

ECT IN INDIA AND ASIA: Past, present, and future



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ORGANIZATION

- ECT in India: 1991 survey
- ECT in India: 2001-2002 survey
- ECT in India: Current impressions
- ECT in Asia: 2001-2003 survey
- ECT research in India and Asia
- ECT in India: Regulatory matters
- ECT in India: Challenges for the future
- Is ketamine a threat to the future of ECT?



HISTORICAL NOTE

- The first ECT in India was administered in 1944-1945; and possibly even earlier, in 1943.
- Modified ECT was practised in India as early as in 1954-1955.
- (Ramanathan and Andrade, Convulsive Ther 1995)



ECT IN INDIA: 1991

- Agarwal et al, Indian J Psychiatry 1992
- Andrade et al, Indian J Psychiatry 1993
- Agarwal and Andrade, Indian J Psychiatry 1997



ECT IN INDIA: 1991

- Postal survey of the Indian Psychiatric Society in 1991
 - Response rate: n=263 of 913 (28.8%)
- Using ECT: n=215 (81.7%)
 - Very likely a biased sample
- These psychiatrists treated a M(SD) of 13.4(25.3)% of their patients with ECT.

ECT IN INDIA: 1991

Practice

- Respondents who at least sometimes administered unmodified ECT: n=61 (28.4%)
- Respondents who at least sometimes manually timed the ECT stimulus: n=74 (54.9%)
- Respondents who at least sometimes used glissando: n=70 (32.6%)
- Respondents who at least sometimes administered RUL ECT: n=10 (4.7%)
- Respondents who administered brief-pulse ECT: n=42 (19.5%)

ECT IN INDIA: 1991

Attitudes

- Comprehensive psychiatric facilities should include ECT services: n=227 (86.3%)
- ECT should not be used in children below 16 years: n=98 (37.3%)
- Totally opposed to ECT: n=7 (2.7%)
- Willing to receive ECT if indicated: n=150 (82.9%)

ECT IN INDIA: 2001-2002

Chanpattana et al (J ECT 2005)

- Postal survey of 188 teaching institutions and psychiatric hospitals
- Responses from 74 (39.4%) institutions
- ECT available in 66 (35.1%) institutions
- In the past year:
 - 19,632 patients received 114,111 ECTs from 316 psychiatrists
 - 10,234 patients (52%) received unmodified ECT (52,450 treatments in 33 institutions)

ECT IN INDIA: 2001-2002

Practice

- Administered sine wave ECT at least sometimes:
n=26 (39.4%)
- Almost all ECT was bilateral
 - Schizophrenia (36.5% of patients)
 - Major depression (33.5% of patients)
- Pediatric ECT in 1.4% of patients

ECT IN INDIA: CURRENT IMPRESSIONS

- Unmodified ECT has all but disappeared
- Sine wave ECT has all but disappeared
- Bilateral ECT is still almost invariable
- No national standards/guidelines exist

ECT IN ASIA: 2001-2003

(Chanpattana et al, J ECT 2010)

- Postal questionnaire sent to 977 psychiatric facilities in 45 Asian countries
 - Seeking information pertaining to the past year
 - Response from 34% of institutions in 64% of countries
- ECT available in 257 institutions in 25 countries

ECT IN ASIA: 2001-2003

Practice

- 39,875 patients (62% men) received a mean of 7.1 ECTs
- Most patients (73.1%) were 18 to 44 years old; few were <18 years (6.0%) or >64 years (4.4%)
- Indications: schizophrenia (41.8%), major depression (32.4%), mania (14.0%), catatonia (6.9%), drug abuse (1.8%), dysthymia (1.6%)

ECT IN ASIA: 2001-2003

Practice

- Brief-pulse ECT devices were used in only 115 (58.4%) of 197 institutions.
- BL ECT was invariable in 202 (78.6%) institutions.
- Unmodified ECT was administered to 22,194 (55.7%) patients at 141 (54.9%) institutions in 14 countries.
- Routine EEG monitoring was conducted in only 59 (23.0%) institutions.

ECT IN ASIA: 2001-2003

Practice

- Continuation ECT was available in only 115 (44.7%) institutions in 17 countries.
- No institution had a formal ECT training program.



ECT RESEARCH IN ASIA

- India is one of the major centers for ECT research in Asia.
- Most of the research has emerged from the Departments of Psychiatry and Psychopharmacology at the National Institute of Mental Health and Neurosciences, Bangalore
- Both clinical and basic science research is being conducted

ECT IN INDIA: REGULATORY MATTERS

- Position statement and guidelines on unmodified ECT (Andrade et al, Indian J Psychiatry 2012)
- Jointly issued by:
 - The Indian Psychiatric Society
 - The Indian Association of Biological Psychiatry
 - The Indian Association of Private Psychiatrists
- Comprehensive review of unmodified ECT
 - Endorses unmodified ECT only in exceptional circumstances with checks and balances outlined

ECT IN INDIA: REGULATORY MATTERS

- THE MENTAL HEALTHCARE ACT, 2017
- Prohibited:
 - Unmodified ECT
 - Pediatric ECT, unless prior permission from the State Mental Health Review Board is obtained



ECT IN INDIA: CHALLENGES

- The practice of ECT will not grow along with the growth in the number of psychiatrists
 - Because the growth in hospitals is less
 - Because of poor anesthesiological support
- There are populous states in India in which ECT is almost completely unavailable
 - E.g. Kerala, West Bengal
- Happily, there is no antipsychiatry, antiECT movement, nor media hostility
 - India has more fundamental challenges

IS KETAMINE A THREAT TO THE FUTURE OF ECT: 1

- Ketamine does have some advantages
 - Greater convenience of administration
 - Faster onset of benefits
- Ketamine does not offer the advantages of ECT
 - Across a range of mental mental illnesses
 - For a range of clinical contexts
 - In the most severely ill of patients
 - With near-certainty of benefit

IS KETAMINE A THREAT TO THE FUTURE OF ECT: 2

- BUT because oral/sc/in ketamine are so much easier to administer, patients who would have been better off receiving ECT will be diverted to ketamine.
- Ketamine might become the private psychiatrist's ECT
 - And this IS a threat to the profitability and hence the survival of ECT.

ENFIN...



- That's it, folks;
thanks for listening!