ECT: Highly Effective, Highly Misunderstood

Presented By:
Brian Espinoza, MD
Aurora West ECT Director
JACK NICHOLSON

ONE FLEW OVER
THE CUCKOO'S NEST
-What's that?
-This'll keep you from biting your tongue.
“SHOCK: THE HEALING POWERS OF ELECTROCONVULSIVE THERAPY”

- Shock: The Healing Powers of ECT
HISTORY OF ECT

► 1600s: Various agents used to produce seizures to Rx psychiatric conditions
► 1930s: Insulin Coma Therapy, Metrazole CT, Lobotomy, & ECT
► 1937: First International meeting on Convulsive Therapy
  ► Published in the American Journal of Psychiatry
  ► Metrazole Convulsive Therapy began to be used worldwide
► 1938: Cerletti & Bini--first ECT (Schizophrenia)
► ECT soon replaced MCT--cheaper, less frightening, more convenient
► 1940: ECT comes to America & England---UNMODIFIED
HISTORY OF ECT, CONTINUED…

- Unmodified ECT---no anesthesia, no muscle relaxers, unknown dosing and frequency of treatments
- 1940s-1950s
  - Modifications--Curare, then Succinylcholine muscle relaxers, Barbiturate Anesthesia, electrical dosing and electrode placement (RUL)
  - Widely used by U.S. Military Hospitals during WWII
  - 1950’s---a standard of care in Hospital Depression
- 1960’s-1980’s---Counterculture to Psychiatry, esp. ECT
- 1962 One Flew Over the Cuckoo’s Nest novel
HISTORY OF ECT, CONTINUED…

- **1960s – 1980s---Counterculture to Psychiatry, esp. ECT**
  - 1962 *One Flew Over the Cuckoo’s Nest* novel
  - 1974 ECT banned in California
  - 1975 *One Few Over the Cuckoo’s Nest* movie

- **1980s to present**
  - 1978 APA releases first Task Force Report on ECT
    - Standardizes ECT consent process & Unilateral Electrode placement
  - 1985 NIMH Consensus Conference confirms therapeutic role of ECT
HISTORY OF ECT, CONTINUED…

- 1990 APA releases 2nd Task Force Report on ECT
  - Detailed recommendations on delivery, education & training
- 2001 APA releases latest Task Force Report
  - Emphasizes importance of Informed Consent
  - Expands role ECT has in Modern Medicine
## COUNTRIES WHERE ECT IS UTILIZED

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<td>2000</td>
<td>Requiem for a Dream</td>
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<td>2001</td>
<td>A Beautiful Mind</td>
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LIST OF PEOPLE WHO HAVE UNDERGONE ECT

- **Linda Andre**, American author, psychiatric survivor activist, director of the Committee for Truth in Psychiatry
- **Antonin Artaud**, French poet and playwright
- **Clara Bow**, American actress
- **Richard Brautigan**, counter-culture figure, poet and novelist
- **Beverley Callard**, English television actress
- **Dick Cavett**, American television talk show host
- **Ted Chabasinski**, American attorney and psychiatric survivor activist who first received ECT at six years of age when treated by the noted and now late child psychiatrist **Lauretta Bender**
- **Paulo Coelho**, author of *The Alchemist*
- **Kitty Dukakis**, wife of former Massachusetts governor and 1988 Democratic presidential nominee Michael Dukakis and author of *Shock*, a book chronicling her experiences with ECT
- **Thomas Eagleton**, US senator and vice presidential candidate
- **Roky Erickson**, American singer, songwriter, harmonica player and guitarist
- **Carrie Fisher**, American actress and novelist. Fisher speaks at length of her experiences with ECT in her autobiography *Wishful Drinking.*
- **Janet Frame**, New Zealand writer and poet
- **Harold Gimblett**, British cricketer
- **Peter Green**, English blues guitarist, founding member of *Fleetwood Mac.*
- **David Helfgott**, Australian pianist

From Wikipedia, the free encyclopedia
LIST OF PEOPLE WHO HAVE UNDERGONE ELECTROCONVULSIVE THERAPY, CONTINUED:

- Ernest Hemingway, American Pulitzer Prize winning novelist, Nobel Laureate, short-story writer, and journalist
- Marya Hornbacher, American writer
- Vladimir Horowitz, Russian-American classical pianist
- Vivien Leigh, English actress and second wife of Laurence Olivier
- Oscar Levant, American pianist, composer, television and film personality
- Michael Moriarty, American actor
- Sherwin B. Nuland, American surgeon and writer
- Robert M. Pirsig, American author of *Zen and the Art of Motorcycle Maintenance*
- Sylvia Plath, American writer and poet
- Bud Powell, American jazz musician
- Lou Reed, American singer-songwriter
- Yves Saint-Laurent, French fashion designer
- Edie Sedgwick, American socialite and Warhol Superstar
- Gene Tierney, American actress
- Tammy Wynette, American country music singer
- David Foster Wallace, American writer
- Townes van Zandt, American country singer-songwriter
- Christopher Wilder, serial killer, also known as the Beauty Queen Killer
WHAT DO WE USE ECT FOR?

- **Diagnosis**
  - Major Depressive Disorder
  - Bipolar Disorder---all phases; depressive, manic, mixed
  - Schizophrenia---unresponsive to Clozapine

- **Emergencies**
  - Catatonia---depressive or malignant (manic delirium)
  - Neuroleptic Malignant Syndrome
  - Failure to thrive (geriatric population)
  - Severity of disease (active SI, active VI, severe psychosis)
WHAT DO WE USE ECT FOR?, CONTINUED…

- Special Clinical Situations
  - OCD
  - Dyskinesias
  - Tourettes Syndrome
  - Epilepsy
  - Parkinson’s Disease
  - Autism with self-injurious behaviors
THE PSYCHOPHARMACOLOGY ALGORITHM PROJECT AT THE HARVARD SOUTH SHORE PROGRAM: AN UPDATE ON BIPOLAR DEPRESSION
ECT: TECHNICAL
ECT: TECHNICAL, CONTINUED…

Ann Smedley, RN-BC
ECT: TECHNICAL, CONTINUED…

Dr. Jordan Leake  Dr. Alan Snyder  Dr. Paul Dalton
ECT: TECHNICAL, CONTINUED...
ECT PROCESS

- Sign In---Nursing Assessment and Consent
- ECT preparation (family member or friend may be with patient)
  - Vital Signs
  - Anesthesia Assessment and placement of the IV
  - Psychiatric Assessment and adjustment of ECT settings
  - ECT procedure
- ECT procedure
  - Anesthesia and Muscle Relaxant given IV
  - EEG Monitoring Electrodes placed
  - ECT Electrodes deliver stimulation (seconds)
ECT PROCESS, CONTINUED…

ECT procedure, continued…

- Gran Mal Seizure or Convulsion takes place: 30-60 seconds
- Anesthesia and muscle relaxant wear off within 5 minutes and patient awake
- To recovery area for 45 minutes
- Home or back to inpatient unit

Procedure 10 minutes; paperwork and prep 20 minutes
HOW DOES ECT WORK?

- Mega-Release of Neurotransmitters---Serotonin, Norepinephrine, Dopamine, Acetylcholine, GABA and others
- Sprouting and regeneration of nerve cells
  - No brain damage or loss of brain cells
  - Psychiatric conditions are degenerative states
- Hormone secretion---Brain-Derived Neurotrophic Growth Factor
ECT RISKS AND SIDE EFFECTS

- Memory Loss---everybody gets it
  - Short Term---recovers within weeks to months
  - Recent Term---may not recover
  - Long Term---? a glimpse into patient future ?
- Headaches
- Muscle Aches
ECT BENEFITS

- Average of studies shows average of 80% effectiveness
  - In expert hands, we can help 9 out of 10 patients
- 1 of 3 psychiatric treatments shown to decrease the chance of suicide
- No drug to drug interactions
- No concerning side effects of several medications
  - No sexual side effects
  - No weight gain
- Covered by all insurance companies
CASE STUDY 1 (SMI) MICHAEL A

- 34 y/o male with Schizoaffective Disorder, Bipolar Type
  - adopted by affluential childless Scottsdale couple
  - “normal” childhood & early adolescence
  - pubertal onset progressing to S/I & psychosis leading to HI
  - spent 20’s in prison due to stabbing his halfway house roommate secondary to command A/H’s
  - spending life between parents house & hospital despite SMI Case Management including Clozapine
  - Series 1 of ECT led to recovery, months later recurrence
  - Series 2 with titrated Maintenance ECT to weekly regimen
CASE STUDY 1 (SMI) MICHAEL A, CONTINUED…

- Has been on weekly Maintenance ECT and Clozapine for 6 years without re-hospitalization
- Lives independently in his own apartment
- Has established the tradition of having breakfast with his parents every Sunday and joins family get-togethers
- Part-time employment as a Peer Support Specialist with an SMI Clinic
- Changed from Medicare A & B to Medicare HMO without disruption in care
CASE STUDY II (BLUE COLLAR) ARTHUR F

- 40 y/o AAF with Bipolar I Disorder, depressed with mixed features
  - Employed as a baker; second marriage; first marriage with 3 children ended due to poorly controlled disease
  - Misdiagnosed as MDD and on hospitalization requested ECT
  - BL-ECT given with recovery, but later intolerable Memory Loss
  - Second hospitalization given BL-ECT plus Lithium with recovery, but later Lithium side effects
  - Third hospitalization given UL-ECT without medication
  - Currently on every other week Maintenance UL-ECT, without medication; back to work; enjoying marriage and sports talk
CASE STUDY III (WHITE COLLAR)
DONALD C

- 72 y/o WM, retired Radiologist, with wife, and kids, including an established Child Psychiatrist,
- Mania led to financial indiscretions; depression predominated with anergia and amotivation
- Initial series of BL-ECT after multiple medication sensitivities with recovery and relapse within one year; side effect was STML
- Second series of BL-ECT with recovery, and now monthly M-ECT without STML