


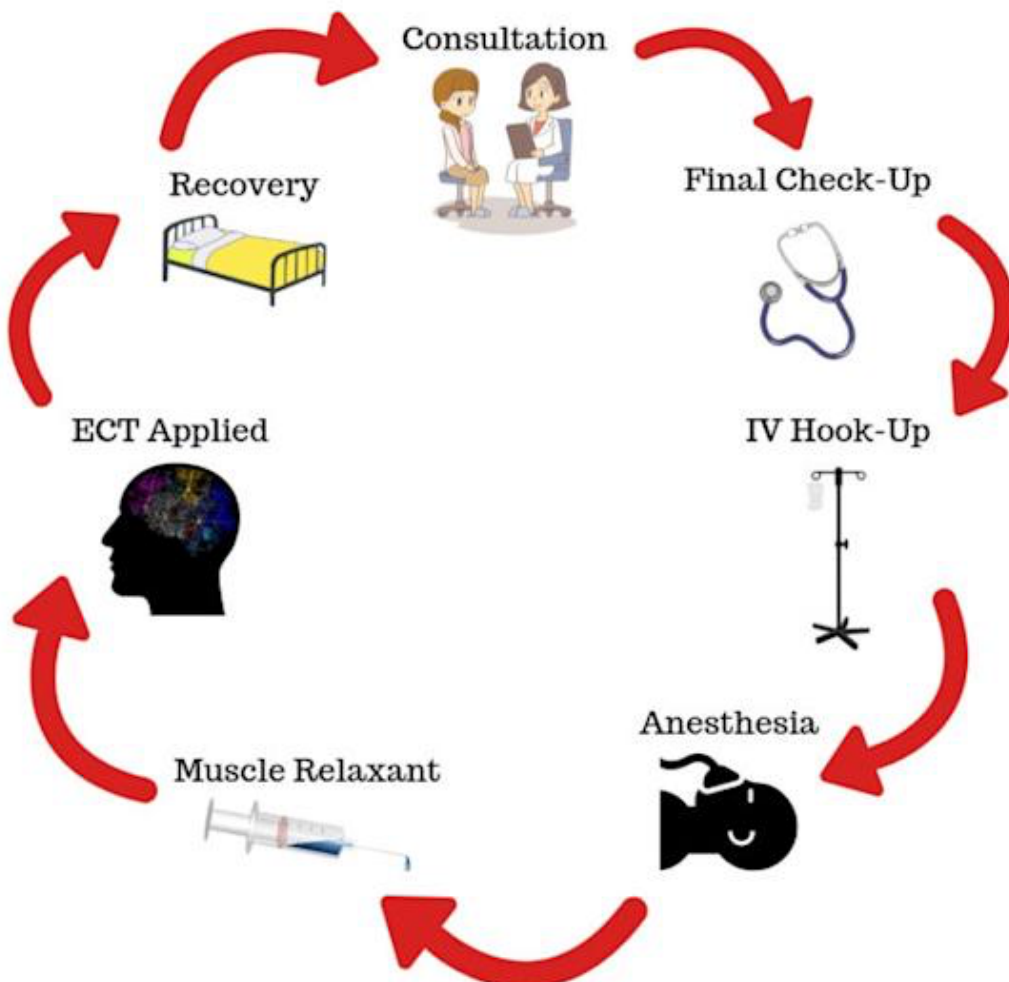
A. What is Electroconvulsive therapy?

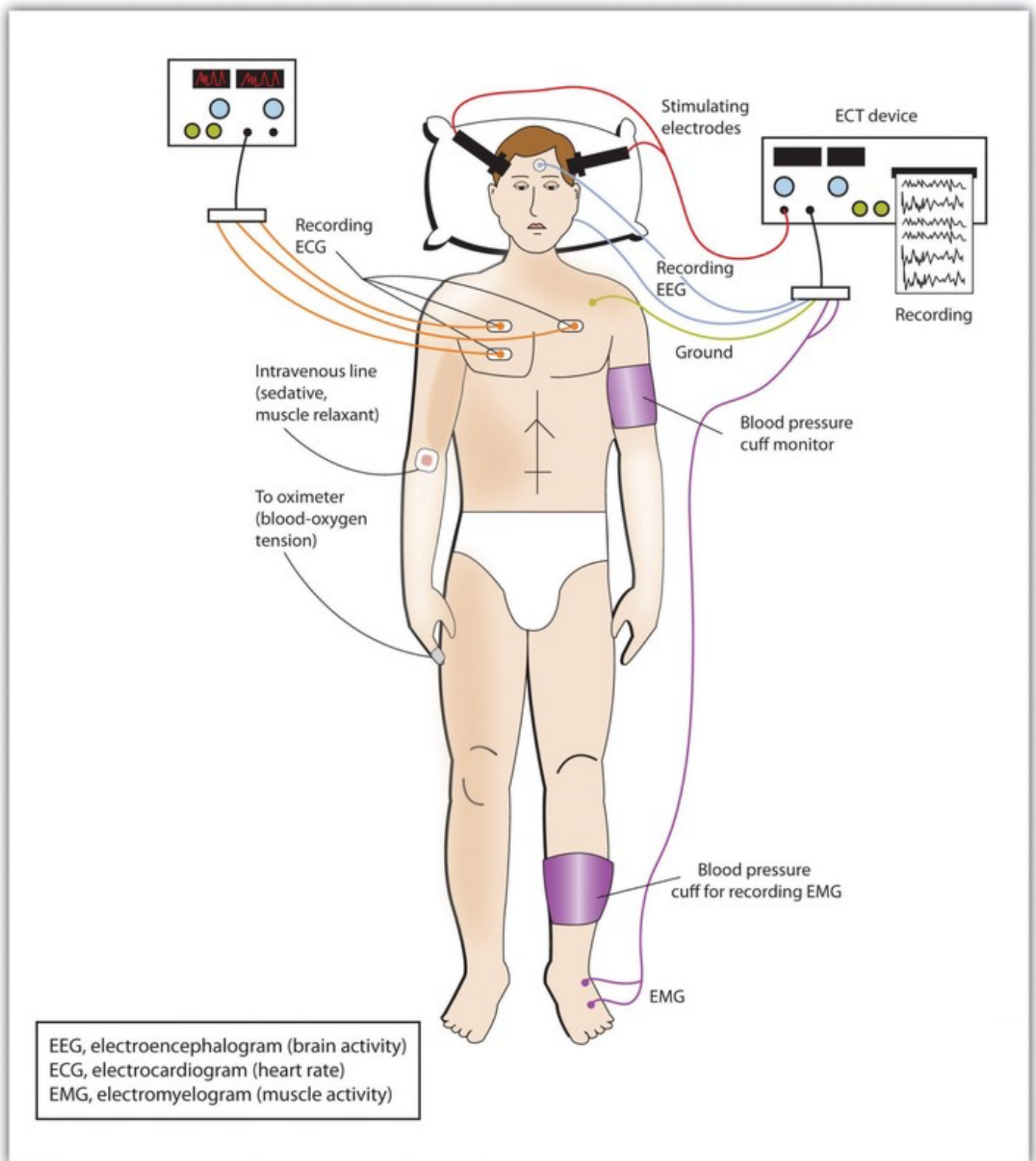
Electroconvulsive therapy – also known as ECT for short, is a treatment that involves sending an electric current through the patient’s brain - causing a brief surge of electrical activity within the brain. This medical treatment is mostly used with patients with severe major depression or bipolar disorders.

During this process, the patient is **anaesthetized** and **curarized**. What is “curarize”?

	According to the <i>Merriam Webster Dictionary</i> , curare is “ <i>a complex poison of South American Indians used on arrow tips that causes muscle relaxation and paralysis, includes various substances of plant and animal origin. [...]</i> ”.
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THE PROCESS OF ECT





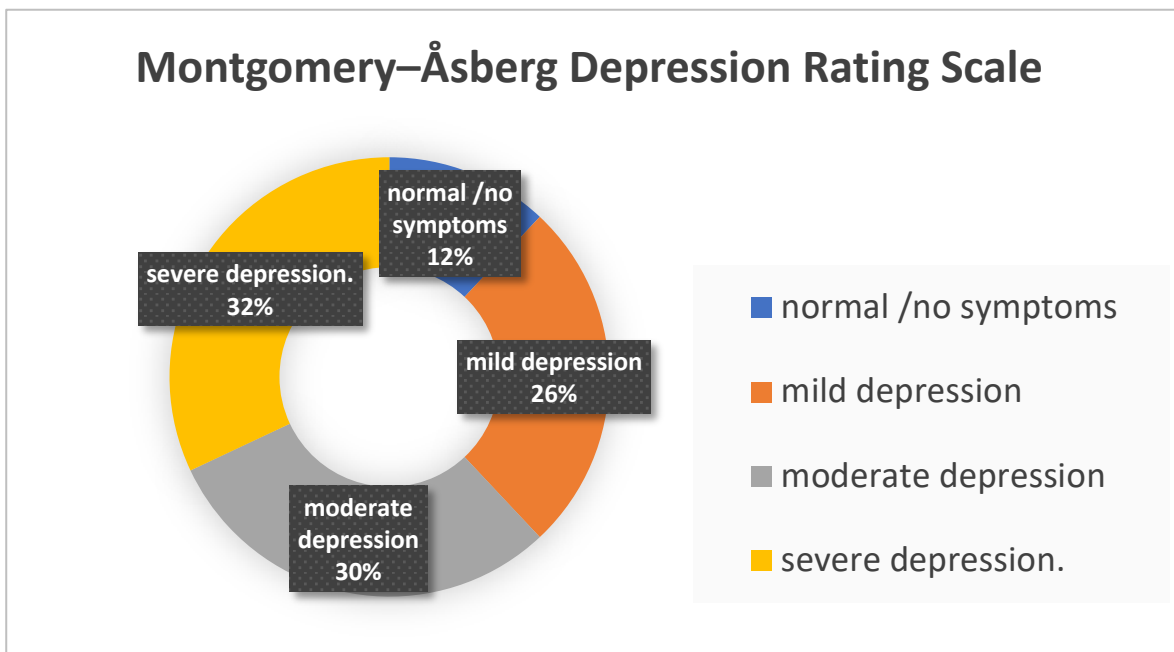
In an attempt to demonstrate the effectiveness of electroconvulsive therapy, this paper [will be focusing](#) on a specific case study.

B. Case Study

Thomas Smith has already suffered from two major depressive episodes before. After making significant improvements, he, unfortunately, became ill again. After his relapse, he was hospitalized in A&E. Upon arrival, the patient presented various symptoms including:

1. Psychological symptoms.
2. Physical symptoms.
3. Profound and overwhelming sadness.
4. The state of being unable to feel anything, especially pain.
5. Emotional **tedium**.
6. Cognitive inhibition.
7. Ruminating anxiety and **intrusive thoughts** [being stuck in a loop of repeated negative thoughts about the past].
8. Feeling unable and incapable to fulfil his responsibility as a father.
9. Feeling guilty and incompetent (inadequate).
10. Slow-motion thoughts.
11. Experiencing confusion and perplexity: the state of feeling confused and worried because you do not understand something.
12. Stress and concentration disorders.
13. Acute anxiety.
14. Anhedonia or the inability to feel any pleasure
15. Avolition [a total lack of motivation that makes it difficult to get anything done - procrastination]
16. Social withdrawal or isolation.
17. Trouble sleeping or insomnia. [disruptive sleep]
18. A score of 37 out of 60 on **MADRS (Montgomery–Åsberg Depression Rating Scale)**

Montgomery–Åsberg Depression Rating Scale	
• Normal /symptom absent	• 0 to 6
• Mild depression	• 7 to 19
• Moderate depression	• 20 to 34
• Severe depression.	• >34 –



- **Somatic symptoms**
 - ⇒ **Extreme fatigue**
 - ⇒ **Weight loss** (about 5kg within 4 weeks)
- **Diagnosis:** Recurrent and severe depressive disorder without psychotic symptoms.
- **Hospitalization length of stay: 6 months.**
 - ⇒ Intensive care involving different areas of medical and social knowledge and skills.
 - ⇒ Marital difficulties.
- **Patient management and care**

Different psychopharmacological strategies and approaches.

- ⇒ **Weekly couple's therapies** in order to assess the different emotional relational factors that might influence the patient's symptoms.
- ⇒ **Mention of Electroconvulsive therapy** (the patient refuses first but eventually accept after a thorough explanation of the assets but also disadvantages of this technique).

Running of the ECT

1) The first three sessions:

Encouraging and favourable results. The patient developed a better emotional modulation and the feeling of sadness completely disappeared. The MADRS scoring instructions also indicated that the patient was in the normal range (9 out of 60).

2) Two weeks later

- ⇒ **Relapse.** The patient is given five supplementary therapy sessions.

Five supplementary sessions are provided. Improvement of the patient's symptomatology [*the set of symptoms characteristic of a medical condition or exhibited by a patient.*] Rapid improvement of the patient's symptomatology has been noticed in the postoperative period, with complete recovery without any complication.

3) Patient's discharge from hospital: two weeks after the other five sessions.

4) Catamnesis

[*The medical history of a patient following the onset of a mental or physical disorder, either after the initial examination or after discharge from treatment (in the latter case, it is also known as follow-up history)*]

- ⇒ Patient's return to professional activity one month later.
- ⇒ No sign of relapse after five years of **constant medical follow-ups.**

C. Effectiveness Electroconvulsive therapy

- ⇒ 80% to 90% effectiveness on severe depression with or without psychotic symptoms.
- ⇒ 50% effectiveness on recurrent depression.

ECT should not be used for patients with:

- ⇒ Unstable cardiovascular disease.
- ⇒ Recent strokes.
- ⇒ Hemorrhagic stroke [a brain aneurysm that can leak or rupture, causing bleeding into the brain].
- ⇒ Retinal detachment.
- ⇒ Pheochromocytoma [a type of neuroendocrine tumour that grows from cells called chromaffin cells. These cells produce hormones needed for the body and are found in the adrenal glands.].
- ⇒ Respiratory failure.

Surgical Risks

The inherent risks of this procedure are similar to the complications associated with anaesthesia for minor surgical procedures: 2 deaths for 100,000 sessions of ECT or 1 death for 10,000 patients.

Morbidity rate: the incidence is 1 in 1400 sessions

- cardiac arrhythmia without consequence.
- Laryngospasm [a transient and reversible spasm of the vocal cords that temporarily makes it difficult to speak or breathe].
- Dental traumas
- Dislocations or other fractures.
- Circulatory disease or complication
- Repeated epileptic seizures
- Long-term apnea



Immediate side-effects after ECT

- Confusional state.
- Partial amnesia
- Headaches
- Nausea
- Muscle fatigue



The disappearance of side effects or adverse reactions may vary from one individual to another.

Side-effects or adverse reactions

Difficulty in remembering: retrograde amnesia.