ECT wipes out 30 years of memories

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Woman loses 30 years of memories after electroconvulsive therapy

Richland County (SC) Circuit Court

A 55-year old woman with a history of depression underwent successful electroconvulsive therapy (ECT) after her husband and father died. Six months later she became depressed, and a new psychiatrist referred her to his partner for additional ECT treatments.

The partner administered outpatient ECT at a hospital daily for 10 days. The referring psychiatrist wrote in the patient's chart that the patient experienced memory loss and severe cognitive problems during the initial ECT regimen but did not report this development to his partner and allegedly encouraged the patient to continue ECT.

After the second round of ECT treatments, the patient suffered brain damage and lost all her memories from the past 30 years—including the births of her children and her job skills—leaving her unable to work.

In court, the patient claimed ECT should be administered no more than three times a week, and the referring psychiatrist should have told his partner about the patient's memory problems.

- **The case was settled for $18,000**

Dr. Grant's observations

Although this case concerns ECT, the claim is based on negligence—that is, the psychiatrist did not fulfill his duty to care for the patient. The negligence claim focused on how the treatment was implemented, not whether ECT was appropriate for this woman's depression.

ECT's response rate ranges from 50% to 60%[1] among patients who did not respond to one or more antidepressant trials. Symptomatic improvement usually is faster with ECT than with pharmacotherapy[2] when ECT is administered three times per week. Mortality rates with ECT are similar to those associated with minor surgery.[1]

In addition to being an effective and safe treatment for depression, ECT rarely is a basis for malpractice. One study found that only 4 (0.2%) of 1,700 psychiatric malpractice claims filed between 1984 and 1990 concerned ECT's side effects, complications, or appropriateness.[3] Few patients who receive ECT file a malpractice claim because most are satis-

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fied with the treatment; approximately 80% of ECT patients say they would consent to ECT again.[4,5] In fact, one might consider withholding ECT from severely depressed patients grounds for malpractice.

Although safe and effective, ECT could present health risks that you need to discuss with patients. In particular, cognitive problems such as delirium and impaired attention and memory may result.[1]

COGNITIVE IMPAIRMENT RISK IN ECT

ECT's more severe cognitive side effects stem from:

- bilateral electrode placement
- sine wave stimulation
- suprathreshold stimulus intensity
- administration >3 times per week
- large numbers of treatments, usually >20 in an acute treatment course
- some medications, such as lithium carbonate and anticholinergics[6]
- pre-existing neurologic diseases such as Alzheimer's or Parkinson's disease.[1]

Among depressed patients without a known neurologic disease, the extent of global cognitive impairment before ECT may predict loss of autobiographical information.[7] The severity of memory loss presented in this case—although rare—is not unheard of. Patients have reported losing memories of personal events in the distant past and loss of function.[8,9]

The magnitude of retrograde amnesia often is greatest immediately after treatment. Patients are more likely to forget public information such as current events than personal information.[10] The effects usually subside over time, and older memories are more likely to be recovered than more recent ones. ECT can cause permanent memory loss, particularly after bilateral electrode placement, suprathreshold stimulus intensity, sine wave stimulation, or large numbers of treatments—usually more than 20.

Box

6 steps for obtaining informed consent before ECT

Ensuring adequate informed consent when delivering ECT or before referring a patient for treatment can help prevent a malpractice claim. Although specific requirements for ECT consent vary by jurisdiction, follow these general principles:[1]

- **Provide** the patient adequate information. Explain the reasons for ECT, describe the procedure including choice of stimulus electrode placement, offer alternative treatments, and explain the risks, benefits, anticipated number of treatments, relapse risk, and need for continuing treatment.
- **Make sure** the patient is capable of understanding and acting reasonably on this information and knows he or she can refuse treatment at any time.
- **Tell** the patient that a successful outcome is not guaranteed.
- **Describe** the likelihood and potential severity of major risks associated with ECT, including mortality, cardiovascular and CNS problems, and minor side effects such as headache, muscle aches, or nausea.
- **Be sure** the patient understands that consent is voluntary and can be withdrawn. The patient should know that he or she is also consenting to emergency treatment.
- **Tell patients** about possible behavioral restrictions—such as needing a friend or family member to monitor the patient or not being able to drive a car—that may be necessary during evaluation, treatment, and recuperation.

Although ECT might impair memory, it can improve neuropsychological domains such as global cognitive status and measures of general intelligence.[11] Also, there is no evidence that

ECT causes lasting problems in executive functioning, abstract reasoning, creativity, semantic memory, implicit memory, or skill acquisition or retention. Long-term negative effects on ability to learn and retain new information are unlikely.[1]

AVOIDING AN ECT RELATED MALPRACTICE CLAIM

To reduce the possibility of a malpractice claim after ECT:

- **Inform** the patient about the risk of cognitive side effects as part of the informed consent process (*Box, page 85*).
- **Assess** the patient's orientation and memory functions before and throughout ECT. In the above case, the referring psychiatrist had a duty to inform the psychiatrist administering ECT about the patient's memory problems and recommend decreasing or discontinuing ECT.
- **Consider** a patient's mood state, which may influence how ECT patients rate their memory.[12] Ask about symptoms of depression. Patients with cognitive complaints such as subjective memory loss are more likely than those without such problems to have depression symptoms.[1]
- **Do not** administer ECT more than 3 times per week. No evidence supports more frequent use, and daily ECT may increase cognitive problems.[1] The psychiatrist in the above case was negligent in providing a treatment frequency with no scientific support or medical rationale.

Reduce ECT frequency when cognitive problems develop. Twice-weekly treatment may be as effective as treatment given three times weekly and cause fewer cognitive problems, although symptoms may resolve more slowly.[1]

- **Verify** that the physician is qualified to perform ECT. Hospitals must ensure ECT quality and safety and should have a written plan for providing and maintaining ECT privileges.
- **Involve** the family when appropriate. Family members often care for patients during outpatient ECT. Give patients and family members literature describing ECT. Allow them time to consider the procedure, then schedule an appointment to answer questions.

Address patient and family concerns throughout treatment, not just before ECT. Uninformed family members may have strong negative opinions about ECT from books or movies and may instigate a malpractice action—such as a wrongful death claim if the patient dies while receiving ECT—or urge the patient to sue when complications develop. By contrast, a well-informed, supportive family might expedite the patient's recovery and be less likely to file malpractice claims.

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