both the medical and legal professions because of the increased frequency of litigation against doctors and the increase in the dollar amount of claims.<sup>2</sup> Malpractice litigation related to shock therapy, however, is of less concern now than in previous years because of the development of neuroleptics (tranquilizers), psychostimulants, and antidepressant drugs which may be used in lieu of shock therapy for treating certain mental disorders [7-11]. The development of succinylcholine dichloride (Anectine<sup>®</sup>) and ultra-short-acting barbiturates (USAB) such as methohexital sodium (Brevital<sup>®</sup>), a fast-acting general anesthetic, has also contributed to the decline in shock therapy malpractice litigation because the proper administration of these drugs can substantially reduce the complications associated with shock therapy [12-17].

This article examines the medical and legal aspects of shock therapy with the dual purpose of informing both the medical and legal community of the malpractice risks associated with shock therapy.

### Medical Aspects of Shock Therapy

Shock therapy is used to describe those forms of treatment in which pharmacologic modes (drugs), electric stimuli, and/or insulin are used to induce convulsive or near-convulsive states in the body.<sup>3</sup> The physiologic mechanism of shock therapy is to bring

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<sup>1</sup>Attorney and counselor at law, 20 Parkwood St., Albany, N.Y. 12208 and 1065 Park Avenue, Apt. 8D, New York, N.Y. 10028.

<sup>2</sup>Popular, medical, and legal writing expresses this increasing concern (see C. Kramer's continuing column in the *New York Law Journal* and Refs 1-6).

<sup>3</sup>Psychiatric treatment can generally be divided into two categories: psychologic treatments and biologic treatments (somatic, organic, and physical) [18]. Biologic treatments can be subdivided into (1) pharmacotherapy, (2) shock (convulsive) therapy, (3) insulin coma and subcoma treatment, and (4) psychotherapy. Shock (convulsive) therapy can be further subdivided into pharmacologic shock and electroshock therapy. The drugs most frequently used in pharmacologic shock therapy are indoklon, metrazol, picrotoxin, coriamylin, ammonium chloride, and triazol. Electroshock therapy (EST) is also known as shock therapy (ST), electrocoma (EC), electric treatments (ET), electroconvulsive therapy (ECT), convulsive therapy (CT), brief stimulus therapy (BST), electronarcosis (electric sleep), and electrostimulation nonconvulsive (ESNC).

about chemical changes in the body which will have a salutary effect on behavior patterns characteristic of mental disease.

Misunderstanding and fear of shock therapy stem in part from the erroneous belief that modern shock therapy techniques are carry-overs from former centuries when fear, torture, and execution were used as treatments for mental illness. Shock therapy takes its origin from insulin, treatments given to increase a patient's weight and decrease excitement [19-21]. Sakel [22,23] first discovered the curative effects of insulin on psychosis. In his initial experiments Sakel tried to avoid coma or convulsions in treatment, but he later concluded that symptoms of mental disorders were relieved only if shock (coma or convulsions) were induced. Von Meduna [24,25] followed Sakel's initial efforts by experimenting with the use of metrazol to induce convulsions as a treatment for schizophrenia. Von Meduna is considered by some to be the father of modern shock therapy because of his experiments based on the therapeutic value of the convulsion. The pioneering efforts of Sakel and Von Meduna were followed by Professor Ugo Cerletti of Rome [26]. There is some indication that Cerletti's belief in electrically induced convulsions as treatment for mental disorders was shared by other researchers. However, Cerletti did not, as other researchers, permit personal fear to paralyze his willingness to experiment. Bini, Cerletti's assistant, working with the electrical engineer in Cerletti's Rome clinic, constructed the original electroshock machine. In 1938 a shock therapy team lead by Cerletti induced the first electroconvulsion in man for treatment of mental disorder. After this initial historic treatment, experimentation and use of electroshock therapy techniques grew rapidly.

Today, pharmacotherapy, the treatment of mental disorders with prescription drugs, is the most widely practiced form of physiologic psychiatric treatment. Electroshock therapy is the second most widely practiced form of treatment [10, pp. 3, 4, 160, 165]. Insulin has been largely replaced by an inhalant, hexafluorodiethyl ether (Indoklon®) [27].

What is troublesome in the modern-day treatment of mental illness with shock therapy is that the physical (organic) causes of mental disease remain to a great extent without explanation. Shock therapy techniques were developed on a trial and error basis through experimentation and observation of patients. They did not evolve, as many treatments for physical disease, by laboratory experimentation to isolate the organic or chemical cause of a particular set of symptoms, and then to derive a specific chemical agent to counteract the disease-producing entity. A thumbnail sketch of some of the explanations given for the mode of action of shock therapy provides some support for the view that shock therapy is still experimental in nature [28].

One physiologic (organic, somatic, biologic) explanation of shock therapy advanced by Sakel [29] was that in schizophrenia the nerve cell develops hyperactivity and subsequent oversensitivity to normal stimuli in the outside world, and that the administration of insulin shock therapy either neutralizes the excitant hormone causing the hyperactivity, or blockades the genetically younger nerve pathways from the harmful effects of chemicals produced in the vegetative subcortical centers, which were thought to damage the genetically younger nerve passages responsible for normal behavior patterns. Sakel failed, however, to explain the physical (chemical) process for either the destruction of the hormone by insulin, or for the blockade of the genetically younger nerve passages.

Von Meduna's [24,25] theory for the mode of action of shock therapy was founded on the assumption that epilepsy and schizophrenia were somehow antagonistic to one another, and that schizophrenic symptoms would temporarily disappear after spontane-

ous convulsions. However, the fundamental assumption was later shown to be clinically invalid.<sup>4</sup>

Georgi [31] postulated that alteration of the nerve cell membrane was responsible for the effectiveness of shock therapy.

Kuppers [32] theorized that initially insulin slowed metabolism in the brain, and that a rebound effect of the initial slowdown was a speedup of metabolic activity in the brain causing a stimulation of nerve cells formerly in a state of malfunction or degeneration.

Cerletti [10, p. 371] reasoned that convulsions bring a patient to a state close to death and thereby arouse a reaction of extreme biologic defense, producing a substance he called agonine which exerts the therapeutic effect.

Other physiologic theories deal with stimulation of the diencephalon regions of the brain, cerebral oxidation, the balance between the sympathetic and vagoinulin systems, excitation of the hypothalamus, coma, effects of electric current, and confusion accompanied by memory impairment [10, pp. 372, 373].

Psychogenic (psychological) explanations of shock therapy center around the assumption that the physical effects of shock therapy are negligible and that the real value of shock therapy is to prepare the soil for intensive psychotherapy. Psychogenic explanations rely on such theories as a feeling of rebirth after death, enabling the patient to begin life and normal relations with people anew; the facilitation of emotional catharsis; and satisfaction of a guilt complex, through punishment administered by a doctor/father figure.

While the mode of action of shock therapy remains without a generally accepted explanation, psychiatrists do know which mental disorders are most favorably influenced by treatment. Shock therapy has been used to treat a variety of mental disorders including the affective disorders, schizophrenia, psychoneuroses, anxiety states, and conversion hysteria.<sup>5</sup> Shock therapy has proven most valuable in alleviating the symptoms of the affective disorders on a permanent basis. Some researchers feel that depressive syndromes which occur during old age react best to treatment. Because episodic recurrences of manic-depressive disease and involuntal depression are highly probable, some psychiatrists suggest maintenance treatments to stabilize the course of the depression over extended periods of time.

The value of shock therapy in relieving the underlying causes of schizophrenia is more uncertain than its value in treating the affective disorders.<sup>6</sup> Most psychiatrists agree that shock therapy is effective in relieving certain symptoms of schizophrenia, but in chronic schizophrenia the value of shock therapy remains subject to question [33].

Shock therapy's therapeutic effect on psychoneuroses is also uncertain. Shock therapy has proven effective in relieving only some symptoms of certain psychoneuroses, and where it is indicated only a few treatments are applied [10, pp. 242-244].

Knowledge of the existing techniques for administering shock treatment can be as crucial to evaluation of a malpractice action as knowledge of the forms of mental disease which are favorably influenced by the administration of shock treatment. There is no single "approved" procedure for administering shock treatment. Variations of pharma-

<sup>4</sup>In an electroencephalographic, genetic study based on clinical experience, Hoch [30] demonstrated that schizophrenia and epilepsy are neither opposed nor related to one another. On the basis of 10,000 patients surveyed in the literature, Esser [10, p. 370] concluded that epileptic convulsions have occurred in patients who were catatonic schizophrenics and in many cases there was no improvement in the psychoses.

<sup>5</sup>Affective disorders include involuntal, senile, and reactive depressions and manic depressive psychoses (see Refs 10, pp. 229-242 and 21, pp. 557-558).

<sup>6</sup>Compare Ref 10, p. 237 with Ref 21, p. 557.

cologic and electroshock techniques can be found in medical literature [34]. Although there is variation in the technique of shock therapy, certain standard precautions are indicated in administering treatment to most patients. In a particular case a psychiatrist may have sound medical reasons for not taking a certain precaution. Therefore, the following discussion of general precautions should not be taken as statements of absolute legal impositions of standards of care. A psychiatrist who fails to take an indicated precaution may or may not be liable, depending on the reasons the psychiatrist has for failing to follow the precaution.

Today the complications which may follow from the administration of shock treatment have been reduced [10, p. 212]. In the past, complications from shock treatment were caused either by the muscle relaxant administered with treatment, or by violent muscular contractions which occurred upon the introduction of the convulsive agent.

Early efforts to control the intensity of the muscular contractions were made with curare [35,36]. While curare was effective in reducing the violent muscular contractions, it was dangerous because it often caused paralysis of the involuntary muscles controlling respiration, resulting in death by asphyxiation [37-39].

The development of succinylcholine, a modern muscle relaxant which is fast acting and produces only brief respiratory arrest, made the administration of shock therapy much safer. By paralyzing muscles for only a few minutes, violent muscle contraction could be controlled without the danger of asphyxiating the patient. One researcher developed a tendon-reflex test to determine the "safe" dosage of succinylcholine for each patient [40,41].

The administration of succinylcholine together with oxygen functions to effectively reduce the two major complications of shock therapy, bone fracture caused by violent muscular contraction and asphyxiation caused by an overeffective muscle relaxant.

Of somewhat lesser significance than the development of succinylcholine was the introduction of ultra-short-acting barbiturates (USAB). Barbiturate anesthesia is recommended for some patients before the administration of succinylcholine to make the patient unconscious and unable to feel the discomfort of muscle contractions which occur before muscle relaxation [42]. Administration of a USAB also helps to reduce patient fear which may accompany the respiratory arrest induced by the succinylcholine [43]. While a USAB helps to reduce discomfort and fear, it may not be indicated for all patients because of the undesirable general side effects of barbiturate anesthesia such as nausea, late patient awakening, and prolongation of respiratory arrest. If possible, before administering shock therapy the first time to a particular patient the psychiatrist should give the patient a thorough physical examination to determine whether there are any contraindications to the administration of succinylcholine, a USAB, or the shock treatment itself. Pre-existing cardiac, cardiovascular, or allergic conditions may suggest a modification of treatment procedure [34].

Failure to follow one of these precautions may result in injury. Knowledge of the types of injuries associated with shock treatment is essential to the evaluation of a malpractice case.

Before the introduction of succinylcholine and USAB, the most frequent complication of shock therapy was bone fracture caused by quick, violent, muscular contractions associated with the treatment. Localized fractures of bones in the arms, legs, back, and pelvic areas are most frequently associated with muscle contractions during shock therapy. Dislocation of the jaw and arm have also occurred. While administering succinylcholine reduces the risk of fracture, fractures may still occur [44].

Respiratory complications have also occurred during shock therapy. Respiratory complications can be divided into two types: complications occurring immediately after

treatment [respiratory distress or arrest (apnea)], and complications resulting from disease processes in the lungs aggravated by treatment (lung abscess or tuberculosis) [45]. Precautions to avoid the possibility of immediate respiratory complication include clearing the airways before treatment, counteracting collapse of the tongue with a rubber or metal airway, and administering oxygen until the patient is able to breathe spontaneously [10, p. 177].

From 1947 through the first half of 1952, cardiovascular complication was the greatest cause of deaths from shock therapy [46]. To minimize the risk of treatment in mental patients with previous cardiovascular disease, Impastato and Gabriel [13, p. 698] devised an electroshock procedure in which no barbiturates are used, and only a small dose of succinylcholine is used to produce the anesthetic effect.

Mental complications, including postconvulsive restlessness, confusion, psychotic episodes, startle reactions, and memory impairment, often follow shock treatment [47]. Barbiturate anesthesia and succinylcholine have negligible effect in reducing post-treatment mental complications. The procedure indicated to reduce post-treatment mental complications is nonconvulsive therapy with unidirectional, low amperage currents [48]. The precautions indicated to lessen the effects of mental complications are close supervision if the patient is hospitalized, or detailed instructions to the person(s) responsible for the patient if treatment is given on an outpatient basis [10, p. 184].

### **Legal Aspects of Shock Therapy**

Broadly defined, psychiatric malpractice is an act or omission by a psychiatrist which proximately causes injury to a patient, and which is inconsistent with such reasonable care and skill as is usually exercised by psychiatrists of good standing of the same system or school of practice as the treating psychiatrist [49,50].

The incidence of shock therapy malpractice actions was greatest in the period prior to the development of succinylcholine. Shock therapy malpractice actions were so troublesome at one time that physicians and surgeons in Kansas mental institutions threatened to resign if their individual liability for shock therapy injury were not limited, malpractice insurance premiums for psychiatrists who administered shock therapy were higher than for psychiatrists who didn't, and the American Psychiatric Association's Committee on Therapy rescinded specific standards it issued for the administration of shock therapy because the standards were being used in court against psychiatrists, as evidence of the precautions which should have been observed.

Recovery against psychiatrists found liable for malpractice has not been for errors in the administration of treatment. Rather, patients have recovered for the failure of psychiatrists to observe pretreatment and post-treatment duties imposed by law. Therefore, it is important for psychiatrists and attorneys to be aware of the duties the law imposes on the psychiatrist who administers shock treatment.

Informed consent is a pretreatment legal duty which requires a physician to disclose the risks inherent in a contemplated treatment [51,52]. The psychiatrist faces a dilemma in communicating the risks of shock treatment to his patient. Flat statements that shock therapy is safe may subject the psychiatrist to liability for breach of warranty. Disclosure of all risks may frighten some patients into nonconsent, even though there is only a minimal risk of injury from treatment.

The practical dilemma with informed consent and shock therapy is reflected legally in a difference between states over whether a psychiatrist must obtain an informed consent before proceeding with treatment. The minority view, that *no* informed consent is necessary before administering shock treatment to patients, is expressed in an advisory opinion handed down by the Pennsylvania Department of Justice, *Shock Therapy in*

*State Hospitals* [53,54]. This opinion was based on the questionable premise that shock therapy is an established, uniform procedure which is safe and effective in treating most mental disorders, and that patients in a state mental institution should not have the same right to consent to shock treatment as patients under the care of their own psychiatrist. Kentucky is another state which dispensed with the requirement of informed consent to shock therapy in the case *Wilson v. Lehman* [55]. The patient in *Wilson* was not successful in recovering damages from the treating psychiatrist for the failure to give informed consent, because the highest Kentucky court held that the patient implied consent to the treatment by not objecting or resisting. Finding that the patient implied consent from the fact he submitted to treatment is equivalent to removing the requirement since, if an informed consent can be implied, the psychiatrist does not have to disclose the risks to the patient before the treatment is administered.

The more popular view, shared by the state courts in Missouri, California, and New Mexico and the federal courts in the Fifth and District of Columbia Circuits, is that informed consent must be obtained before proceeding with shock therapy. The Supreme Court of Missouri in two cases, *Aiken v. Clary* [56] and *Mitchell v. Robinson* [57], established the basic rule that in the absence of an emergency a psychiatrist is obligated to disclose to his patient (assuming competence) or to the patient's guardians (assuming incompetence) those risks which a reasonable psychiatrist would disclose under similar circumstances.

A question may arise concerning who is able to give an informed consent to treatment. The California Supreme Court and the Fifth Federal Circuit have held that a spouse can consent to treatment. The California case, *Maben v. Rankin* [58], involved a suit by a woman patient against the medical clinic where, with her husband's consent, she had been involuntarily confined and given electroshock treatments, and the psychiatrist who treated her. The woman sued for false imprisonment and assault and battery. The Fifth Circuit case, *Lester v. Aetna Casualty* [59], involved a suit by a patient against his treating psychiatrist. The man sued for injuries he sustained during shock treatment to which his wife consented. The suit was brought on the theory that by obtaining an informed consent from the patient's wife, the psychiatrist deprived him of freedom to contract without due process of law. The courts in both *Mabin* and *Lester* dismissed the complaints and reasoned that in the absence of an emergency, a psychiatrist must obtain an informed consent from the patient, but that when the patient is not competent to give his consent, or when in the judgment of the psychiatrist it would be unwise or unsafe to discuss possible dangers of treatment, consent can be obtained from a close relative or guardian.

Given that a patient's consent must be obtained, the next logical question which arises is to what extent does informed consent require that risks be disclosed fully? The answer to the degree of disclosure question given by the Supreme Court of New Mexico and the District of Columbia Court of Appeals is that a reasonable psychiatrist should never make statements that shock treatment is "perfectly safe," and should disclose the most likely risks in the treatment unless the psychiatrist has a good medical reason for *not* disclosing the risks. In *Woods v. Brumlop* [60] the Supreme Court of New Mexico said:

A physician who misleads a patient by not only failing to give a warning of reasonable and recognized risks inherent in a treatment...but by affirmatively assuring [a patient] that there are no risks...is liable for the harmful consequences of the treatment. Such failure to disclose, or the giving of an untrue answer as to the probable consequences of a treatment, constitutes malpractice;...unless [such] failure comes within one of the exceptions to the rule requiring candor and disclosure.

In *Johnston v. Rodis* [61], the District of Columbia Court of Appeals held that an affirmative statement by a psychiatrist that shock treatments were "perfectly safe" might be a warranty, the breach of which could be the basis for legal action. *Woods* and *Johnston* indicate that if an error is to be made with regard to the degree of risk disclosure, it should be made in overstatement and not understatement of the risks.

Less troublesome for psychiatrists than informed consent are the legal standards imposed during the process of treatment. In no reported case has a psychiatrist been held liable for injuries a patient sustained by reason of an error in the actual administration of treatment. The law, to date, permits great flexibility in the actual administration of shock treatment. Evidence of the flexibility given psychiatrists who administer shock treatment is their exemption from the legal theory *res ipsa loquitur*.

*Res ipsa loquitur* is a Latin phrase which translated literally means the thing speaks for itself [62,63]. In tort law, the law of personal injury, *res ipsa loquitur* enables a plaintiff who is not aware of the exact circumstances surrounding his injury to require an explanation of those circumstances from the defendant. If the defendant does not explain the circumstances surrounding the plaintiff's injury to the trier of fact so that the trier of fact is convinced of the defendant's freedom from negligence, then the defendant may be held liable. *Res ipsa loquitur* will be invoked when a plaintiff is able to prove that: (1) the event which caused the injury would not occur unless someone was negligent, (2) the agency or instrument which caused the injury was in the exclusive control of the defendant, and (3) the plaintiff engaged in no voluntary action which contributed to the cause of injury.

Reported cases indicate that courts, without exception, have refused to apply *res ipsa* to shock therapy malpractice cases [57,61,64-66]. Each of the cases involved a suit by a patient who suffered fractured bones when he underwent treatment. *Res ipsa* was rejected because the plaintiff(s) could not demonstrate that fractures would *not* occur even if treatment were properly administered. The courts recognized the generally accepted theory that regardless of precautions, fractures remain an inherent risk of shock therapy. By this reasoning a plaintiff must fail to satisfy the proof requirement that the injury sustained was caused by a negligent act of the psychiatrist. *Res ipsa* has been held inapplicable in fracture cases involving shock therapy; however, apparently no plaintiff in a reported case has argued for the application of *res ipsa* to other types of injuries which if reasonable care were taken would not occur from the administration of shock therapy. An injury which should *not* occur from shock therapy is death from respiratory arrest. *Res ipsa* might be accepted if the estate of a patient who died from respiratory arrest related to the administration of shock therapy attempted to invoke the doctrine. As yet, however, *res ipsa* has been rejected when raised in the context of shock therapy injury.

After the administration of shock therapy a psychiatrist is required to provide for observation or restraint or both of patients. The post-treatment duty of surveillance required by law recognizes the medical fact that following shock treatment a patient is likely to experience considerable mental confusion and possible loss of memory. Under certain circumstances, the post-treatment complications of shock therapy may be dangerous to either the patient or to those who care for him. In Minnesota a court found a psychiatrist negligent in failing to give proper instructions concerning post-shock-treatment medication; the patient was discovered asleep in a burning chair [67]. Reported cases also indicate that serious injuries may result from falls by patients who are not properly observed after treatment. Courts in Georgia, Minnesota, Pennsylvania, Texas, and Washington have been confronted with injuries sustained by patients who were not

properly observed after shock treatment, ranging from minor fractures to paralysis to death [68-72] and including a fall from a bed following shock therapy [68].

The legal accommodation to shock therapy is that no psychiatrist has been held liable for errors which occur during the treatment process. The result parallels the uncertainty in medical opinion concerning standard precautions which should be taken during the administration of treatment. Liability attaches either when the psychiatrist guarantees freedom from complication or fails to fully inform his patient of the inherent risks of treatment (pretreatment duties), or when the psychiatrist fails to provide for close supervision after treatment (post-treatment duty). Since the introduction of shock treatment to the United States, the law has left psychiatrists relatively free to experiment and to develop new and sometimes better treatment techniques. The climate of relative legal tolerance in which shock therapy has emerged is a significant, though perhaps unintentional, legal accommodation to a new medical treatment.

### **Legal Implications of Medical Knowledge**

Notwithstanding the general climate of legal tolerance to shock therapy, psychiatrists have been held liable for certain shock-therapy-related injuries. This article can be aptly concluded by cataloguing legal obligations related to the administration of shock therapy.

#### *Duty to Obtain Informed Consent*

Explaining all risks of treatment, if circumstances permit, is the best procedure for the psychiatrist who wishes to reduce liability for failure to give informed consent. The duty to obtain an informed consent is justified by the fact that the precise physiochemical mode of action of shock therapy is still not known and, therefore, shock therapy remains to some extent experimental. Any patient who is the subject of an experimental treatment should be informed of the risks of that treatment before it is administered. Requiring informed consent before treatment promotes better doctor-patient understanding, and is likely to decrease a patient's inclination to bring a malpractice suit if, by chance, he sustains an injury he was warned of prior to receiving treatment.

#### *Duty to Provide for Post-Treatment Surveillance*

Whether shock therapy is administered on an outpatient basis or in a hospital or clinic, the treating psychiatrist is required by law to provide for proper post-treatment patient care and supervision. In reported cases both psychiatrists and hospitals have been held liable for failure to provide proper supervision. Given that the patient is in a confused, drugged condition after treatment, he is a danger to both himself and those around him. The legally imposed duty to provide for post-treatment supervision is based on medical fact, and appears justified.

#### *Duty to Use Muscle Relaxants*

Although administration of muscle-relaxant drugs is suggested for most patients before shock therapy to reduce the risk of bone fracture caused by violent muscular contractions, courts have been reluctant to impose liability for failure to administer muscle-relaxant drugs. The New York Court of Claims found no obligation to administer muscle relaxants in a case where a patient in a state hospital who sustained fractures



from shock treatment urged negligence in the failure to administer muscle relaxants [73]. Significantly, the court said:

In 1956 some doctors were using relaxant drugs as routine procedure when administering electric shock treatments. Many other doctors were not using the relaxant drug, fearing the dangers of the unknown reactions more than the probability of injuries which would include fractures.

Because of the split in medical authority concerning the administration of muscle relaxants, the New York Court held that there was no violation of a standard of care in failing to administer muscle relaxants. A similar result was reached by an English court [74] which summarized expert testimony presented during a trial in which an injured mental patient attempted to recover from a hospital urging that failure to use either manual restraints or muscle relaxants constituted negligence. The English court also recognized the split, holding that there is no legal requirement for a psychiatrist to administer muscle relaxants during shock therapy. The failure to administer muscle relaxants during shock treatment is not necessarily negligence because of the differing medical opinions regarding the propriety of using muscle-relaxant drugs in every case. Courts have not been confronted with a situation in which the administration of muscle-relaxant drugs was clearly indicated.

#### *Duty to Follow Published Standards*

In 1953, when malpractice suits arising from shock therapy were of great concern to psychiatrists, the Committee on Therapy of the American Psychiatric Association drafted detailed standards of suggested precautions for psychiatrists who administered shock treatments. These detailed standards were subsequently repealed in 1959 and more general standards were adopted. The practical effect of the adoption of more general standards was to make it more difficult for a plaintiff to demonstrate in court the specific proper standard a psychiatrist should follow in administering treatment. The plaintiff's burden to prove the precise act or failure to act which constituted negligence can be met, however, by the introduction of expert testimony concerning the proper standard to be observed during the administration of treatment.

When the detailed published standards were in existence, a North Carolina court held that they were admissible to show the suggested standard regarding the use of X-rays to diagnose fractures occurring from shock treatment [75]. The failure to introduce published standards regarding the use of X-ray treatment to diagnose fractures weighed heavily against the plaintiff in a case where a New York court held that the plaintiff failed to prove the standard of care which was not followed and resulted in his injury [76].

While detailed standards were of some use to plaintiffs in shock therapy malpractice actions, now, with more general standards, it appears that psychiatrists are not required to follow a specific set of published standards. The freedom from following published detailed standards leaves the psychiatrist room to further experiment with the administration of shock treatment

#### *Duty to Abstain from Unwarranted or Excessive Treatment*

Dr. Lothar Kalinowsky, a pioneer in the introduction of electroshock treatments to the United States, says, "The indiscriminate use of somatic treatments, particularly of electric shock therapy, must be deplored" [10, p. 378]. Research for this article reveals

no reported case in which a psychiatrist was sued for malpractice on the theory that excessive shock treatment was given when such treatment was not indicated.

A plaintiff who sues on the theory he received unwarranted or excessive shock treatment faces difficult problems in proving either that shock treatment was not indicated or that an unreasonable number of treatments were given or both. Reasonable psychiatrists can differ over the proper number of shock treatments to be administered in a given case. For this reason it would be difficult to prove that a certain course of treatment was not consistent with reasonable care exercised by psychiatrists who use shock therapy.

Shock therapy has proven most effective in temporarily relieving the symptoms of severe mental illness. It can be argued that a psychiatrist who administers numerous treatments in short time periods on an extended basis does his or her patients a disservice because the symptoms of the mental illness are being treated without any effort to relieve the underlying cause of the mental illness. However, proof of excessive treatment in court would be difficult because of the experimental nature of shock therapy.

While psychiatry recognizes the possibility of unwarranted or excessive administration of shock therapy, there have been no cases reported where a plaintiff attempted to sue on the basis of receiving too many shock treatments. Unwarranted or excessive treatment has remained without legal definition, and if this theory of recovery is alleged it will have to be proven with expert testimony.

### Summary

Shock therapy has developed over the years into an accepted form of psychiatric treatment for relieving the symptoms of certain mental illnesses. The development of shock therapy did and still does take place in a legal environment which leaves the reasonable psychiatrist free to experiment. The discovery of muscle-relaxing drugs and their introduction into the treatment procedure were undoubtedly encouraged by the possibility of malpractice suits arising from bone fracture caused by rapidly contracting muscles. Today the incidence of malpractice suits involving shock therapy has been reduced, and a reasonable psychiatrist exercising care remains free to treat without concern over the possibility of a successful malpractice action.

### References

- [1] "Suing the Doctor—A Rising Problem," *U.S. News and World Report*, Vol. 70, No. 10, 8 March 1971, p. 70.
- [2] Green, P. W., "The Malpractice Problem," *Michigan Medicine*, Vol. 72, No. 1, Jan. 1973, p. 67.
- [3] Halberstam, David, "The Doctor's New Dilemma—'Will I Be Sued?'," *New York Times Magazine*, 14 Feb. 1971, pp. 8, 9, 33-39.
- [4] Shapiro, D. and Curran, P., *Law, Medicine, and Forensic Science*, 2nd ed., Little, Brown, & Co., Boston, 1970.
- [5] Waltz, J. and Inbau, F., *Medical Jurisprudence*, MacMillan, New York, 1971.
- [6] "Medical Malpractice: The Patient v. the Physician," Special Report, 91st Congress, 1st Session, 1969, pp. 1, 2.
- [7] Louisell, D. and Williams, H., *Medical Malpractice*, Vol. 1, M. Bender, New York, 1970, p. 49.
- [8] Sandor, A., "The History of Professional Liability Suits in the United States," *Journal of the American Medical Association*, Vol. 163, 1957, pp. 459, 464.
- [9] Sadusk, J. and Waterson, R., "A Statistical Study of Professional Liability Claims in California," *California Medicine*, Vol. 87, 1957, pp. 192, 196.

- [10] Kalinowsky, L. and Hippus, H., *Pharmacological, Convulsive and Other Somatic Treatments in Psychiatry*, Grune & Stratton, New York, 1969, pp. 7, 118, 119.
- [11] Kraines, S., Ford, H., Impastato, D. and Ziskind, E., "A Symposium on the Importance of Shock Therapy in the Treatment of Depressive States," *Diseases of the Nervous System*, Vol. 23, 1962, p. 1.
- [12] Holmberg, G. and Thesleff, S., "Succinylcholine Iodide as a Muscle Relaxant in Electroshock Therapy," *American Journal of Psychiatry*, Vol. 108, 1952, p. 842.
- [13] Impastato, D. and Gabriel, A., "P.M.-G.M. Succinylcholine Modified Electroshock—Therapy Without Barbiturates," *American Journal of Psychiatry*, Vol. 114, Feb. 1958, p. 698.
- [14] Impastato, D., "A New Succinylcholine Technique," *Diseases of the Nervous System*, Vol. 18, Jan. 1957, No. 1, p. 34.
- [15] Impastato, D., "The Control of Memory Impairment with Unilateral G.M. Treatment," *Excerpta Medica International Congress, Proceedings of IV World Congress of Psychiatry*, Vol. 150, 1966, p. 1549.
- [16] Impastato, D., Berg, S., and Gabriel, A., "Practical Elimination of Fractures in Electroshock Therapy by Succinylcholine," *New York State Journal of Medicine*, Vol. 57, Aug. 1957, p. 2513.
- [17] Impastato, D., "Apnea in Succinylcholine Modified Electroshock Therapy," *Diseases of the Nervous System*, Vol. 17, No. 11, Nov. 1956, p. 347.
- [18] Kraines, S., *Mental Depressions and Their Treatment*, MacMillan, New York, 1957, pp. 404-486.
- [19] Steck, H., "Die Behandlung des Delirium Tremens mit Insulin," *Schweizer Archiv fuer Neurologie und Psychiatrie*, Vol. 29, 1932, p. 173.
- [20] Steck, H., "Zur Insulinbehandlung akuter Psychosen," *Schweizer Archiv fuer Neurologie und Psychiatrie*, Vol. 31, 1933, p. 153.
- [21] Bennett, A., "The Value of the So-Called Shock Therapies," *Annals of Western Medicine and Surgery*, Vol. 6, 1962, p. 555.
- [22] Sakel, M., "Neue Behandlung der Morphinsucht," *Zeitschrift fuer die Gesamte Neurologie und Psychiatrie*, Vol. 143, 1933, p. 506.
- [23] Sakel, M., "The Nature and Origin of the Hypoglycemic Treatment of Psychoses," *American Journal of Psychiatry Supplement*, Vol. 94, 1938, p. 24.
- [24] Von Meduna, L., "Die Konvulsionstherapie der Schizophrenie," *Psychiatrisch-Neurologische Wochenschrift*, Vol. 37, 1935, pp. 317-319.
- [25] Von Meduna, L., "General Discussion of the Cardiazol Therapy," *American Journal of Psychiatry Supplement*, Vol. 94, May 1938, p. 40.
- [26] Impastato, D., "The Story of the First Electroshock Treatment," *American Journal of Psychiatry*, Vol. 116, 1960, pp. 1113-1114.
- [27] Krantz, J., Manchey, L., Truitt, E., Ling, A., and Kurland, A., "The Availability of Hexafluorodiethyl Ether by Intravenous Injection as a Convulsant in Psychiatric Treatment," *Journal of Nervous and Mental Diseases*, Vol. 129, 1959, p. 92.
- [28] Gordon, H., "Fifty Shock Therapy Theories," *Military Surgeon*, Vol. 103, 1948, p. 397.
- [29] Sakel, M., "The Pharmacologic Shock Treatment of Schizophrenia," *Nervous and Mental Diseases*, Monograph Series No. 62, Nervous and Mental Diseases Publishing Co., New York, 1938.
- [30] Hoch, P., "Clinical and Biological Interrelations Between Schizophrenia and Epilepsy," *American Journal of Psychiatry*, Vol. 99, 1943, p. 507.
- [31] Georgi, F., "The Problem of Convulsions and Insulin Therapy," *American Journal of Psychiatry*, Vol. 94, 1938, pp. 67, 76.
- [32] Koppers, E., "Die Insulin und Cardiazolbehandlung der Schizophrenie," *Allgemeine Zeitschrift fuer Psychiatrie und Ihre Grenzgebiete*, Vol. 107, 1938, p. 76.
- [33] Feldman, S., Susselman, S., and Barrera, S., "Socio-economic Aspects of the Shock Therapies in Schizophrenia," *American Journal of Psychiatry*, Vol. 104, 1947, p. 402.
- [34] Impastato, D., "Physiologic Therapy in Psychiatry," *Journal of the Medical Society of New Jersey*, Vol. 52, Oct. 1955, pp. 529-539.
- [35] Bennett, A., "Preventing Traumatic Complications in Convulsive Therapy by Curare," *Journal of the American Medical Association*, Vol. 114, 1940, p. 322.
- [36] Easton, N. and Sommers, L., "Vertebral Fractures in Metrazol Therapy with or Without the Use of Curare as a Supplement," *Journal of Nervous and Mental Diseases*, Vol. 99, 1944, p. 256.
- [37] Riggs, B. and Schlomer, G., "Hazards of Curarization Before Electroshock," *Diseases of the Nervous System*, Vol. 8, 1947, p. 382.

- [38] Beard, B. and Harris, T., "Near Fatality from Curare Preceding Electroshock Therapy, Case Report," *Diseases of the Nervous System*, Vol. 7, Sept. 1946, p. 226.
- [39] Impastato, D., Frosch, J., Alamnsi, R., and Wortis, S., "The Electrofit in Depression—Comparison of Hospital and Privately Treated Patients," *New York State Journal of Medicine*, Vol. 45, Jan. 1945, p. 179.
- [40] Impastato, D. and Berg, S., "Methods of Administration of Succinylcholine Dichloride in Electroshock Therapy with a Description of a Simple and Modified Technique, and a Succinylcholine Dichloride Test," *American Journal of Psychiatry*, Vol. 112, 1956, p. 893.
- [41] Impastato, D., "Tendon Reflexes and Safe EST," *Diseases of the Nervous System*, Vol. 24, 1963, p. 618.
- [42] Impastato, D., Bok, R., Frosch, J., and Wortis, S., "Modification of the Electrofit: Sodium Amytal," *American Journal of Psychiatry*, Vol. 100, 1943, p. 358.
- [43] Rubinstein, H., "The Fear Allaying Effect of Pentothal Sodium in Electroshock Therapy," *Diseases of the Nervous System*, Vol. 7, 1946, p. 1.
- [44] Kalinowsky, L., "The Question of Vertebral Fractures in Convulsive Therapy and Epilepsy," *American Journal of Psychiatry*, Vol. 98, 1942, p. 533.
- [45] Conway, H. and Osmons, H., "Lung Abscess Following Electroconvulsive Therapy," *Journal of Mental Science*, Vol. 94, July 1948, p. 653.
- [46] Maclay, W., "Death Due to Treatment," *Proceedings of the Royal Society of Medicine*, Vol. 46, 1953, pp. 13-15.
- [47] Zamora, E. and Kaelbling, R., "Memory and Electroconvulsive Therapy," *American Journal of Psychiatry*, Vol. 122, 1965, p. 546.
- [48] Impastato, D., Frosch, J., Robertiello, R., and Wortis, S., "Improved Electro-Convulsive Therapy with Low Amperage Unidirectional Currents," *Diseases of the Nervous System*, Vol. 12, Oct. 1951, p. 3.
- [49] Saxe, D., "Psychiatric Treatment and Malpractice," *Medico-Legal Journal*, Vol. 37, 1969, p. 187.
- [50] Morse, H., "The Tort Liability of the Psychiatrist," *Buffalo Law Review*, Vol. 16, 1967, p. 649.
- [51] Waltz, J. and Schuneman, T., "Informed Consent to Therapy," *Northwestern University Law Review*, Vol. 164, 1970, p. 628.
- [52] Annotation, *American Law Reports*, 2nd Series, Lawyers' Cooperative, Rochester, Vol. 79, 1961, p. 1028.
- [53] *Shock Therapy in State Hospitals*, 64 Pa. D. & C. 14 (1948).
- [54] Comment, "Constitutional Law—Advisory Opinions Upholding Legality of Administering Electric Shock Treatments to Patients in State Mental Hospitals Without Consent," *University of Pennsylvania Law Review*, Vol. 97, 1949, p. 436.
- [55] *Wilson v. Lehman*, 379 S.W. 2d 478 (1964).
- [56] *Aiken v. Clary*, 396 S.W. 2d 668 (1965).
- [57] *Mitchell v. Robinson*, 334 S.W. 2d 11 (1960).
- [58] *Maben v. Rankin*, 55 Cal. 2d 139, 358 P. 2d 681 (1961).
- [59] *Lester v. Aetna Casualty*, 240 F. 2d 676 (1957); *cert. den.* 354 U.S. 923 (1957).
- [60] *Woods v. Brumlop*, 377 P. 2d 520 at 525 (1962).
- [61] *Johnston v. Rodis*, 251 F. 2d 917 at 918 (1958).
- [62] Prosser, W., *Law of Torts*, 4th ed., West, St. Paul, Minn., 1971, pp. 211-235.
- [63] Rubasmen, D. S., "Res Ipsa Loquitur in California Medical Malpractice Law—Expansion of a Doctrine to the Bursting Point," *Stanford Law Review*, Vol. 14, 1962, p. 251.
- [64] *Quinley v. Cocke*, 183 Tenn. 428 (1946).
- [65] *Farber v. Olkon*, 40 Cal. 2d 503 (1952).
- [66] *Collins v. Hand*, 431 P. 2d 378 (1968).
- [67] *Christy v. Saliterman*, 179 S.W. 2d 288 (1970).
- [68] *Adams v. Ricks*, 91 Ga. App. 494, 86 S.E. 2d 329 (1955).
- [69] *Quick v. Benedictine Sisters Hospital*, 257 Minn. 470, 102 N.W. 2d 36 (1960).
- [70] *Brown v. Moore*, 274 F. 2d 711 (1957) reversing 143 F. Supp. 816 (1956); *cert. den.* 355 U.S. 882 (1957).
- [71] *Constant v. Howe*, 436 S.W. 2d 115 (1968) reversing *Howe v. Citizens Memorial Hospital*, 426 S.W. 2d 882 (1968).
- [72] *Roth v. Havens*, 56 Wash. 2d 393, 353 P. 2d 159 (1960).
- [73] *Foxulger v. State*, 23 Misc. 2d 933, 934 (1960).
- [74] *Bolam v. Friern Hospital Committee*, 2 All. Eng. L. Rep. 118 (1957).
- [75] *Stone v. Proctor*, 259 N.C. 633, 131 S.E. 2d 297 (1963).
- [76] *Howe v. State of New York*, 33 Misc. 2d 147 (1962).