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# Electroconvulsive Therapy (ECT): An Introduction for Elder Law Professionals

Electroconvulsive therapy (ECT), colloquially called "shock therapy," is often denounced as barbaric by members of the lay population. However, it is actually a highly efficacious treatment for depression, which can be particularly common and severe in the elderly. This discussion illuminates the potential benefits and risks of this controversial treatment.

# By Deirdre Johnston, Doug Eitel, and W. Vaughn McCall



uring a recent workshop with a group of law students on dementia and capacity issues, factors contributing to variability in functional capacity were discussed. These included psychiatric

syndromes that might influence an elderly person's perceptions and cognition. One important, treatable condition is major depression, which can be particularly common and severe in the elderly. There is a range of effective treatments available for this common illness, which, when used appropriately, can restore functional capacity and independence. However, the students expressed firmly entrenched negative beliefs regarding one particular treatment: electroconvulsive therapy, or "shock therapy."

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When electroconvulsive therapy (ECT) was mentioned as a treatment option, a number of students became animatedly vocal, denouncing ECT as brutal and barbaric. Efforts to present the students with evidence to the contrary were met with outright skepticism. Their reaction is understandable, in light of what one finds when attempting to obtain information regarding ECT from any source other than mainstream scientific publications. For example, an Internet search for ECT generates links to numerous sites depicting disturbing images of grimacing faces and lightning bolts.

It appears that the depiction of ECT in the popular media is still represented by images such as that in the movie One Flew Over the Cuckoo's Nest, which blurs the distinction between ECT and lobotomy. In fact, such images are inaccurate and misleading. The use and effects of ECT are far different than portrayed; yet the "Cuckoo's Nest" image is the one that dominates the public—and seemingly, many legal professionals'—perception. It is likely that this and similar images have contributed in some measure to the obstruction of access to treatment by some people who might benefit from ECT.

## **Indications for ECT**

It is generally accepted in the medical profession that ECT is safe and effective. There is an extensive body of clinical and research literature supporting the use of ECT. There are well-established indications for its use, as well as clear guidelines for its appropriate administration. The most common indication for ECT is as a secondary treatment for major depression when the illness is unresponsive to antidepressants. It is also used as a primary treatment when depression is so severe as to be life threatening.

In addition to being an extremely valuable treatment resource in such situations, ECT also remains the most reliable and effective primary treatment for major depression with psychotic features.<sup>1</sup> However, in practice, it is usually used only after other treatments have failed.<sup>2</sup> In the elderly, there is evidence that ECT may, in fact, be increasingly effective with increasing age,<sup>3</sup> and that it is well tolerated even by persons in the over eighty, or "old-old" age group.<sup>4</sup>

#### **Major Depression**

Major depression is a serious medical illness and can be associated with significant medical complications, including suicide and death from other causes. For instance, it has been shown that depression increases the risk for cardiac mortality—even in persons without cardiac disease at baseline.<sup>5</sup> In older individuals, depression, similar to dementia, presents impairment that not only affects mood, but also involves cognition and perceptions. Persons with severe depression may become inattentive to their personal care. They may neglect themselves by not eating or bathing, and may become withdrawn and isolated. They may neglect to pay bills, resulting in loss of utilities or other necessary services. These complications are more common in the elderly than in younger adults.

Secondary medical complications may arise, necessitating emergency medical care. A profoundly depressed person may exhibit psychomotor retardation in which response time is markedly impaired. He or she may stare fixedly into space when being addressed and may seem unable to understand verbal requests, commands, or instructions, giving the appearance of having dementia. Without effective treatment-in addition to being at risk of medical complications including malnutrition, dehydration, infections, falls, and the sequelae of prolonged immobility-such an individual may lose the ability to care for him- or herself, to make decisions on his or her own behalf, and may even be institutionalized. Depression may also complicate dementia, aggravating the degree of cognitive impairment to the point at which, unless the depression is treated, loss of independence and institutionalization can occur prematurely.

#### **Major Depression with Psychotic Features**

In severe major depression, psychotic symptoms can develop, including delusional beliefs. Delusion is defined as, "a false belief based on incorrect inference about external reality that is firmly sustained despite what everyone else believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary."<sup>6</sup>

In nihilistic delusions, affected persons become convinced that everything is hopeless, that they are doomed, even that the location that they inhabit is a wasteland. One woman was delusionally convinced that her body was dead, that it had been replaced by an artificial body made of plastic, and that food or medications introduced to this plastic body were wasted. On the basis of this belief, she refused to eat or to take medication, resulting in eventual involuntary admission to a hospital in a state of profound malnutrition.

Persecutory and paranoid delusions are more frequently seen in severe major depression. In these situations, the affected persons may believe that they are in physical danger from others or that people are stealing from them. Such individuals may go to great lengths to protect themselves from the person(s) whom they believe to be dangerous, sometimes resulting in behavior that puts themselves and others at risk. This may include refusing food or medications because of the belief that such offerings contain poison, or threatening imagined assailants with weapons. Because of the loss of motivation, energy, and initiative that usually accompanies severe depressive illness, the persons may not act on these beliefs.

# **Suicide Risk**

Suicidal thoughts and actions are among the most serious complications of major depression. The risk of suicide, particularly in the elderly, underscores the need for effective treatment of this disorder.

Suicide rates are highest in the geriatric population, particularly in older white males, and have been increasing in the past decade.<sup>7</sup> Older Americans are disproportionately likely to kill themselves. Nineteen percent of all U.S. suicide deaths in 1997 involved persons over the age of sixty-five, although persons over sixty-five comprise only thirteen percent of the U.S. population. The rate is highest in those over the age of eighty-five. Suicide is the cause of death in 65 deaths per 100,000 persons over eighty-five: This is approximately six times the national U.S. rate of 10.6 suicides per 100,000 populations.<sup>8</sup>

Effective treatment of depression might prevent some of these deaths. However, no one treatment works for everyone, and some individuals do not respond to medication.

# **Treatment for Depression**

Much progress has been made in recent years in the development of safer, more effective, pharmacological treatments. A range of psychopharmacological agents is now available, including the selective serotonin reuptake inhibitors, or SSRIs (e.g., fluoxetine, sertraline, paroxetine, fluvoxamine) and the atypicals (e.g., nefazadone, venlafaxine). The older medications (tricyclic antidepressants and monoamine oxidase inhibitors), which were more toxic but also very effective for many, are still available and may help some of those who fail trials of the newer agents.

As noted above, there are still individuals whose depression does not respond to medication. For these persons, ECT can be lifesaving and can make a significant difference to the quality of life of the affected persons and their families. Yet because of negative perceptions of ECT, some people who may benefit from it may not have access to it or may refuse it. The following hypothetical illustrates the particularly valuable role of ECT in geriatric psychiatry.

#### The Case of Mrs. K.L.

Mrs. K.L. is a seventy-four-year-old, married, white female. She is the primary caregiver for her seventyeight-year-old husband, who suffers from insulin-dependent diabetes, chronic congestive heart failure, renal failure, and vascular dementia.

Mrs. K.L. has a history of two episodes of major depression. One episode occurred after the birth of her last child in 1960. The second followed an episode of influenza in 1984, during which she made a serious suicide attempt. She was given antidepressant medication on both occasions without any improvement, and with progression of her symptoms. As a result, her treating physicians recommended ECT. On both occasions she responded to a course of three applications of the treatment. During the episodes of depression, she was withdrawn, hostile, had no energy or motivation, remained in bed, refused to eat, lost more than twenty pounds on each occasion, and expressed the wish to die. Between episodes, she was active, energetic, and very much involved in family and community activities.

In 1997, her family noticed that she was increasingly irritable, lost interest in usual activities, and began refusing to eat. They requested referral to a psychiatrist after she began to express the belief that her house was infested with poisonous molds that she could smell, even though no one else could smell anything. She was agitated, could not sit still long enough to stay in church with her family, and gave up her involvement in usual activities. Although she continued to care for her frail husband, she felt depressed and hopeless, could not sleep at night, woke early, and began to describe a death wish.

She was started on an antidepressant, a selective serotonin reuptake inhibitor (SSRI) that is the standard primary treatment for major depression. Because of the persistent delusional beliefs (the family had the house checked for molds, nothing was found but the patient could not be convinced), a small dose of an atypical antipsychotic medication (also standard treatment for delusional syndromes in the elderly) was added and gradually increased. After an initial improvement, her symptoms returned while she remained on medication. A second psychiatric opinion was sought, and recommendations followed, but despite appropriate increases in the doses of antidepressants and antipsychotics, as well as trials of other antidepressants, she continued to deteriorate. She also complained of being unable to remember things, although on careful examination, her cognitive function was intact.

As her agitation and subjective distress progressed, she became unable to care for her husband. Her medications were reduced in case they might be contributing to her confusion, but she continued to worsen. Her family hired a certified nursing assistant to come into the home to care for her and her husband, but the patient's agitation was so severe that it became impossible for the nurse to manage Mr. L.'s care while constantly having to reassure and redirect his wife, who, because of her extreme agitation, was very disruptive. The family decided, with the patient's agreement, to place her in a nursing home, where her mood and appetite continued to deteriorate, and she became increasingly hopeless and agitated.

At this point, although ECT had been discussed, the patient refused to proceed with it. Medications were tried again, with no improvement. She paced continuously, wept, and constantly complained that she felt terrible and she wasn't getting her medications (this was checked—she was). She began to express suicidal ideas, requesting a knife so she could kill herself. Finally, she was admitted on an emergency basis to Psychiatry.

While in the hospital, a further psychiatric opinion was sought and further medications were tried, to no avail. She was now losing weight rapidly due to severe agitation and refusal to eat. She was also visibly distraught, delusional toward family and staff, unable to sit still at all, pacing day and night, and would strike out at anyone who approached her. Her clinical appearance resembled that of a person with dementia. She frequently expressed suicidal ideas, and begged to be helped or to be "put out of [her] misery," while stating at the same time, "there is no hope, I'm done for, nothing can help me now." The patient and her husband had arranged some time previously for their son to have durable power of attorney. As the patient's illness progressed, her ability to participate meaningfully in decision-making deteriorated markedly. Her son sought and obtained guardianship. He and his siblings requested that ECT be considered, based on her history of prior response to it. Although the patient had objected to having ECT when it had last been discussed, expressing the delusional belief that nothing could help her, she retained enough insight to state that something had to be done to make her feel better, and assented to having ECT. As is permitted under North Carolina law, her son, now her guardian, gave consent for the treatment to proceed.

Although she had assented to proceeding with the treatment, the patient's agitation and delusional nihilism prevented her from participating fully in the consent process. She received a series of eight treatments and showed little improvement (most people show adequate improvement after six). She was not eating, and was taking minimal oral fluids. Because of her agitation she was unable to tolerate the placement of an intravenous line to hydrate her. In addition, she became dehydrated and developed a urinary tract infection and subsequently developed pneumonia. After a conference with the treatment team, the family requested that ECT be continued. Mrs. K.L. had six further treatments and finally began to improve, a total of fourteen treatments in all for this episode of depression.

After her treatments, she experienced some transient confusion but was discharged to the nursing home. Monthly maintenance treatments were scheduled, as is commonly the practice in persons whose depression is refractory to medication. On followup visits she continued to improve and moved back home to care for her husband. She requested to be allowed to drive again, as she had allowed her family to sell her car when she had been admitted to the nursing home. Approximately three months after discharge from the hospital, an occupational therapy adaptive driving skills assessment was carried out, and she was found to be capable of driving safely. She continued to have maintenance ECT for approximately one year.

The treatments have since been tapered and discontinued at the patient's request. She remains on a maintenance dose of an "atypical" antidepressant (one of the newer antidepressants with a combination of pharmacological actions). At the time of writing (January 2002), Mrs. K.L. remains the primary caregiver for her husband, who has since been diagnosed with colon cancer. Mr. L. now has a colostomy, which Mrs. K.L. is responsible for changing several times a day. Her family says she manages this very well. In addition, she is an avid cook and enjoys preparing Sunday lunch for her children and grandchildren weekly.

On examination, she is well groomed and pleasant, energetic, and speaks enthusiastically about her many interests. Her family reports that she is back to her "old self." Her mood is stable and her memory and cognition are intact, although she does not remember being in the hospital. She is extremely grateful for having had the treatment that allowed her to return to her previous level of functioning. She is actively involved in her church and community. In 1999, her younger brother developed a depressive illness with similar symptoms. Because his sister had responded well to ECT, he sought the same treatment she received. He received six applications of ECT, made a full recovery, and remains well.

# **Key Points**

This case illustrates several important points:

- 1. Indications for ECT:
  - a. Mrs. K.L. was given several trials of antidepressant medications without success.
  - b. She had a favorable prior response to ECT.
  - c. Her illness was life threatening, with unrelieved suicidality, progressive emaciation, and was now complicated by secondary illness (dehydration and infection).
- 2. Treatment strategy guided by the patient's wishes:

She initially refused ECT during this episode of depression and agreed to take medication; the treatment team honored her wishes until her illness became life threatening. At that point, ECT was sought as a life-saving intervention.

3. Loss of independence:

Due to her persistent severe symptoms, she was placed in a nursing home, was no longer able to drive, was unable to participate in her usual activities, and was unable to look after her husband. She was totally dependent on others for her care.

- 4. Competence to consent:
  - a. As her depression became more severe, she developed delusions of hopelessness and was unable to comprehend that anything could help her. On this basis she refused ECT.
  - b. Her son obtained guardianship, and sought ECT on her behalf after consultation with other family members and the treatment team. He gave consent for the treatment to proceed (under North Carolina law, a guardian may give consent for ECT).
- 5. Good outcome:

She recovered from her depression after a greater than usual number of treatment applications and is now fully functional in her home and community. It has long been evident clinically, and recent research has demonstrated, that ECT is associated with improvement in function and in mood.<sup>9</sup>

# Indications and Standards for the Use of ECT

The Surgeon General's 1999 Report on Mental Health stated that, "on balance, the evidence supports the conclusion that modern ECT is among those treatments effective for the treatment of select severe mental disorders, when used in accord with current standards of care, including appropriate informed consent."<sup>10</sup>

The American Psychiatric Association (APA) has presented recommendations on the practice of ECT since 1978, when it established the APA Task Force on ECT. This body has developed regularly updated guidelines, based on continuous review of the literature regarding the indications for use and application of ECT. The most recent update was released in 2001.<sup>11</sup> Principal diagnostic indications, based on either compelling data supporting the efficacy of ECT or a strong consensus in the field among experienced clinicians, are:

- 1. Unipolar major depression, including major depression, single episode, and major depression, recurrent;
- 2. Bipolar major depression, including bipolar disorder, depressed, and bipolar disorder, mixed;
- 3. Mania;

- 4. Schizophrenia, where the psychotic symptoms are of abrupt onset, when the illness is of the catatonic type, or where there is a history of a favorable response to ECT; and
- 5. Schizoaffective disorder, a schizophrenia-like illness in which there is a pronounced mood component.

The APA task force recommends that ECT not be reserved for use as a "last resort" in cases of recurrent depression where there has been a lengthy first episode with failure to respond to medications. Doing so may deprive patients of an effective treatment resulting in protracted suffering. It has been shown that exposure to episodes of longer duration may contribute to treatment resistance.<sup>12</sup>

Major depression is a recurrent illness, and ECT is not a "curative" procedure. It is used to treat an episode of depression. However, maintenance treatments, usually once a month, can prevent recurrence of depression. Also, if ECT has been effective for previous episodes of depression, a good response is likely if used to treat subsequent episodes. In addition, as with pharmacological treatments, a family history of response to ECT is often associated with increased likelihood of a good response. This occurred in the case of Mrs. K.L.'s brother, whose symptoms were very similar to his sister's and who made a good recovery with ECT after having had no response to trials of several different antidepressants.

#### **Description of the ECT Procedure**

In accordance with the 1999 recommendations of the American Society of Anesthesiologists Task Force on Perioperative Fasting,<sup>13</sup> the patient fasts for six to eight hours before the procedure (usually starting at midnight the night before). Prior to the treatment, the nurse confirms that the patient has not had anything to eat or drink and prepares him or her for treatment. The team, usually consisting of psychiatrist, anesthesiologist, and a nurse, are present during the procedure.

The psychiatrist speaks with the patient prior to the treatment and reviews the medical record as well as any new information (e.g., medication changes or new symptoms). When the patient is ready, a shortacting intravenous anesthetic is administered along with a short-acting muscle relaxant. A protective mouthpiece is carefully inserted to prevent the patient's teeth, tongue, and other oral structures from injury, as application of the stimulus causes a reflex contraction of the jaw muscles. This contraction is produced by a direct action of the stimulus on these muscles, and not by the seizure itself. A pharmacological muscle relaxant is used to prevent muscle contraction occurring during the seizure in order to minimize the risk of musculoskeletal injury.

The induced seizure activity, usually lasting thirty to sixty seconds, is monitored by continuous electroencephalogram (EEG), as there is minimal visible muscular contraction to indicate that a seizure is taking place. The anesthesiologist ensures that an airway is maintained throughout the procedure and supports the patient's breathing, monitoring oxygenation, for the brief duration of the seizure and the period of muscle relaxation, between two to five minutes for most patients. A brief electrical stimulus (measured in milliseconds) is delivered via electrodes placed either unilaterally on the non-dominant hemisphere, or bilaterally. In humans, one hand, foot, and/ or eye-usually the right-is dominant or preferred over the other. The contra-lateral cerebral hemisphere controls the function of that side of the body and is referred to as the dominant hemisphere. The opposite side of the brain is called the non-dominant hemisphere. Unilateral non-dominant hemisphere electrode placement is perceived to be less likely to be associated with confusion following treatment, therefore it is usually used initially but may be changed to bilateral over the course of the treatments if the patient is not experiencing an adequate therapeutic response. However, recent research suggests that with high stimulus doses, the advantage of choosing the non-dominant hemisphere may disappear.

Most patients begin to feel better after three treatments and are recovered after six. There is considerable individual variability in the number of treatments needed, and some patients may require ten or more treatments.

# Adverse Effects of ECT

All effective medical treatments are associated with some adverse effects, including ECT. However, as has been noted, the popular media have overstated the range and severity of the adverse effects of ECT, which are usually mild and transient. The most common adverse effect is a headache following the treatment, which usually subsides within a few hours and can be alleviated by a mild pain-relieving medication such as acetaminophen if needed. Some people may incur abrasions or lacerations to the tongue or cheeks, or dental injuries, during the procedure, usually if the mouthpiece is inappropriately placed or becomes displaced during treatment. Musculoskeletal injuries are uncommon since the introduction of muscle relaxants. However, muscle soreness is a common transient symptom and is due to the effects of the muscle relaxant. Prolonged seizures, lasting more than three minutes, or status epilepticus, in which the seizure persists for longer than thirty minutes, are rare complications. This is more likely to occur in patients receiving medication that lowers the seizure threshold. Precautions are taken (e.g., stopping or omitting doses of the medication prior to ECT) to prevent this.

Delayed recovery of spontaneous respiration can occur in rare instances. If this occurs, the anesthesiologist continues to support respiration until the patient recovers. Some elderly patients experience a period of delirium immediately following ECT. This resolves spontaneously within a few hours. In a small minority of patients, mania may develop over the course of ECT. This usually happens in patients with bipolar disorder and is treated in the same way as an episode of mania occurring spontaneously. More commonly, many people experience a disruption of short-term memory for the period prior to and during the series of treatments.

The ability to learn and retain new information may be disrupted during the treatments, but returns to normal within two to three weeks.<sup>14</sup> Some memory loss for the period immediately prior to and during the series of treatments may be permanent. However, ECT does not cause structural damage to the brain.<sup>15</sup>

When mortality occurs during ECT, it is usually a result of adverse cardiovascular effects. Therefore, the patient is assessed carefully for cardiovascular risk factors prior to ECT. A cardiologist is consulted, the risks and benefits of proceeding with the treatment in the presence of an identified risk factor are reviewed with the patient, and preventive measures are taken if it is agreed that it is necessary to proceed.

#### **Consent for ECT**

Physicians are required to obtain informed consent from their patients before starting ECT.<sup>16</sup> They are expected to summarize the mechanics of the procedure, its indication, reasonable treatment alternatives, and potential side effects and risks. The patient is also informed of the right to refuse treatment and to revoke consent at any time. Some states, such as Texas,<sup>17</sup> require a more comprehensive disclosure. These additional disclosures can include discussions about the degree, duration, and probability of the potential side effects, especially noting memory loss and death.

As our patient population becomes more culturally diverse, some states have required that consent forms be written and explained in the patient's primary language. Legislators may also require safeguards for obtaining consent from the hearing and visually impaired. At the patient's request, family members are included in discussions and often witness the consent form. Physicians are typically thorough in preserving documentation of consent because ECT may be associated with transient memory deficits that can cause some patients to forget such discussions.

Once the decision has been made to treat the patient with ECT, the attending physician orders X-rays, lab work, and cardiology and anesthesiology consults. If any additional risks are detected, the physician discusses these risks with the patient. If the risks are deemed to outweigh the likely benefits of ECT, it may be decided not to pursue ECT and to try an alternate treatment. If it is felt that the likely therapeutic effect of ECT outweighs the risks, then the consent issue is revisited with the patient, and a new consent form is signed. Some states, such as Florida,<sup>18</sup> add a second layer of precaution by requiring a non-treating physician to review the medical record and agree to the proposed ECT.

#### **Capacity to Consent**

In general, competent patients who consent to or refuse ECT are easily managed according to their expressed desires. Consent becomes more complicated when patients cannot understand their medical conditions or the proposed procedure.<sup>19</sup> This is not unusual among the geriatric psychiatric population, and is frequently the very cause of the hospital admission. Numerous states have legislated safeguards to help physicians and families balance the risks and benefits of ECT under such conditions.

First, many states regulate the process for determining capacity. Requirements range from informal bedside evaluations to complex and timeconsuming court hearings.<sup>20</sup> For example, Connecticut<sup>21</sup> requires the head of the hospital and two qualified physicians to agree that the patient is incapable of providing informed consent. Virginia authorizes a judge to receive evidence to determine whether a patient is incapable of making or communicating an informed decision.<sup>22</sup> While the latter method adds an additional safeguard for the patient, there is some trade-off in terms of cost and expeditious relief of acute, distressful psychiatric symptoms.

# **Substituted Judgment**

Second, many states have specified the people who can consent on behalf of an incompetent patient. For example, Alaska<sup>23</sup> and Michigan<sup>24</sup> authorize ECT if the patient expressly affirmed such treatment in an advance directive. No court involvement is required prior to initiating treatment. Michigan also recognizes a guardian's consent if two psychiatrists concur with the decision to administer ECT. North Carolina authorizes consent from the patient's legally responsible person, health care power of attorney, or pursuant to the patient's consent in an advance instruction for mental health treatment.<sup>25</sup> Utah<sup>26</sup> and Iowa<sup>27</sup> allow family members as well as guardians to consent without court interference.

The District of Columbia recognizes, in order of priority, an attorney-in-fact, guardian, spouse, adult child, parent, adult sibling, religious superior, and nearest relative.<sup>28</sup> Any of these representatives, however, must obtain a court order authorizing them to consent. Wyoming affirmatively disallows attorneysin-fact from consenting to ECT and only recognizes court appointed guardians.<sup>29</sup> Wyoming also requires the appointment of a separate guardian ad litem and conducts a court hearing before allowing the guardian to consent.<sup>30</sup> Finally, North Dakota allows guardians to consent without prior approval by the court.<sup>31</sup> The presumption is that these representatives have already been screened as persons who will advocate for the best interests of the patient and are accountable to the court, unlike attorneys-in-fact.

At least one state, Missouri,<sup>32</sup> permits involuntary ECT over the objections of a voluntarily admitted patient. Counsel must represent the patient at a full hearing before the court can act. Medical staff must demonstrate by clear and convincing evidence that the patient will enjoy significant improvement without serious functional harm and that there is no less drastic treatment alternative. The court is careful to prescribe a limited number of convulsive treatments over a specified period of time. South Dakota<sup>33</sup> and Virginia<sup>34</sup> also permit court-authorized ECT over the patient's objection for involuntarily committed patients.

Although not the focus of this article, many states have enacted special legislation concerning the use of ECT on children. For example, Texas forbids ECT being used on any person younger than sixteen years of age.<sup>35</sup> Of relevance to some geriatric patients, Missouri forbids the use of ECT on developmentally disabled patients.<sup>36</sup> Minnesota<sup>37</sup> and Ohio<sup>38</sup> legislate procedural safeguards before using ECT on this population. Perhaps the presumption is that substituted judgment is more difficult to determine with these patients. However, these states may be denying or delaying a valuable treatment alternative for recalcitrant patients.

## **Reporting Requirements**

Some states go further to improve patient care by legislating reporting requirements. Statutes range from mandating the maintenance of consent forms in the medical record (New Jersey)<sup>39</sup> to the submission of detailed reports. For example, Illinois<sup>40</sup> demands quarterly reports that include the number of patients who gave informed consent, number of patients who received ECT without informed consent, emergency ECTs, and any adverse reactions or autopsy findings. It is assumed that such detailed reports prevent abuse of ECT and promote continued improvements in care.

#### **Emergency ECT**

Finally, some states allow for ECT without informed consent under life-threatening conditions. Louisiana permits emergency treatments by authority of the facility director in consultation with two physicians.<sup>41</sup>

#### Summary

It is hoped that this article clarifies some of the issues misrepresented by inaccurate and sensationalized media images (apparently still dominated by such images as those in the movie One Flew Over the Cuckoo's Nest) in order to demystify this much maligned, yet effective treatment for such a serious, disabling, and common illness as major depression.

Readers are referred to the American Psychiatric Association Task Force on ECT publication, The Practice of Electroconvulsive Therapy, Second Edition,<sup>42</sup> for a more detailed account of the issues discussed. A hypothetical case history is described to illustrate the current standards and indications for ECT, along with a description of the procedure and review of adverse effects. Consent and competency issues as applied in different states are reviewed. It is clear that a considerable degree of variability exists nationwide. Such variability results in lack of

# Endnotes

- William Z. Potter & Matthew V. Rudorfer, Electroconvulsive Therapy: A Modern Medical Perspective, 328 New Eng. J. Med. 882 (1993).
- 2. Max Fink, Convulsive Therapy in the Twenty-First Century, in THE NEW OXFORD TEXTBOOK OF PSYCHIA-TRY, VOL. 2, 1342 (Oxford University Press 2000).
- 3. Andrew M. Wilkinson et al., Age and the Effects of ECT, 8 INT. J. GERIATRIC PSYCHIATRY 401 (1993).
- James D. Tew et al., Acute Efficacy of ECT in the Treatment of Major Depression in the Old-Old, 156 AM. J. PSYCHIATRY 1865 (1999).
- 5. Brenda W. Penninx et al., Depression and Cardiac Mortality: Results from a Community-Based Longitudinal Study, 58 ARCH. GEN. PSYCHIATRY 221 (2001).
- 6. Am. Psychiatric Ass'n, Diagnostic and Statistical Manual of Mental Disorders, fourth ed. (DSMD-IV) at 765.
- Allan T. Bennett and Kim A. Collins, Elderly Suicide: A Ten-Year Retrospective Study, 22 AM. J. FORENSIC MED. AND PATHOLOGY 169 (2001).
- D.L. Hoyert et al., *Deaths: The Final Data for* 1997, 47 DHHS NAT'L VITAL STATISTICS REPORT 19, DHHS PUBLICATION NO. 99-1120 (1999).
- 9. W. Vaughn McCall et al., Electroconvulsive Therapy is Associated with Superior Symptomatic and Functional Change in Depressed Patients, 63 J. AFFECTIVE DISORDERS 17 (2001).
- 10. Mental Health: A Report of the Surgeon General, at http://www.surgeongeneral.gov/library/ mentalhealth (visited January 10, 2002).
- 11. AM. PSYCHIATRIC ASS'N TASK FORCE REPORT,

uniformity of access to a treatment that can be lifesaving.

Thankfully, the "Cuckoo's Nest" era is long past. It does a grave disservice to many afflicted by severe depression—the most severely affected and at highest risk being the elderly—to allow such images to continue to dominate the public perception of ECT, and possibly influence the thinking underlying some of the laws that govern access to it.

The Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training, and Privileging (2d ed., 2001).

- See Maurizio Fava and Katherine G. Davidson, Definition and Epidemiology of Treatment-Resistant Depression, 19 PSYCHIATRIC CLINIC NORTH AM. 179 (1996); see also, Alistair J. Flint and Sandra L. Rifat, The Effect of Sequential Antidepressant Treatment on Geriatric Depression, 36 J. AFFECTIVE DISORDERS 95 (1996).
- 13. AM. SOC'Y OF ANESTHESIOLOGISTS TASK FORCE ON PERIOPERATIVE FASTING, Practice Guidelines for Perioperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures, 90 ANESTHESIOLOGY 896 (1999).
- 14. Eugene H. Ruben et al., *The Nature and Time* Course of Cognitive Side Effects During Electroconvulsive Therapy in the Elderly, 6 J. GERONTOLOGICAL PSYCHIATRY AND NEUROLOGY 78 (1993).
- 15. D.P. Devanand et al., Does ECT Alter Brain Structure?, 151 AM. J. PSYCHIATRY 957 (1994).
- Stephen B. Levin et al., Informed Consent in the Electroconvulsive Treatment of Geriatric Patients, 19 BULL. AM. ACAD. PSYCHIATRY LAW 395 (1991).
- 17. Tex. Health & Safety Code Ann. § 578.003 (Supp. 2002).
- 18. FLA. STAT. ANN. § 458.325 (2001).
- 19. Loren H. Roth et al., Test of Competency to Consent to Treatment, 134 Am. J. PSYCHIATRY 279 (1977).

- William J. Winslade et al., Medical, Judicial and Statutory Regulation of ECT in the United States, 141 AM. J. PSYCHIATRY 1349 (1984).
- 21. CONN. GEN. STAT. ANN. § 17a-543 (1958).
- 22. VA. CODE ANN. § 37.1-134.21 (Supp. 2001).
- 23. Alaska Stat. § 47.30.825 (2000).
- 24. MICH. STAT. ANN. § 330.1717 (1936).
- 25. N.C. GEN. STAT. § 122C-57 (1999).
- 26. Utah Code Ann. § 17A-3-611 (1953).
- 27. IOWA CODE ANN. § 229.23 (2000).
- 28. D.C. CODE ANN. § 21-2210 (2001).
- 29. WYO. STAT. ANN. § 3-5-205 (2001).
- 30. WYO. STAT. ANN. § 3-2-202 (2001).
- 31. N.D. Cent. Code § 25-03.1-40 (1959).

- 32. Mo. Ann. Stat. 630.130 (1949).
- 33. S.D. Codified Laws § 27A-12-3.12 (1967).
- 34. VA. CODE ANN. § 37.1-134.21 (Supp. 2001).
- 35. Tex. Health & Safety Code Ann. § 578.002 (Supp. 2002).
- 36. Mo. Ann. Stat. § 630.130 (1949).
- 37. MINN. STAT. ANN. § 245.825 (1946 & Supp. 2002).
- 38. Ohio Rev. Code Ann. § 5123.86 (2000).
- 39. Supra note 20.
- 40. 405 Ill. Comp. Stat. Ann. 5/2-110.1 (Supp. 2001).
- 41. LA. REV. STAT. ANN. § 28:171 (1951).
- 42. AM. PSYCHIATRIC ASS'N TASK FORCE REPORT, supra note 11.