

- ECT is a safe and effective treatment option for children and adolescents.
- Exact mechanism of action is unknown.
- Catatonia and treatment-resistant mood disorder/psychosis are the most common indications for its use.
- It is important to educate patients and parents about the procedure to obtain consent and dispel misconceptions.
- More randomized controlled trials are needed in this population to further determine efficacy and safety and explore new indications.

### Introduction

- Electroconvulsive therapy (ECT) is an established and safe treatment of various psychiatric disorders.
- No age restrictions
- Data is mostly derived from adult populations
- The efficacy and safety of pediatric ECT are largely established from retrospective studies, case series, and reviews.

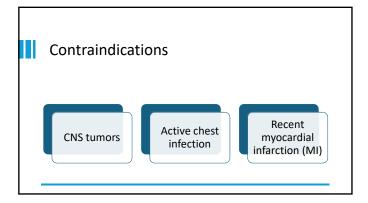


History of Electroconvulsive Therapy	-
• Convulsive therapy for catatonic schizophrenia (pentylenetetrazol), ECT pioneered by Cerletti & Bini.	
Early Pediatric Use:  1943: – Effective for melancholia in children, inconsistent for mania, not helpful for schizophrenia. 1947: Lauretta Bender treated 98 children with "childhood schizophrenia" using ECT – showed behavioral improvements.	
Decline &  Resurgence:  - Decline due to neuroleptics and stigma (Hollywood's negative portrayal).  - Renewed interest in the 1990s—modern studies show safety and efficacy in adolescents.	
Legal Aspects	
FDA Reclassification:	
<ul> <li>ECT devices reclassified from Class III (highest risk) to Class II (moderate risk) for ages 13+.</li> <li>Approved for severe major depression, bipolar depression,</li> </ul>	
and catatonia.	
State Regulations:  • Vary widely by state.	
vary widery by state.	
	1
Ethical Considerations	
Although most states allow for	
the treatment with consent  ECT is safe and ethical to use from parents of a minor, it is extremely important to	
involve patient in discussion and obtain their assent.	

# Indications Treatment-resistant depression Schizophrenia Spectrum Disorders Catatonia Refractory Self-injurious behavior Neuroleptic malignant syndrome Severe suicidality

### The refusal to eat or drink Severity of Symptoms in uncontrollable mania florid psychosis minimal standards

# Lack of Treatment Response CT may be considered earlier in cases in which: (1) adequate medication trials are not possible because of the patient's inability to tolerate psychopharmacological treatment (2) the adolescent is grossly incapacitated and thus cannot take medication (3) waiting for a response to a psychopharmacological treatment may endanger the life of the adolescent [MS]



## Varies depending on the clinical presentation and treatment goals. Bilateral electrode placement Right unilateral treatment Changing from unilateral to bilateral treatment

