COURT OF APPEALS
STATE OF NEW YORK

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IN THE MATTER OF SIMONE D.,

Petitioner-Appellant

-against-

KATHLEEN IVERSON, etc.,

Respondent-Respondent

----------X

NOTICE OF MOTION

Appellate Division
Docket No. 2005-11405

Queens County
Index No. 501166/2005

SIRS:

PLEASE TAKE NOTICE, that upon the affirmation of ROBERT L. SCHONFELD, dated the 8th day of May, 2007, the undersigned will move this Court at a Motion Part thereof to be held at the Courthouse, Eagle Street, Albany, New York, on th 21st day of May, 2007 at 9:30 o'clock in the forenoon or as soon thereafter as counsel may be heard for an order permitting the New York State Psychiatric Association, Inc. to file an amicus brief in this appeal, calendared for argument on May 31, 2007.

Dated: Garden City, New York
May 8, 2007

MORITT HOCK HAMROFF & HOROWITZ, LLP
By:

ROBERT L. SCHONFELD
Attorneys for the New York State Psychiatric Association
400 Garden City Plaza
Garden City, New York 11530

To: Mental Hygiene Legal Service
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Mineola, New York 11501

New York State Attorney General's Office
120 Broadway
New York, New York 10271

COURT OF APPEALS
STATE OF NEW YORK

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IN THE MATTER OF SIMONE D.,

Petitioner-Appellant

AFFIRMATION

Appellate Division
Docket No. 2005-11405

Queens County
Index No. 501166/2005

-against-

KATHLEEN IVERSON, etc.,

Respondent-Respondent

----------X

ROBERT L. SCHONFELD, an attorney admitted to practice in the Courts of this State, affirms under penalty of perjury as follows:

1. I am of counsel to the law firm of MORITT HOCK HAMROFF & HOROWITZ, LLP, attorneys for the New York State Psychiatric Association, Inc. ("NYSPA").

2. I make this affirmation in support of a motion by NYSPA to file an amicus brief in this appeal, calendared for May 31, 2007.

3. NYSPA is the statewide medical specialty society representing 5,000

psychiatrists throughout New York State and has an interest in promoting research and treatment for the benefit of people with mental disabilities.

4. NYSPA has participated as amicus curiae in several cases involving mental health issues, including Matter of Paul Henri T., (Appellate Division, Second Department Docket No. 2001-03519) (concerning challenge to order permitting administration of electroconvulsive therapy (ECT) to petitioner), T.D. v. The New York State Office of Mental Health, 228 A.D.2d 95 (1st Dept. 1996), appeal dismissed, 91 N.Y.2d 860 (1997) (concerning challenge to regulations governing scientific research); In re Grand Jury Subpoena Duces Tecum dated December 14, 1984, 60 N.Y.2d 232 (1987) (concerning the scope of the psychiatrist-patient privilege in Medicaid fraud investigations; Matter of Guardianship of Alexander L., 112 A.D.2d 902 (1st Dept. 1985) (involving the proper role of the attorney for the parent in a case involving termination of parental rights with respect to the psychiatric examination of the child); and Savastano v. Nurnberg, 152 A.D.2d 290 (2d Dept. 1989), aff'd, 77 N.Y.2d 300 (1991) (concerning whether judicial hearings were necessary in the transfer of patients from short-term to long-term psychiatric facilities).

5. This appeal is from a decision and order of the Supreme Court of the State of New York, Appellate Division, Second Department entered on September 19, 2006 which affirmed an order of the Supreme Court, Queens County that

granted the respondent psychiatric center's petition for permission to administer ECT to her without her consent.

6. A motion for several organizations was filed on or about April 20, 2007 challenging the safety and efficacy of ETC.

7. The proposed amicus brief, which is attached to this motion, is submitted to present medical authority supporting the position that ECT has a clear and distinct role in the treatment of major depression, bipolar disorder and schizophrenia and has been effective in treating all of those conditions.

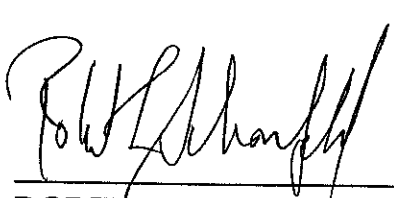
8. As a medical society representing psychiatrists, NYSPA is in the unique position of being able to explain the benefits and importance of the medical treatment proposed for the appellant.

9. This appeal is on the Court's calendar for oral argument for May 31, 2007.

10. No previous application for the relief sought herein has been made.

WHEREFORE, it is respectfully requested that this Court grant the motion of NYSPA to permit it to file the attached amicus brief.

Dated: Garden City, New York
May 8, 2007



ROBERT L. SCHONFELD

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Citation: **32 A.D.3d 931**

*2006 NY Slip Op 6574, *; 32 A.D.3d 931, **;*
*821 N.Y.S.2d 248, ***; 2006 N.Y. App. Div. LEXIS 10885*

[*1] In the Matter of Simone D. (Anonymous), appellant; Kathleen Iverson, etc., respondent.

2005-11405, (Index No. 501166/05)

SUPREME COURT OF NEW YORK, APPELLATE DIVISION, SECOND DEPARTMENT

2006 NY Slip Op 6574; 32 A.D.3d 931; 821 N.Y.S.2d 248; 2006 N.Y. App. Div. LEXIS 10885

September 19, 2006, Decided

NOTICE: THE LEXIS PAGINATION OF THIS DOCUMENT IS SUBJECT TO CHANGE PENDING THE RELEASE OF THE FINAL PUBLISHED VERSION.

THIS OPINION IS UNCORRECTED AND SUBJECT TO REVISION BEFORE PUBLICATION IN THE OFFICIAL REPORTS.

CASE SUMMARY

PROCEDURAL POSTURE: Appellant patient appealed an order by the Queens County Supreme Court (New York) that granted respondent psychiatric center's petition for permission to administer electroconvulsive therapy (ECT) to her without her consent.

OVERVIEW: A licensed psychiatrist and the person who administered the ECT at the psychiatric center testified that the patient suffered from a major depressive disorder, and was incapable of making decisions regarding her own treatment. Although the patient had benefitted from ECT in the past, the treatments had ceased, and she had "decompensated," i.e., she became withdrawn, mute, and nonparticipatory, and spent most of her time in a corner in a fetal position. Further, she was not eating properly, and had become aggressive and assaultive toward the staff and her fellow patients. The psychiatrist testified that after the completion of the last course of ECT treatments, the patient had gained weight, was eating, drinking, and interacting with others. The appellate court found, inter alia, that the patient would be carefully monitored during the administration of ECT. Because many other forms of treatment had been tried and failed, ECT was the least restrictive, clinically appropriate treatment available for the patient. Consequently, the trial court properly granted the center's petition to administer ECT to the patient without her permission.

OUTCOME: The order was affirmed.

CORE TERMS: cross-examination, own knowledge, administer, therapy, patient, electroconvulsive, psychiatrist, assaultive, permission, eating, brain, pain, clear and convincing evidence, psychiatric expert, proposed treatment, respectfully, colleagues', appoint, psychiatric examination, least restrictive, blood pressure, fetal position, recommendations, cross-examine, administered, hemorrhages, long-range, depressive, questioned, aggressive

LexisNexis(R) Headnotes ♦ Hide Headnotes

Criminal Law & Procedure > Trials > Examination of Witnesses > Cross-Examination

Criminal Law & Procedure > Trials > Judicial Discretion

HN1 The nature and extent of cross-examination are matters within a trial court's sound discretion. More Like This Headnote

COUNSEL: Mental Hygiene Legal Service, Mineola, N.Y. (Kim L. Darrow and Dennis B. Feld of counsel), for appellant.

Eliot Spitzer, Attorney-General, New York, N.Y. (Michael S. Belohlavek and Patrick J. Walsh of counsel), for respondent.

JUDGES: STEPHEN G. CRANE, J.P., DAVID S. RITTER, GLORIA GOLDSTEIN, REINALDO E. RIVERA, MARK C. DILLON, JJ. RITTER, RIVERA and DILLON, JJ., concur. CRANE, J.P., dissents with memorandum, in which GOLDSTEIN, J., concurs.

OPINION: [931] [***249]** DECISION & ORDER

In a proceeding for permission to administer electroconvulsive therapy to a patient without her consent, the patient appeals **[**932]** from an order of the Supreme Court, Queens County (Rosengarten, J.), dated November 29, 2005, which, after a hearing, granted the petition.

ORDERED that the order is affirmed, without costs or disbursements.

In the instant petition, Creedmoor Psychiatric Center (hereinafter Creedmoor) seeks permission to administer electroconvulsive therapy (hereinafter ECT) to the appellant without her consent. At a hearing held on the petition, Dr. Ella Brodsky, a licensed psychiatrist and the person who administers the ECT at Creedmoor, testified that the appellant suffers from a "major depressive disorder, severe, with chronic features" and was incapable of making decisions regarding her own treatment. In fact, Dr. Brodsky asserted that during a meeting to discuss **[***250]** treatment, at which the appellant, her Spanish-speaking attorney, Dr. Brodsky, and the treatment team were present, the appellant refused to respond or even make eye contact. Dr. Brodsky testified that, although the appellant had benefitted from ECT in the past, such treatments had ceased and the appellant had "decompensated," i.e., she had become withdrawn, mute, and nonparticipatory, and spent most of her time in a corner in a fetal position. Further, the appellant was not eating properly and had become aggressive and assaultive toward the staff and her fellow patients. Dr. Brodsky noted that **[*2]** on a prior occasion, the appellant needed to be fed through a tube, which was a "drastic remedy." By contrast, Dr. Brodsky testified that after the completion of the last course of 30 ECT treatments, the appellant had gained weight, was eating, drinking, and interacting with others, and "was not aggressive or assaultive at all." Dr. Brodsky noted that the appellant would be carefully monitored during the administration of ECT to determine her blood pressure, her EKG, her EEG, and her "mini-mental status." Dr. Brodsky further testified that many other forms of treatment had been tried and failed, including an extensive course of drug therapy, and that ECT was the least restrictive, clinically appropriate treatment for the appellant available at this time. She added, "[w]e don't have any other choices."

On cross-examination, counsel for the appellant questioned Dr. Brodsky concerning ECT treatments administered to the appellant in 1995 and 1996 in an effort to demonstrate that the appellant had suffered possible brain damage from those treatments. Dr. Brodsky testified that she had not reviewed the appellant's ECT records for that time period. She stated that she did not need to review the "old records" because medical assessments were

updated so that she could "find everything in **[**933]** the current record, whatever is important for an ECT." Dr. Brodsky added that the appellant was "regularly" receiving ECT since 1996. Thus, she opined that what occurred in 1996 was not relevant in assessing the appellant's current condition.

Counsel also questioned Dr. Brodsky concerning a variety of potential risks involved in the administration of ECT, including whether increases in blood pressure during treatment could induce hemorrhages in the brain, whether treatment could rupture the blood/brain barrier, how the amount of electric current used is determined, the risks of the anesthesia used during the treatments, and whether the patient feels pain during the treatment.

Based on this record, the petitioner established by clear and convincing evidence that the appellant lacked the capacity to make a reasoned decision with respect to the proposed treatment and that the proposed treatment was narrowly tailored to give substantive effect to her liberty interest (*see* *Rivers v Katz*, 67 N.Y.2d 485, 497-498, 495 N.E.2d 337, 504 N.Y.S.2d 74; *Matter of Adam S.*, 285 A.D.2d 175, 178-179, 729 N.Y.S.2d 734; *Matter of Mausner v William E.*, 264 A.D.2d 485, 694 N.Y.S.2d 165; *Matter of Adele S. v Kingsboro Psychiatric Center*, 149 A.D.2d 424, 424-425, 539 N.Y.S.2d 769).

Contrary to our dissenting colleagues' view, the Supreme Court did not improperly curtail the cross-examination of Dr. Brodsky. HN1 The nature and extent of cross-examination are matters within the trial court's sound discretion (*see* *People v Rodriguez*, 2 A.D.3d 464, 767 N.Y.S.2d 820; *People v Ayala*, 280 A.D.2d 552, 720 N.Y.S.2d 407). Respectfully, the dissent focuses only on certain selectively chosen portions of the cross-examination. When **[***251]** the cross-examination is viewed as a whole and properly analyzed in context, it is clear that the appellant's counsel was permitted extensive questioning on all relevant areas to be considered under *Rivers v Katz (supra)*. Indeed, while the direct examination of Dr. Brodsky encompassed only 13 pages of the hearing transcript, the cross-examination covered 44 pages.

Moreover, the Supreme Court providently exercised its discretion in denying the appellant's application for the appointment of an independent psychiatric expert. While a court "may" appoint an independent psychiatric expert (Judiciary Law § 35 [4]), here, an independent expert had already examined the appellant. Thus, the court's determination that "another [expert] opinion would not be necessary" was entirely proper. **[*3]**

We disagree with our dissenting colleagues' assertions that the court relied upon its own knowledge in reaching its determination. There is no indication in the record that the court based its decision on its own knowledge or became an unsworn witness. **[**934]** To the contrary, the court's determination is amply supported by the medical evidence presented, including the evidence elicited by the appellant's counsel during cross-examination.

The dissent's statement that the appellant has been subjected to an "extensive course" of ECT without "long-range benefit" is incorrect. The benefits to the appellant herein are crystal clear. As Dr. Brodsky recognized, although the appellant may not achieve remission, the treatment has improved her quality of life. Namely, with the treatment, she will not remain in a fetal position, she will eat, interact, and not pose a danger to herself or others. These positive responses to ECT cannot be dismissed or ignored.

Accordingly, under the circumstances of this case, the Supreme Court properly authorized the administration of ECT.
RITTER, RIVERA and DILLON, JJ., concur.

DISSENT BY: STEPHEN G. CRANE

DISSENT:

CRANE, J.P., dissents and votes to reverse the order and remit the matter to the Supreme Court, Queens County, for a hearing before a different Justice to consider the issues anew upon taking testimony and, if it deemed it appropriate, after assigning an independent expert to conduct a psychiatric examination and report relevant recommendations, with the following memorandum, in which GOLDSTEIN, J., concurs:

This is a proceeding pursuant to *Rivers v Katz* (67 N.Y.2d 485, 495 N.E.2d 337, 504 N.Y.S.2d 74) to determine whether the respondent, Simone D., has the mental capacity to withhold her consent to electroconvulsive therapy (hereinafter ECT).

Simone D. was first admitted to Creedmoor Psychiatric Center in 1994 and suffers from a severe depressive disorder. Since 1995, she has undergone, over her objection but pursuant to previous court orders, at least 148 ECT treatments. Prior efforts to help her with medication failed to improve her condition. After two unsuccessful applications in July and September 2005 for permission to administer ECT to Simone D., the petitioner applied again in November 2005. The petition and supporting papers showed that without ECT Simone D. becomes depressed, stops eating and drinking, and requires nasogastric tube feeding. Allegedly, the ECT will diminish her assaultive behavior, enable her to eat, enhance self-care, and promote her ability to socialize.

At a hearing on the petition, the court rejected the request of Simone D.'s counsel that it appoint an independent psychiatrist. The petitioner called one of its psychiatrists, **[***252]** Dr. Ella Brodsky, who opined that Simone D. lacked the capacity to make a reasoned treatment decision and that ECT is the least restrictive alternative because there is no other choice.

[935]** Trying to undermine Dr. Brodsky's opinion, Simone D.'s counsel cross-examined Dr. Brodsky extensively. Simone D. claimed that ECT inflicted pain on her. So, counsel tried to focus on the pain a patient undergoing ECT might suffer. On a prior petition that did not result in court-ordered ECT, Simone D. had been examined by an independent expert who suggested the alternative **[*4]** of psychotherapy with a Spanish-speaking therapist. This therapy was tried, but for only a few weeks. In an effort to show that this alternative to ECT deserved a longer testing period, Simone D.'s counsel attempted to cross-examine Dr. Brodsky on this subject. In addition, Simone D. had experienced cognitive impairment from ECT, resulting in its discontinuance in 1996. Her attorney, therefore, tried to cross-examine Dr. Brodsky on the extensive course of ECT administered to his client over the years without permanent improvement.

When Simone D.'s counsel tried to ask questions about the physical pain ECT causes, and also about grand mal seizure, the court interceded and proclaimed that it was familiar with the workings of ECT. When counsel sought to elicit information about hemorrhages and the rupture of the blood/brain barrier caused by ECT, the court sustained the petitioner's objections. Likewise, the court thwarted counsel when he inquired about the dosage and duration of ECT, the Food and Drug Administration risk classification of ECT machines, and the identification of succinylcholine. These were but a few of the limitations the court placed on counsel as he attempted to show that Simone D. should not be forced yet again to undergo ECT.

At the conclusion of Dr. Brodsky's testimony, Simone D. renewed her application for an independent examination. The court denied the application as unnecessary. After closing arguments, the court found that it was in Simone D.'s best interest to administer ECT even though it acknowledged that she would probably never "get better": "she perhaps could die. Perhaps she wants to die. But that's not for us to determine. We must prevent her from dying."

The court prevented Simone D. from making a record that could be reviewed on appeal and instead became a silent witness relying on its own knowledge of ECT. The appellant, therefore, was unable to demonstrate the side effects of ECT, the risks of this course of treatment, and the potential alternatives that may be available. This was error in the circumstances of this case, particularly because of the extensive course of ECT treatments to which Simone D. has been subjected since 1995 without long-range benefit.

[936]** The court's reliance on its own knowledge was error in three respects. First, it violates the rule prohibiting a judge from considering, absent the parties' consent, facts outside the record (*see* Silberman v Antar, 236 A.D.2d 385, 654 N.Y.S.2d 319 ["(t)he court improperly gave great weight to its own knowledge, based on personal observation of certain facts"]; *People v Weiss*, 19 A.D.2d 900, 244 N.Y.S.2d 914; *People v Lawrence*, 19 A.D.2d 899, 244 N.Y.S.2d 913; *People v Dow*, 3 A.D.2d 979, 162 N.Y.S.2d 960; Prince, Richardson on Evidence § 2-205 [Farrell 11th ed]).

Second, the court became an unsworn witness whose "knowledge" of the "facts" and the basis those "facts" form for his conclusion was never scrutinized or tested by cross-examination (*see e.g. People v Jie Mei Chen*, 26 A.D.3d 344, 345, 810 **[***253]** N.Y.S.2d 205; *People v Dow, supra* at 980).

Third, the details of the knowledge possessed by the court are not memorialized in the transcript, thus depriving all appellate courts of the ability to review the entire record and evaluate whether the petitioner has sustained its burden, in this case, by clear and convincing evidence (*see* Judiciary Law § 295; *People v Harrison*, 85 N.Y.2d 794, 795-796, 652 N.E.2d 638, 628 N.Y.S.2d 939; *Rivers v Katz, supra* at 498; *People v Degondea*, 256 A.D.2d 39, 41, 682 N.Y.S.2d 139 ["defendant was effectively thwarted from creating an adequate record for appellate review"]; *People v Robinson*, 209 A.D.2d 648, 649, 619 N.Y.S.2d 666). Put simply, there is no way to determine whether the petitioner met its burden because much of the evidence was **[*5]** contained only in the court's mind.

For these reasons, I respectfully dissent and would reverse the order and remit the matter to the Supreme Court, Queens County, for a hearing before a different Justice (*see People v Jie Mei Chen, supra*; *People v Dow, supra*) to consider the issues anew upon taking testimony and, if it deemed it appropriate, after assigning an independent expert to conduct a psychiatric examination and report relevant recommendations.

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AMICUS BRIEF FOR THE NEW YORK STATE PSYCHIATRIC ASSOCIATION, INC.

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Dated: Garden City, New York
May 8, 2007

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INTRODUCTION

This amicus brief is written on behalf of the New York State Psychiatric Association, Inc. (NYSPA) to explain the benefits and importance of the medical treatment proposed for the appellant. NYSPA is the statewide specialty society representing 5,000 psychiatrists throughout New York State and has an interest in promoting research and treatment for the benefit of people with mental disabilities. NYSPA has filed amicus briefs previously and is in a unique position to explain the benefits and significance of ECT and why ECT is the most appropriate course of treatment for the appellant.[1]

ARGUMENT

ECT IS AN APPROPRIATE AND EFFECTIVE COURSE OF TREATMENT FOR THE APPELLANT AND PERSONS WITH SIMILAR CONDITIONS.

A. Introduction.

After more than 60 years and many thousands of medical and scientific publications, ECT continues to be acknowledged throughout the world as a highly effective and rapid treatment for individuals with certain clearly defined severe mental illnesses. The American Psychiatric Association's comprehensive recommendations on ECT summarize a great deal of knowledge about the

[1] The amici express their gratitude to Laura J. Fochtmann, M.D., Professor, Department of Psychiatry and Behavioral Science, Stony Brook University, for her assistance in the preparation of this brief.

practice of ECT.[2] In developing these consensus recommendations, numerous individuals provided input including mental health consumers and experts in other medical specialties and mental health professions. In addition to these practice recommendations on ECT, the American Psychiatric Association has also published comprehensive and authoritative guidelines on the overall treatment of major psychiatric disorders such as major depression;[3] bipolar disorder[4] and schizophrenia.[5] Additional evidence-based guidelines are available and reflect expert consensus from around the world on the treatment for these disorders.[6] Despite an ever-increasing number of treatment options and despite

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[2] American Psychiatric Association, Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging, 2d Edition, American Psychiatric Press, 2001.

[3] American Psychiatric Association, "Practice Guideline for the Treatment of Patients with Major Depressive Disorder," 2d Edition, Am J Psychiatry 2000, Apr; 157(4 Suppl): 1-45.

[4] American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Bipolar Disorder," 2d Edition. Am J Psychiatry. 2002 Apr;159(4 Suppl):1-50.

[5] American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Schizophrenia," 2d Edition. Am J Psychiatry. 2004 Feb;161(2 Suppl):1-56.

[6] Canadian Psychiatric Assocation, "Clinical Practice Guidelines. Treatment of Schizophrenia," Can J Psychiatry 2005 Nov; 50: 7S-57S; S.H. Kennedy, R.W. Lam, N.L. Cohen, and A.V. Ravindran, "Clinical Guidelines for the Treatment of Depressive Disorders. IV. Medications and Other Biological Treatments," Can J Psychiatry 2001 Jun; 46 Suppl 1: 38S-58S; Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for Bipolar Disorder, "Australian and New Zealand Clinical Practice Guidelines for the Treatment of Bipolar Disorder," Aust N Z J Psychiatry 2004 May; 38: 280-305; Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for the Treatment of Schizophrenia and Related Disorders, "Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines for the Treatment of

the fact that a separate team of experts assembled each of these documents, all agree that ECT has a clear and distinct role in the acute and chronic treatment of these conditions.

B. Description of ECT Procedure.[7]

Before ECT is administered, patients undergo a complete psychiatric assessment, medical history, physical examination, and indicated medical tests including anesthesiology consultation. This pre-ECT evaluation helps in

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Schizophrenia and Related Disorders," Aust N Z J Psychiatry 2005 Jan; 39: 1-30; Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for Depression, "Australian and New Zealand Clinical Practice Guidelines for the Treatment of Depression," Aust N Z J Psychiatry 2004 Jun; 38: 389-407; M. Bauer, P.C. Whybrow, J. Angst, M. Versiani, and H.J. Moller, "World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Unipolar Depressive Disorders, Part 1: Acute and Continuation Treatment of Major Depressive Disorder," World J Biol Psychiatry 2002 Jan; 3: 5-43; M. Bauer, P.C. Whybrow, J. Angst, M. Versiani, and H.J. Moller, "World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Unipolar Depressive Disorders, Part 2: Maintenance Treatment of Major Depressive Disorder and Treatment of Chronic Depressive Disorders and Subthreshold Depressions," World J Biol Psychiatry 2002 Apr; 3: 69-86; P. Falkai, T. Wobrock, J. Lieberman, B. Glenthoj, W.F. Gattaz, and H.J. Moller, "World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Schizophrenia, Part 1: Acute Treatment of Schizophrenia," World J Biol Psychiatry 2005; 6: 132-191; P. Falkai, T. Wobrock, J. Lieberman, B. Glenthoj, W.F. Gattaz, and H.J. Moller, "World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Schizophrenia, Part 2: Long-Term Treatment of Schizophrenia," World J Biol Psychiatry 2006; 7: 5-40; H. Grunze, S. Kasper, G. Goodwin, C. Bowden, D. Baldwin, R. Licht, E. Vieta, and H.J. Moller, "World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Bipolar Disorders. Part I: Treatment of Bipolar Depression," World J Biol Psychiatry 2002 Jul; 3: 115-124; H. Grunze, S. Kasper, G. Goodwin, C. Bowden, D. Baldwin, R.W. Licht, E. Vieta, and H.J. Moller, "The World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for the Biological Treatment of Bipolar Disorders, Part II: Treatment of Mania," World J Biol Psychiatry 2003 Jan; 4: 5-13;

[7] American Psychiatric Association, Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging, 2d Edition, American Psychiatric Press, 2001.

determining the potential benefits and risks ECT relative to the potential benefits and risks of alternate treatment options. It allows the potential risks of treatment to be minimized by adjusting medications or obtaining additional laboratory studies or diagnostic tests. Such information is also essential to the informed consent process in patients having capacity or to the judicial review process for treatment over objection when capacity is lacking. Once informed consent or judicial authorization has been obtained, the acute course of ECT is administered with the goal of relieving acute symptoms to the greatest possible extent. In successfully treating psychiatric disturbances, the requisite number of ECT varies from patient to patient. For depression, the typical range is from 6 to 12 treatments, but some patients may require fewer and some patients may require more treatments. Patients with psychotic disorders such as schizophrenia or schizoaffective disorder, may require more treatments in an acute course. With continuation or maintenance of ECT, the number of treatments in a course also varies with the patient's clinical condition and the availability and utility of other treatment options.

With acute courses of ECT, treatments are usually given three times per week, typically in the morning on Monday, Wednesday and Friday. Before each treatment, patients are not allowed to eat or drink anything for several hours. This restriction is common to all procedures involving general anesthesia. Prior

to each treatment session, patients are brought to a specially equipped treatment area. An intravenous line is started so that fluids and medications can be administered during the procedure. Patients also receive oxygen to breathe throughout the procedure. Monitoring sensors are placed on the head to record electroencephalogram (EEG) activity during the ECT itself. Additional monitoring of electrocardiogram (ECG), heart rate, blood pressure and relative oxygen saturation of hemoglobin occur throughout the treatment and recovery period.

After the intravenous line and the monitoring devices are in place, a short acting intravenous anesthetic medication is given that will cause the patient to sleep for 5 to 10 minutes. Because the patient is asleep, under general anesthesia, the procedure is painless. Once the patient falls asleep, a muscle relaxing medication is injected so that muscle contractions and fracture risk will be minimal with the ECT. Typically, succinylcholine is used to achieve muscle relaxation. As is the case with other anesthetic procedures in which succinylcholine is administered and respiratory muscles are inactive, the anesthesiologist continuously ventilates the patient with oxygen until spontaneous respiration resumes, except for the brief interval during which the electroconvulsive therapy is actually administered.

When the patient is completely asleep and the muscles are well relaxed, an electrical charge is applied to electrodes that are positioned on the scalp. Although this stimulus lasts only a few seconds, it heightens the electrical discharges that normally occur in neurons throughout the brain and produces a seizure that typically lasts for about a minute. With the seizure, these neurons release large amounts of neurotransmitters that act as natural anticonvulsant substances. The dramatic increases in these neurotransmitters blunts the normal electrical activity in the brain leading to the cessation of the seizure activity. As the concentrations of these natural anticonvulsant substances dissipate, brain electrical activity normalizes. Once the ECT is complete and patients begin to awake, they are taken to a recovery area for further monitoring. Patients can leave the recovery area after they are fully awake and have stable vital signs, usually within 30 to 60 minutes. They are then taken to their rooms where they can eat breakfast and rest. Following ECT, some patients experience nausea, headache, or muscle pain but these resolve spontaneously or respond to pain relievers or anti-nausea medications.

C. Efficacy of Acute Treatment with ECT.

A large number of controlled research studies show a high efficacy for ECT in major depressive disorder, making it one of the most well established treatments in medical practice. Such studies have included double-blind, random

assignment trials that contrasted 'real' ECT with 'sham' ECT (with administration of anesthesia alone). The well-designed trial that used bilateral electrode placement showed that 'real' ECT was superior to sham treatment whereas the trial that used unilateral electrode placement showed no superiority of 'real' ECT over 'sham' treatment.[8] Meta-analysis also demonstrates superiority of 'real' ECT to 'sham' ECT as well as to pill placebo.[9] Studies and meta-analyses that have compared the acute efficacy of ECT using different stimulus electrode placements have typically found greater efficacy for bilateral electrode placement [10], although efficacy rates for right unilateral electrode placement

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[8] J. Greenhalgh, C. Knight, D. Hind, C. Beverley, and S. Walters, "Clinical and Cost-Effectiveness of Electroconvulsive Therapy for Depressive Illness, Schizophrenia, Catatonia and Mania: Systematic Reviews and Economic Modelling Studies," Health Technol Assess 2005 Mar; 9: 1-176.

[9] D. Pagnin, V. de Queiroz, S. de Pini, and G.B. Cassano, "Efficacy of ECT in Depression: A Meta-Analytic Review," J ECT 2004 Mar; 20: 13-20.

[10] J. Greenhalgh, C. Knight, D. Hind, C. Beverley, and S. Walters, "Clinical and Cost-Effectiveness of Electroconvulsive Therapy for Depressive Illness, Schizophrenia, Catatonia and Mania: Systematic Reviews and Economic Modelling Studies," Health Technol Assess 2005 Mar; 9: 1-176; UK ECT Review Group, "Efficacy and Safety of Electroconvulsive Therapy in Depressive Disorders: A Systematic Review and Meta-Analysis," Lancet 2003 Mar; 361: 799-808; H. Sackeim, P. Decina, I. Prohovnik, and S. Malitz, "Seizure Threshold in Electroconvulsive Therapy. Effects of Sex, Age, Electrode Placement, and Number of Treatments," Arch Gen Psychiatry 1987 Apr; 44: 355-360; H.A. Sackeim, P. Decina, M. Kanzler, B. Kerr, and S. Malitz, "Effects of Electrode Placement on the Efficacy of Titrated, Low-Dose ECT," Am J Psychiatry 1987 Nov; 144: 1449-1455; H.A. Sackeim, J. Prudic, D.P. Devanand, J.E. Kiersky, L. Fitzsimons, B.J. Moody, M.C. McElhiney, E.A. Coleman, and J.M. Settembrino, "Effects of Stimulus Intensity and Electrode Placement on the Efficacy and Cognitive Effects of Electroconvulsive Therapy," N Engl J Med 1993 Mar; 328: 839-846;

may approach those of bilateral ECT if the patient's seizure threshold is sufficiently low to permit stimulating at five to six times the seizure threshold.[11]

When compared to treatment with antidepressant medications, studies and meta-analyses have consistently found ECT to be more effective than antidepressants.[12] In addition, in a meta-analysis of controlled studies that compared antidepressant treatments to ECT, individuals treated with ECT had a

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[11] A.D. Krystal, M.D. Dean, R.D. Weiner, L.A. Tramontozzi, III, K.M. Connor, V.H. Lindahl, and R.W. Massie, "ECT Stimulus Intensity: Are Present ECT Devices Too Limited?," Am J Psychiatry 2000 Jun; 157: 963-967; W.V. McCall, D.M. Reboussin, R.D. Weiner, and H.A. Sackeim, "Titrated Moderately Suprathreshold Vs Fixed High-Dose Right Unilateral Electroconvulsive Therapy: Acute Antidepressant and Cognitive Effects," Arch Gen Psychiatry 2000 May; 57: 438-444; W.V. McCall, A. Dunn, P.B. Rosenquist, and D. Hughes, "Markedly Suprathreshold Right Unilateral ECT Versus Minimally Suprathreshold Bilateral ECT: Antidepressant and Memory Effects," J ECT 2002 Sep; 18: 126-129; H.A. Sackeim, J. Prudic, D.P. Devanand, M.S. Nobler, S.H. Lisanby, S. Peyser, L. Fitzsimons, B.J. Moody, and J. Clark, "A Prospective, Randomized, Double-Blind Comparison of Bilateral and Right Unilateral Electroconvulsive Therapy at Different Stimulus Intensities," Arch Gen Psychiatry 2000 May; 57: 425-434; A. Stoppe, M. Louza, M. Rosa, G. Gil, and S. Rigonatti, "Fixed High-Dose Electroconvulsive Therapy in the Elderly With Depression: A Double-Blind, Randomized Comparison of Efficacy and Tolerability Between Unilateral and Bilateral Electrode Placement," J ECT 2006 Jun; 22: 92-99; J.D. Tew, Jr., B.H. Mulsant, R.F. Haskett, D. Dolata, L. Hixson, and J.J. Mann, "A Randomized Comparison of High-Charge Right Unilateral Electroconvulsive Therapy and Bilateral Electroconvulsive Therapy in Older Depressed Patients Who Failed to Respond to 5 to 8 Moderate-Charge Right Unilateral Treatments," J Clin Psychiatry 2002 Dec; 63: 1102-1105; W.K. Ward, P. Lush, M. Kelly, and A.D. Frost, "A Naturalistic Comparison of Two Right Unilateral Electroconvulsive Therapy Dosing Protocols: 2-3X Seizure Threshold Versus Fixed High-Dose," Psychiatry Clin Neurosci 2006 Aug; 60: 429-433.

[12] J. Greenhalgh, C. Knight, D. Hind, C. Beverley, and S. Walters, "Clinical and Cost-Effectiveness of Electroconvulsive Therapy for Depressive Illness, Schizophrenia, Catatonia and Mania: Systematic Reviews and Economic Modelling Studies," Health Technol Assess 2005 Mar; 9: 1-176; D. Pagnin, V. de Queiroz, S. de Pini, and G.B. Cassano, "Efficacy of ECT in Depression: A Meta-Analytic Review," J ECT 2004 Mar; 20: 13-20; UK ECT Review Group, "Efficacy and Safety of Electroconvulsive Therapy in Depressive Disorders: A Systematic Review and Meta-Analysis," Lancet 2003 Mar; 361: 799-808.

four-fold greater likelihood of response than those treated with antidepressants. Response to ECT was about three times more likely than with tricyclic antidepressant treatment and about six times more likely than with monoamine oxidase inhibitor antidepressant treatment.[13] Thus, in the treatment of major depression, the efficacy of ECT is well-documented.

Although the majority of patients treated with ECT are experiencing episodes of depression, ECT is also effective in treating the manic episodes of bipolar disorder, even in patients who have not responded to other therapeutic regimens. In a review of the English language literature,[14] ECT was found to be associated with remission or marked clinical improvement in 80 per cent of 589 patients with acute mania. This response rate is higher than that reported for other types of anti-manic treatment.[15] In direct comparisons with

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[13] D. Pagnin, V. de Queiroz, S. de Pini, and G.B. Cassano, "Efficacy of ECT in Depression: A Meta-Analytic Review," J ECT 2004 Mar; 20: 13-20.

[14] S. Mukherjee, H.A. Sackeim, and D.B. Schnur, "Electroconvulsive Therapy of Acute Manic Episodes: A Review of 50 Years' Experience," Am J Psychiatry 1994 Feb; 151: 169-176.

[15] R.H. Perlis, J.A. Welge, L.A. Vornik, R.M. Hirschfeld, and P.E. Keck, Jr., "Atypical Antipsychotics in the Treatment of Mania: A Meta-Analysis of Randomized, Placebo-Controlled Trials," J Clin Psychiatry 2006 Apr; 67: 509-516; L.A. Smith, V. Cornelius, A. Warnock, M.J. Tacchi, and D. Taylor, "Acute Bipolar Mania: A Systematic Review and Meta-Analysis of Co-Therapy Vs. Monotherapy," Acta Psychiatr Scand 2007 Jan; 115: 12-20; D.W. Black, G. Winokur, and A. Nasrallah, "Treatment of Mania: A Naturalistic Study of Electroconvulsive Therapy Versus Lithium in 438 Patients," J Clin Psychiatry 1987 Apr; 48: 132-139; C.L. Bowden, A.M. Brugger, A.C. Swann, J.R. Calabrese, P.G. Janicak, F. Petty, S.C. Dilsaver, J.M. Davis, A.J. Rush, and J.G. Small, "Efficacy of Divalproex Vs Lithium and

pharmacotherapies, retrospective studies in acute mania show the efficacy of ECT to be equivalent or superior to that of lithium or the antipsychotic medication, chlorpromazine.[16] These findings have been confirmed by controlled prospective studies, which also find ECT to be equal to or more effective than pharmacotherapy.[17]

Although it is used less commonly in schizophrenia and schizoaffective disorder than in mood disorders, ECT remains a viable alternative to treat acute episodes in those individuals who do not respond to medications.[18] However,

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Placebo in the Treatment of Mania. The Depakote Mania Study Group," JAMA 1994 Mar; 271: 918-924.

[16] S. Mukherjee, H.A. Sackeim, and D.B. Schnur, "Electroconvulsive Therapy of Acute Manic Episodes: A Review of 50 Years' Experience," Am J Psychiatry 1994 Feb; 151: 169-176; American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Bipolar Disorder," 2d Edition. Am J Psychiatry. 2002 Apr;159(4 Suppl):1-50.

[17] S. Mukherjee, H.A. Sackeim, and D.B. Schnur, "Electroconvulsive Therapy of Acute Manic Episodes: A Review of 50 Years' Experience," Am J Psychiatry 1994 Feb; 151: 169-176; American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Bipolar Disorder," 2d Edition. Am J Psychiatry. 2002 Apr;159(4 Suppl):1-50.

[18] American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Schizophrenia," 2d Edition. Am J Psychiatry. 2004 Feb;161(2 Suppl):1-56; Canadian Psychiatric Assocation, "Clinical Practice Guidelines. Treatment of Schizophrenia," Can J Psychiatry 2005 Nov; 50: 7S-57S; P. Falkai, T. Wobrock, J. Lieberman, B. Glenthoj, W.F. Gattaz, and H.J. Moller, "World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Schizophrenia, Part 1: Acute Treatment of Schizophrenia," World J Biol Psychiatry 2005; 6: 132-191; P. Falkai, T. Wobrock, J. Lieberman, B. Glenthoj, W.F. Gattaz, and H.J. Moller, "World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Schizophrenia, Part 2: Long-Term Treatment of Schizophrenia," World J Biol Psychiatry 2006; 7: 5-40; Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for the Treatment of Schizophrenia and Related Disorders, "Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines for the Treatment of Schizophrenia and Related Disorders," Aust N Z J Psychiatry 2005 Jan; 39: 1-30; M. Fink and H.A. Sackeim,

there is minimal data on whether unilateral electrode placement is effective in treating disorders other than major depressive disorder.[19] In some patients with schizophrenia, schizoaffective disorder or psychotic mood disorders, treatment with antipsychotic medications is precluded by a past history of serious adverse reactions such as hepatic dysfunction, agranulocytosis or neuroleptic malignant syndrome.[20] For such patients, the efficacy of ECT in treating psychosis is particularly relevant.

The acute efficacy of ECT is also important to consider in choosing treatment options for individuals who are at high or immediate risk of suicide or at risk of death from dehydration, malnutrition or complications of prolonged immobility (such as pulmonary embolism) in the context of catatonia. Catatonic features can occur as part of a mood disorder, schizophrenia or general medical

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"Convulsive Therapy in Schizophrenia?," Schizophr Bull 1996; 22: 27-39; P. Tharyan and C.E. Adams, "Electroconvulsive Therapy for Schizophrenia," Cochrane Database Syst Rev 2005; CD000076.

[19] S. Mukherjee, H.A. Sackeim, and D.B. Schnur, "Electroconvulsive Therapy of Acute Manic Episodes: A Review of 50 Years' Experience," Am J Psychiatry 1994 Feb; 151: 169-176; R.J. Braga, G. Petrides The combined use of electroconvulsive therapy and antipsychotics in patients with schizophrenia. J ECT. 2005 Jun;21(2):75-83; J.D. Little, J. Munday, M. Atkins M. Right unilateral ECT at 6x seizure threshold: is it effective in the psychoses? J ECT. 2003 Sep;19(3):158-63; P. Tharyan P, C.E. Adams CE. Electroconvulsive therapy for schizophrenia. Cochrane Database Syst Rev. 2005 Apr 18;(2):CD000076.

[20] American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Schizophrenia," 2d Edition. Am J Psychiatry. 2004 Feb;161(2 Suppl):1-56.

condition;[21] the typical psychomotor abnormalities (e.g., immobility, posturing, excitation) and other features of catatonia (including instability of vital signs) generally respond to ECT even when other treatment has been unsuccessful.[22] In individuals with severe depression, ECT treatment is associated with a rapid resolution of suicidal thoughts and intentions as well as other depressive and psychotic symptoms.[23] Thus, in each of these potentially life-threatening circumstances, the efficacy of ECT is of demonstrated benefit to patients.

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[21] M. Fink and M.A. Taylor, "Resurrecting Melancholia," Acta Psychiatr Scand Suppl 2007; 14-20; G. Bush, M. Fink, G. Petrides, F. Dowling, and A. Francis, "Catatonia. I. Rating Scale and Standardized Examination," Acta Psychiatr Scand 1996 Feb; 93: 129-136; G. Bush, G. Petrides, and A. Francis, "Catatonia and Other Motor Syndromes in a Chronically Hospitalized Psychiatric Population," Schizophr Res 1997 Oct; 27: 83-92; P. Braunig, S. Kruger, G. Shugar, J. Hoffler, and I. Borner, "The Catatonia Rating Scale I--Development, Reliability, and Use," Compr Psychiatry 2000 Mar; 41: 147-158.

[22] G. Bush, M. Fink, G. Petrides, F. Dowling, and A. Francis, "Catatonia. II. Treatment With Lorazepam and Electroconvulsive Therapy," Acta Psychiatr Scand 1996 Feb; 93: 137-143; J. Greenhalgh, C. Knight, D. Hind, C. Beverley, and S. Walters, "Clinical and Cost-Effectiveness of Electroconvulsive Therapy for Depressive Illness, Schizophrenia, Catatonia and Mania: Systematic Reviews and Economic Modelling Studies," Health Technol Assess 2005 Mar; 9: 1-176; American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Schizophrenia," 2d Edition. Am J Psychiatry. 2004 Feb;161(2 Suppl):1-56; American Psychiatric Association, Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging, 2d Edition, American Psychiatric Press, 2001.

[23] American Psychiatric Association. "Practice Guideline for the Assessment and Treatment of Patients with Suicidal Behaviors."Am J Psychiatry. 2003 Nov;160(11 Suppl):1-60; J. Prudic and H.A. Sackeim, "Electroconvulsive Therapy and Suicide Risk," J Clin Psychiatry 1999; 60 Suppl 2: 104-110; C.H. Kellner, M. Fink, R. Knapp, G. Petrides, M. Husain, T. Rummans, M. Mueller, H. Bernstein, K. Rasmussen, K. O'Connor, G. Smith, A.J. Rush, M. Biggs, S. McClintock, S. Bailine, and C. Malur, "Relief of Expressed Suicidal Intent by ECT: A Consortium for Research in ECT Study," Am J Psychiatry 2005 May; 162: 977-982; M.M. Husain, A.J. Rush, M. Fink, R. Knapp, G. Petrides, T. Rummans, M.M. Biggs, K. O'Connor, K. Rasmussen, M. Litle, W. Zhao, H.J. Bernstein, G. Smith, M. Mueller, S.M. McClintock, S.H. Bailine, and C.H. Kellner, "Speed of Response and Remission in Major

The potential benefits of ECT also need to be considered in the context of other potential therapeutic options. Individuals referred for ECT are experiencing severe symptoms and significant impairments in their functioning and many have not responded to extensive treatment with medication.[24] When such symptoms persist, increased morbidity and mortality can result.[25] Although a lack of prior response to medications tends to diminish the likelihood of

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Depressive Disorder With Acute Electroconvulsive Therapy (ECT): A Consortium for Research in ECT (CORE) Report," J Clin Psychiatry 2004 Apr; 65: 485-491.

[24] J. Prudic, R.F. Haskett, B. Mulsant, K.M. Malone, H.M. Pettinati, S. Stephens, R. Greenberg, S.L. Rifas, and H.A. Sackeim, "Resistance to Antidepressant Medications and Short-Term Clinical Response to ECT," Am J Psychiatry 1996 Aug; 153: 985-992; A.Y. Dombrovski, B.H. Mulsant, R.F. Haskett, J. Prudic, A.E. Begley, and H.A. Sackeim, "Predictors of Remission After Electroconvulsive Therapy in Unipolar Major Depression," J Clin Psychiatry 2005 Aug; 66: 1043-1049; K.G. Rasmussen, M. Mueller, C.H. Kellner, R.G. Knapp, G. Petrides, T.A. Rummans, M.M. Husain, M.K. O'connor, J.L. Black, S. Sampson, and M. Fink, "Patterns of Psychotropic Medication Use Among Patients With Severe Depression Referred for Electroconvulsive Therapy: Data From the Consortium for Research on Electroconvulsive Therapy," J ECT 2006 Jun; 22: 116-123; G. Petrides, M. Fink, M.M. Husain, R.G. Knapp, A.J. Rush, M. Mueller, T.A. Rummans, K.M. O'Connor, K.G. Rasmussen, Jr., H.J. Bernstein, M. Biggs, S.H. Bailine, and C.H. Kellner, "ECT Remission Rates in Psychotic Versus Nonpsychotic Depressed Patients: A Report From CORE," J ECT 2001 Dec; 17: 244-253.

[25] R. Sharman and H.R. Markar, "Mortality in Affective Disorder," J. Affect Disord 1994 Jun; 31(2) 91 -6; G.K. Brown, A.T. Beck, R.A. Steer, and J.R. Grisham, "Risk Factors for Suicide in Psychiatric Outpatients; a 20-year Prospective Study," J Consult Clin Psycho 1 2000 Jun; 68(3): 371-7; E.C. Harris and B. Barraclough, "Suicide As an Outcome for Mental Disorders. A Meta-Analysis," Br J Psychiatry 1997 Mar; 170: 205-228; H.M. Inskip, E.C. Harris and B. Barraclough, "Lifetime Risk of Suicide for Affective Disorder, Alcoholism and Schizophrenia, " Br J Psychiatry 1998 Jan 172: 35-37: E.C. Harris and B. Barraclough, "Excess Mortality of Mental Disorder," Br J Psychiatry 1998 Jul; 173: 11-53; M.A. Oquendo, M. Kamali, S.P. Ellis, M.F. Grunebaum, K.M. Malone, B.S. Brodsky, H.A. Sackeim and J.J. Mann, "Adequacy of Antidepressant Treatment After Discharge and the Occurrence of Suicidal Acts in Major Depression: A Prospective Study," Am J Psychiatry 2002 Oct; 159: 1746-1751.

responding to ECT to some degree,[26] the likelihood of acute benefit from ECT is still greater than the symptomatic benefits seen in studies of other treatments, including antidepressant medication[27] or vagal nerve stimulation.[28] Significant benefits of ECT are also seen in patients' quality of life, as described in individual reports[29] as well as in clinical studies [30]

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[26] A.Y. Dombrovski, B.H. Mulsant, R.F. Haskett, J. Prudic, A.E. Begley, and H.A. Sackeim, "Predictors of Remission After Electroconvulsive Therapy in Unipolar Major Depression," J Clin Psychiatry 2005 Aug; 66: 1043-1049; J. Prudic, R.F. Haskett, B. Mulsant, K.M. Malone, H.M. Pettinati, S. Stephens, R. Greenberg, S.L. Rifas, and H.A. Sackeim, "Resistance to Antidepressant Medications and Short-Term Clinical Response to ECT," Am J Psychiatry 1996 Aug; 153: 985-992;

[27] A.J. Rush, M.H. Trivedi, S.R. Wisniewski, A.A. Nierenberg, J.W. Stewart, D. Warden, G. Niederehe, M.E. Thase, P.W. Lavori, B.D. Lebowitz, P.J. McGrath, J.F. Rosenbaum, H.A. Sackeim, D.J. Kupfer, J. Luther, and M. Fava, "Acute and Longer-Term Outcomes in Depressed Outpatients Requiring One or Several Treatment Steps: A STAR*D Report," Am J Psychiatry 2006 Nov; 163: 1905-1917.

[28] M.S. George, A.J. Rush, L.B. Marangell, H.A. Sackeim, S.K. Brannan, S.M. Davis, R. Howland, M.A. Kling, F. Moreno, B. Rittberg, D. Dunner, T. Schwartz, L. Carpenter, M. Burke, P. Ninan, and P. Goodnick, "A One-Year Comparison of Vagus Nerve Stimulation With Treatment As Usual for Treatment-Resistant Depression," Biol Psychiatry 2005 Sep; 58: 364-373; A.J. Rush, L.B. Marangell, H.A. Sackeim, M.S. George, S.K. Brannan, S.M. Davis, R. Howland, M.A. Kling, B.R. Rittberg, W.J. Burke, M.H. Rapaport, J. Zajecka, A.A. Nierenberg, M.M. Husain, D. Ginsberg, and R.G. Cooke, "Vagus Nerve Stimulation for Treatment-Resistant Depression: A Randomized, Controlled Acute Phase Trial," Biol Psychiatry 2005 Sep; 58: 347-354. A.J. Rush, H.A. Sackeim, L.B. Marangell, M.S. George, S.K. Brannan, S.M. Davis, P. Lavori, R. Howland, M.A. Kling, B. Rittberg, L. Carpenter, P. Ninan, F. Moreno, T. Schwartz, C. Conway, M. Burke, and J.J. Barry, "Effects of 12 Months of Vagus Nerve Stimulation in Treatment-Resistant Depression: A Naturalistic Study," Biol Psychiatry 2005 Sep; 58: 355-363.

[29] L.E. Rosenberg, "Brainsick: A Physician's Journey to the Brink," Cerebrum 2002 Oct. available at http://www.dana.org/news/cerebrum/detail.aspx?id=2884 (last visited May 4, 2007); K. Dukakis and L. Tye, Shock: The Healing Power of Electroconvulsive Therapy, Avery, 2006; C.E. Hartmann, "Personal Accounts: Life As Death: Hope Regained With ECT," Psychiatr Serv 2002 Apr; 53: 413-414.

Because illnesses such as major depression, bipolar disorder, schizoaffective disorder and schizophrenia are recurrent and chronic in their course, it is not surprising that patients relapse at high rates if treatment is discontinued.[31] Consequently, it is essential to initiate effective prophylactic treatment immediately after completion of an acute ECT course. For all patients, psychotherapy may be a useful adjunct in preventing relapse although with severe psychotic and affective disorders, psychotherapy is rarely sufficient without concomitant medications and/or ECT.[32] When psychotic symptoms are present, such prophylactic treatment generally includes atypical and/or typical antipsychotic medications. In individuals who have been treated for depression,

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[30] W.V. McCall, A. Dunn, and P.B. Rosenquist, "Quality of Life and Function After Electroconvulsive Therapy," Br J Psychiatry 2004 Nov; 185: 405-409; W.V. McCall, J. Prudic, M. Olfson, and H. Sackeim, "Health-Related Quality of Life Following ECT in a Large Community Sample," J Affect Disord 2006 Feb; 90: 269-274.

[31] American Psychiatric Association, Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging, 2d Edition, American Psychiatric Press, 2001; H.A. Sackeim, R.F. Haskett, B.H. Mulsant, M.E. Thase, J.J. Mann, H.M. Pettinati, R.M. Greenberg, R.R. Crowe, T.B. Cooper, and J. Prudic, "Continuation Pharmacotherapy in the Prevention of Relapse Following Electroconvulsive Therapy: A Randomized Controlled Trial," JAMA 2001 Mar 14; 285 (10): 1299-307; J.D. Tew, Jr., B.H. Mulsant, R.F. Haskett, P. Joan, A.E. Begley, and H.A. Sackeim, "Relapse During Continuation Pharmacotherapy After Acute Response to ECT: A Comparison of Usual Care Versus Protocolized Treatment," Ann Clin Psychiatry 2007 Jan; 19: 1-4.

[32] American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Schizophrenia," 2d Edition. Am J Psychiatry. 2004 Feb; American Psychiatric Association, "Practice Guideline for the Treatment of Patients with Major Depressive Disorder," 2d Edition, Am J Psychiatry 2000, Apr; 157(4 Suppl): 1-45; American Psychiatric Association. "Practice Guideline for the Treatment of Patients with Bipolar Disorder," 2d Edition. Am J Psychiatry. 2002 Apr;159(4 Suppl):1-50.

combination pharmacotherapy with lithium and nortriptyline appears to be associated with the lowest risk of relapse after a course of ECT,[33] but other medication regimens may also be effective although these have been studied less formally.[34] However, symptoms can also be decreased and the likelihood of full-blown episodes of illness can be reduced by continuing ECT on a schedule titrated to the patient's individual need which may be anywhere from weekly to greater than monthly,[35] an approach that has been termed continuation ECT or

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[33] H.A. Sackeim, R.F. Haskett, B.H. Mulsant, M.E. Thase, J.J. Mann, H.M. Pettinati, R.M. Greenberg, R.R. Crowe, T.B. Cooper, and J. Prudic, "Continuation Pharmacotherapy in the Prevention of Relapse Following Electroconvulsive Therapy: A Randomized Controlled Trial," JAMA 2001 Mar 14; 285 (10): 1299-307; C.H. Kellner, R.G. Knapp, G. Petrides, T.A. Rummans, M.M. Husain, K. Rasmussen, M. Mueller, H.J. Bernstein, K. O'Connor, G. Smith, M. Biggs, S.H. Bailine, C. Malur, E. Yim, S. McClintock, S. Sampson, and M. Fink, "Continuation Electroconvulsive Therapy Vs Pharmacotherapy for Relapse Prevention in Major Depression: A Multisite Study From the Consortium for Research in Electroconvulsive Therapy (CORE)," Arch Gen Psychiatry 2006 Dec; 63: 1337-1344.

[34] J.D. Tew, Jr., B.H. Mulsant, R.F. Haskett, P. Joan, A.E. Begley, and H.A. Sackeim, "Relapse During Continuation Pharmacotherapy After Acute Response to ECT: A Comparison of Usual Care Versus Protocolized Treatment," Ann Clin Psychiatry 2007 Jan; 19: 1-4; W.W. van den Broek, T.K. Birkenhager, P.G. Mulder, J.A. Bruijn, and P. Moleman, "Imipramine Is Effective in Preventing Relapse in Electroconvulsive Therapy-Responsive Depressed Inpatients With Prior Pharmacotherapy Treatment Failure: A Randomized, Placebo-Controlled Trial," J Clin Psychiatry 2006 Feb; 67: 263-268.

[35] C.H. Kellner, R.G. Knapp, G. Petrides, T.A. Rummans, M.M. Husain, K. Rasmussen, M. Mueller, H.J. Bernstein, K. O'Connor, G. Smith, M. Biggs, S.H. Bailine, C. Malur, E. Yim, S. McClintock, S. Sampson, and M. Fink, "Continuation Electroconvulsive Therapy Vs Pharmacotherapy for Relapse Prevention in Major Depression: A Multisite Study From the Consortium for Research in Electroconvulsive Therapy (CORE)," Arch Gen Psychiatry 2006 Dec; 63: 1337-1344; K. Rabheru and E. Persad, "A Review of Continuation and Maintenance Electroconvulsive Therapy," Can J Psychiatry 1997 Jun; 42(5) 476-84; J.M. Vanelle, H. Loo, A. Galinowski, W. de Carvalho; M.C. Bourdel, P. Brochier, O. Bouvet, T. Brochier, J. P. Olie, "Maintenance ECT in Intractable Manic-Depressive Disorders," Convuls Ther 1994 Sep; 10(3): 195-205; E. Swoboda, A. Conca, P. Konig, R. Waanders, and M.

maintenance ECT. Typically, maintenance ECT is recommended for those individuals who have responded to an initial acute course of ECT and for whom prophylactic medication regimens have been associated with adverse effects or have been ineffective in preventing a relapse of symptoms.[36]

D. Adverse Effects of ECT.

In addition to inducing changes in brain electrical activity, ECT is also associated with changes in cardiovascular function.[37] The initial ECT stimulus results in an increase in parasympathetic nervous system activity, particularly in the vagus nerve. The heart rate slows and may pause briefly before increasing again as adrenaline is released by seizure activity in the brain. Simultaneously, there is a short-lived increase in blood pressure and in blood flow to the brain. While these arrhythmias and cardiovascular changes are usually benign and resolve spontaneously,[38] cardiovascular and pulmonary complications are the

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Hansen, "Maintenance of Electroconvulsive Therapy in Affective and Schizoaffective Disorder," Neuropsychobiology 2001 Jan; 43(1): 23-8.

[36] American Psychiatric Association, Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging, 2d Edition, American Psychiatric Press, 2001.

[37] American Psychiatric Association, Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging, 2d Edition, American Psychiatric Press, 2001.

[38] American Psychiatric Association, Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging, 2d Edition, American Psychiatric Press, 2001; J. Burd and P. Kettl, "Incidence of Asystole in Electroconvulsive Therapy in Elderly Patients," Am J Geriatr Psychiatry 1998; 6: 203-211; G.A. Nuttall, M.R. Bowersox,

leading cause of significant morbidity with ECT.[39] However, the use of ongoing monitoring allows rapid identification and treatment of cardiovascular adverse effects that may arise.

Evidence from a number of studies suggests that the actual risk of death with ECT is about 0.2 deaths per 10,000 treatments[40], which is comparable to the risks with general anesthesia alone at the time when the research was performed.[41] Improvements in anesthetic safety since that time[42] may contribute to even better safety for patients receiving ECT. For some patients, including those with serious cardiovascular illnesses, ECT may be safer or more tolerable

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S.B. Douglass, J. McDonald, L.J. Rasmussen, P.A. Decker, W.C. Oliver, Jr., and K.G. Rasmussen, "Morbidity and Mortality in the Use of Electroconvulsive Therapy," J ECT 2004 Dec; 20: 237-241.

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[42] W.L. Lanier, "A Three-Decade Perspective on Anesthesia Safety," Am Surg 2006 Nov; 72: 985-989.

than some alternative pharmacological treatments.[43] Additional evidence from longitudinal follow-up studies suggests that mortality rates following hospitalization may be lower among depressed patients who received ECT than in those who received other treatments or no treatment at all.[44]

Although some have questioned whether ECT results in spontaneous seizures, the evidence indicates that such events are extremely rare and probably do not differ from population base rates.[45] In fact, ECT has marked anticonvulsant properties[46] and has been used in treating patients with

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intractable epilepsy or status epilepticus that is unresponsive to pharmacological treatment.[47] In addition, routine monitoring of EEG activity at the time of the ECT treatment permits rapid detection and treatment of any seizure that is increased in its duration.[48]

E. Cognitive Effects of ECT.

Cognitive effects may also occur with ECT, although their manifestations vary across individuals. Following each ECT, almost all patients experience a period of confusion that may be brief, or less commonly, extends between treatment.[49] During and shortly after an ECT course, patients will also

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experience anterograde amnesia, which is characterized by the rapid forgetting of newly learned information. Studies show that this effect resolves in the days to weeks after ECT.[50] Retrograde amnesia also occurs and is characterized by the forgetting of past events. Such amnesia is most prominent for events around the time of the ECT course and may be greater for public information (knowledge of events in the world) as compared to personal information (autobiographic details of the patient's life).[51] Although older memories are most likely to be preserved, occasional patients note permanent gaps in recalling specific past events. In addition, a minority of patients report problems in

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memory that remain for months or even years.[52] The reasons for these reported long-lasting impairments are not fully understood. However, as with other serious and potentially life-threatening disorders for which treatment can be associated with adverse cognitive effects,[53] the possible effects on cognition need to be considered in the context of the potential benefits of treatment for the individual patient.[54]

Effects of ECT on memory are often confounded by the effects of the individual's underlying psychiatric disorder or treatments other than ECT. Consequently, patients who have received ECT may misattribute cognitive effects of medications or psychiatric illness to the ECT itself. For example, there is substantial evidence that schizophrenia is associated with clear

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neuropsychological deficits over the course of the illness.[55] Neurocognitive impairments may also be present in individuals with depressive disorders[56] and patients with depressive disorders have been found to have decreases in the size of the hippocampus, a brain structure that mediates memory.[57] Those with memory problems typically show more symptoms of psychiatric illness and may receive more psychotropic medications suggesting that these factors can influence memory complaints after ECT.[58] Because many psychiatric illnesses result in impaired attention and concentration,[59] there is often improvement in

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these aspects of thinking when the psychiatric disturbance improves following ECT. As a result, patients may report improved memory or exhibit improvements on cognitive tests following ECT.[60] At longer intervals of time after the most recent ECT, there is a greater tendency for improvements in cognition even relative to level of cognitive functioning immediately preceding ECT.[61]

It is important to recognize that technical advances in ECT administration have been associated with decreases in the cognitive effects of ECT. For example, the use of brief pulse electrical waveforms rather than sine waveforms for the electrical stimulus results in fewer memory difficulties.[62] To optimize

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Deficit in Schizophrenia: A Quantitative Review of the Evidence," Neuropsychology 1998 Jul; 12(3): 426-45.

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therapeutic benefits of treatment while minimizing the risk of cognitive effects, electrode placement, stimulus intensity, concomitant medications, and treatment frequency can also be adjusted.[63] With patients who are receiving maintenance ECT, such a decrease in treatment frequency is typically associated with less prominent effects on cognition than observed during acute ECT treatment courses.[64]

Cognitive effects of ECT do not appear to be caused by nerve cell death or other damage to the brain. Careful studies in animals have shown no evidence of brain damage from brief seizures, such as those given with ECT.[65] In the adult, seizures must continue for hours before brain damage can occur, yet the

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[63] American Psychiatric Asocition, Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging, 2d Edition, American Psychiatric Association Press, 2001; C. Sobin, H.A. Sackeim, J. Prudic, D.P. Devanand, B.J. Moody, and M.C. McElhiney, "Predictors of Retrograde Amnesia Following ECT," Am J Psychiatry 1995 Jul: 152: 995-1001; H.A. Sackeim, J. Prudic, D.P. Devanand, M.S. Nobler, S.H. Lisanby, S. Peyser, L. Fitzimons, B.J. Moody, and J. Clark, "A Prospective, Randomized, Double-Blind Comparison of Bilateral and Right Unitlateral Electroconvulsive Therapy at Different Stimulus Intensities," Arch Gen Psychiatry 2000 May; 57: 425-434; B. Lerer, B. Shapira, A. Calev, N. Tubi, H. Drexler, S. Kindler, D. Lidsky, and J.E. Schwartz, "Antidepressant and Cognitive Effects of Twice-Versus Three-Times-Weekly ECT," Am J Psychiatry 1995 Apr; 152: 564-570; H.A. Sackeim, J. Prudic, R. Fuller, J. Keilp, P.W. Lavori, and M. Olfson, "The Cognitive Effects of Electroconvulsive Therapy in Community Settings," Neuropsychopharmacology 2007 Jan; 32: 244-254.

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ECT seizure lasts only for about a minute or less. Brain scans following ECT have shown no injury to the brain.[66] In addition, blood and spinal fluid markers of nerve death are unchanged after ECT.[67] In fact, an increasing amount of evidence suggests that ECT stimulates production of nerve growth factors and may induce growth of new nerve cells.[68]

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CONCLUSION

ECT IS A HIGHLY EFFECTIVE AND RAPID TREATMENT FOR INDIVIDUALS WITH MENTAL ILLNESS.

Dated: Garden City, New York
May 8, 2007

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Aug; 1053: 27-32; S.S. Newton, E.F. Collier, J. Hunsberger, D. Adams, R. Terwilliger, E. Selvanayagam, and R.S. Duman, "Gene Profile of Electroconvulsive Seizures: Induction of Neurotrophic and Angiogenic Factors," J Neurosci 2003 Nov; 23: 10841-10851.

AFFIDAVIT OF SERVICE

STATE OF NEW YORK:
COUNTY OF NASSAU:

Karen Stebe, being duly sworn, deposes and says:

I am not a party to the action, am over 18 years of age and reside at N. Bellmore, NY

On May 8, 2007, I served a copy of the following notice of motion and memorandum of law by placing the same with postage prepaid in a mailbox of the United States Postal Service addressed to the following:

New York Attorney General's Office
120 Broadway
New York, New York 10271

Mental Hygiene Legal Service
170 Old Country Road
Mineola, New York 11501

Karen Stebe
Karen Stebe

Sworn to before me this
8th Day of May, 2007

Notary Public

ROBERT L. SCHONFELD
Notary Public-State of New York
No. 30-4970017
Qualified in Nassau County
Commission Expires July 31, 20[illegible]