



What is Electroconvulsive therapy (ECT)?

Electroconvulsive therapy (ECT) is one of the most controversial and misunderstood treatments for mental illness. In fact, it is safe and effective for treating severe depression when patients have symptoms that haven't responded to medication, counselling or other psychosocial treatments. It is also used to treat conditions such as mania and schizophrenia. ECT can be used to treat people with an acute illness and to maintain their improvement.

How does Electroconvulsive therapy (ECT) work?

As with many medical treatments, the actual way that ECT relieves symptoms of illness is unknown. It is now believed that ECT affects some of the chemicals that transfer impulses or messages between nerve cells in the brain, so it may correct some of the biochemical changes that accompany some mental disorders.

Research has shown that 60 to 80 per cent of people with depression achieve remission with a course of ECT. This treatment often helps people who do not feel better after trying other treatments, such as medications.

A course of ECT consists of individual treatments that are most often given three times per week. The total number of treatments and their frequency are determined by your doctor. The total number of treatments varies—usually between eight and 19—but it could be more or fewer.

Each treatment is given while you are asleep under general anesthesia. The anesthetic (the drug that will put you to sleep) is injected by an anesthesiologist (a doctor who specializes in giving the medicine) through a needle inserted in a vein. You will be given oxygen through a face mask. Your heart rate, blood pressure and oxygen level are monitored during the treatment. You will be asleep for about five to 10 minutes.

Each treatment procedure involves passing a small, controlled electric current between two metal discs (electrodes) that are applied on the surface of the scalp and/or temple. The current passes between the electrodes and through part of the brain in order to stimulate the brain. It causes a controlled therapeutic seizure that usually lasts 20 to 90 seconds.

You will talk to your psychiatrist and members of the health care team about how to stay healthy.

You may need to have ongoing maintenance ECT, take medication, join a therapy group or have one-to-one talk therapy. Together with your psychiatrist and your support people, you will make a treatment and follow-up care plan.

Who can Electroconvulsive therapy (ECT) benefit?

ECT is an effective treatment for severe depression. It is usually recommended when people have symptoms that have not responded to medications or psychosocial treatments.

Risk of Side Effects

Headache

You may get a headache. This may be caused by anesthetic, the ECT treatment or not having anything to eat or drink for a long time.

Muscle stiffness

You may get some muscle stiffness from the medication given to you during the treatment to relax your muscles.

Nausea

You may get nausea from the anesthetic or from not eating and drinking for a long time.

Confusion


You may feel confused after an anesthetic and ECT treatment. It is best to rest for the next 24 hours and have someone with you during this time. Confusion caused by anesthetic and ECT does not last long.

Memory loss

You may have some problems with loss of memory. This can last between a few weeks and several months. Avoid making major decisions while you are having ECT treatments.

Improved ECT techniques and clear guidelines for the use of ECT have reduced the risk and severity of memory side-effects.

Related Programs & Services

- Treatment at CAMH: [Access CAMH](#)
- [Help for families from CAMH](#)
- [ConnexOntario](#) 
- [CAMH Research: Temerty Centre for Therapeutic Brain Intervention](#)