

## What is ECT?

Electroconvulsive therapy (ECT) is a medical treatment most commonly used in patients with severe major depression or bipolar disorder that has not responded to other treatments. It involves a brief electrical stimulation of the brain while the patient is under anesthesia. A patient typically receives ECT 2-to-3 times a week for a total of 6 to 12 treatments, depending on the severity of symptoms and how quickly the symptoms respond to the treatment.

ECT has been used since the 1940s, and decades of research have resulted in major improvements in the procedure. It is typically administered by a team of trained medical professionals that includes a psychiatrist, an anesthesiologist, and a nurse or physician assistant.

## Does ECT Work?

Extensive research has found ECT to be effective for the short-term relief of major depressive disorder and other severe mental illnesses, such as bipolar disorder and schizophrenia, particularly when these are accompanied by psychosis (loss of contact with reality). It is typically used when other treatments, including medications and psychotherapy, don't work.

ECT's effectiveness in treating severe mental illnesses is recognized by the American Psychiatric Association, the American Medical Association, the National Institute of Mental Health, and similar organizations in Canada, Great Britain and many other countries. Clinical evidence indicates that for individuals with uncomplicated but severe major depression, ECT will produce substantial improvement in approximately 80 percent of patients.

Although ECT can be very effective for many individuals with serious mental illness, it is not a cure. To maintain their health and prevent a return of the illness, most people treated with ECT need to continue with some type of treatment, typically psychotherapy and medication or, in some circumstances, ongoing ECT treatments.

## What are the steps involved when getting ECT?

Before beginning a series of ECT treatments, a patient should receive a thorough psychiatric assessment, including a medical examination, basic blood test, and an electrocardiogram (ECG) to check heart health.

Informed consent is another important part of the process. Patients and their families should discuss all options for treatment with the psychiatrist before making a specific treatment decision. They should be provided with sufficient information to fully understand the procedure and the potential benefits, risks, and side effects of each treatment option before providing written consent.

At the time of each treatment, a patient is given general anesthesia and a muscle relaxant and electrodes are attached to the scalp. A small electrical current goes between the electrodes and stimulates the brain, intentionally causing a brief seizure. Patients are monitored throughout the procedure, which takes about 10 to 15 minutes.

## What are the risks and benefits?

ECT treatment has been associated with short-term memory loss and difficulty learning. Some people have trouble remembering events that occurred in the weeks before the treatment or earlier. In most cases, memory problems improve within a couple of months. The risks of general anesthesia, which is needed for ECT, are similar to the risks when anesthesia is used for other procedures such as minor surgeries. The most common side effects of ECT on the day of treatment include nausea, headache, fatigue, confusion, and slight memory loss, which may last minutes to hours.

These risks must be balanced with the consequences of ineffectively treated severe psychiatric disorders. For some patients, the risks of ECT may be less than those of ongoing treatment with medications. ECT can work more quickly than medications. It can be useful if a patient is suicidal, is not responding to medications or cannot tolerate the side effects of medication.