ELECTROCONVULSIVE THERAPY (ECT)

What you need to know...
**WHAT IS ELECTROCONVULSIVE THERAPY (ECT)?**

Electroconvulsive therapy (ECT) is a medical treatment most commonly used in patients with severe mental illness that have not responded to other treatments.

ECT involves a brief electrical stimulation of the brain while the patient is under anesthesia.

The treatment is administered by a team of trained medical professionals that includes a psychiatrist, an anesthesiologist, and a nurse or physician assistant.

ECT has a long history that dates back to the late 1930s. Many advances have been made since then making the practice a modern and well-established medical procedure.

**WHAT IS ECT USED FOR?**

ECT is used to safely and effectively treat various mental illnesses including major depression, bipolar disorder (mania, depression and mixed state), schizophrenia, schizoaffective disorder, catatonia, neuroleptic malignant syndrome, perinatal disorders and Parkinson's disease. There are growing reports suggesting its benefit in treating post stroke depression, delirium, obsessive-compulsive disorder, chronic pain and self-injurious behavior in Autism spectrum disorder and intellectual disability.

Other factors that determine treatment with ECT include:
- Nature and severity of symptomology;
- Treatment history, particularly treatment resistance;
- Risk versus benefit; and
- Patient preference.

Recent research suggests that ECT works by changing neurons in your brain through growth and reorganization.

**REFERENCES**


Ontario Shores Centre for Mental Health Sciences. Retrieved from www.ontarioshores.ca
PREPARING FOR YOUR ECT TREATMENT

To determine your suitability for ECT treatment, you will undergo blood work and an ECG (electrocardiogram).

You will have a consultation with a psychiatrist to discuss the treatment process and potential risks and benefits of ECT. This is a great opportunity to ask any questions you might have about the treatment.

You will also have an anesthesia consultation to identify any possible risk factors and to discuss the side effects of anesthetics, and address the nature and purpose of anesthesia in ECT treatment.

You will receive education on ECT and an information package for you to review in the comfort of your home.

You must have transportation to and from your ECT appointment. You are NOT permitted to drive after your treatment. If you receive ECT as an outpatient, you must have someone drive you home after the procedure and stay with you until you go to sleep at night.

Do not eat and drink after midnight on the day of your treatment and do not take your medications until after your ECT treatment, unless otherwise specified to you by the psychiatrist or anesthesiologist.

Please contact the ECT Program at 705-549-3181, ext. 2178, if you have consumed any food/fluids or taken your medications prior to your treatment appointment.

FREQUENTLY ASKED QUESTIONS

How long is an ECT Appointment?
A single ECT appointment/session usually lasts one hour.

What does a course of ECT look like?
A typical course of ECT is a series of 12 treatments over four weeks with treatments Monday through Friday. Treatment duration and frequency may vary patient to patient and is dependent on treatment response.

Are there any contraindications to ECT?
There are no absolute contraindications for ECT. However, treatment decisions are made on an individual basis after careful considerations are given to potential risks and benefits. All patients considered for ECT are scheduled for a pre-treatment consultation with a psychiatrist and anesthesiologist to ensure the care provided is safe.

What happens if I am unwell?
If you are unwell or ill at any point during your treatment, please call the ECT Program at 705-549-3181, ext. 2178 and leave a message. A nurse will return your call as soon possible to give you further direction.

What happens if I have a medical incident prior to my ECT treatment such as a fall, a seizure, or a major cardiac event, etc.?
Please call the ECT Program at 705-549-3181, ext. 2178 and leave a message. A nurse will return your call as soon as possible to give you further direction. You will most likely need to be cleared by the psychiatrist and anesthesiologist before your next treatment.

What if I have transportation issues?
If you encounter any transportation concerns, please call the ECT Program at 705-549-3181, ext. 2178 and we will assist you with rescheduling your appointment or providing community resources to assist with transportation.
THE DAY OF YOUR APPOINTMENT

Please report to the ECT Program on the main level of the Toanche Building at 500 Church St. Penetanguishene at your scheduled appointment time. A nurse will greet you.

Once you are registered, you will move through three different rooms during your appointment.

In the Pre-Treatment Room
- An intake assessment will be completed which includes vital signs, health assessment and mental status.
- You will receive an intravenous (IV) infusion.

In the Treatment Room
- You will receive a short acting anesthetic by the anesthesiologist (a doctor who specializes in giving the medicine) through the IV line, which will put you to sleep for approximately 5-10 minutes. You will also be given a muscle relaxant to stop your muscles from moving during the seizure.
- You will be given oxygen through a face mask and your heart rate, blood pressure and oxygen level will be monitored during the treatment.
- Cardiac monitoring pads will be placed on your chest to monitor your cardiac status during and after the procedure.
- Four electrodes will be placed on specific areas of your head. Two of these electrodes are for monitoring your brain waves, and the other two are for delivering a short, controlled set of electrical pulses for a few seconds. The electrical pulses must produce a generalized seizure to be effective.
- You will awaken about five to 10 minutes after the treatment is over and will be moved to the Recovery Room.

In the Recovery Room
- You will remain in the Recovery Room until your blood pressure, pulse and breathing return to their pre-treatment levels. This usually takes about 20 to 25 minutes.
- You will be discharged home when you are fully awake and stable.

COMMON SIDE EFFECTS OF ECT

Some common side effects can occur during the ECT treatment, immediately after the treatment, or after the course of treatment.

Complications can occur from either the seizure that is triggered, or the anesthetic agents administered. The following are some of the common side effects:

- Oral and dental trauma: trauma to the tongue and oral cavity are the most common complications associated with ECT. This is usually minimized by using a mouth guard (bite block) during the procedure.
- Headache: some patients can have headaches following the treatment. This is usually managed by hydrating and taking a pain reliever such as Tylenol.
- Muscle aches and pain: this side effect is rare and can usually be managed by hydrating and taking a pain reliever such as Tylenol.
- Nausea and vomiting: can be a side effect of the procedure or from the anesthetic. It is usually managed with an anti-nausea medication such as Gravol.
- Disorientation and confusion: this side effect can last anywhere from 5 to 45 minutes following the treatment. You will be carefully monitored for this in the recovery area.
- Temporary short-term memory loss: you may have some problem with recalling old memories or forming new memories. Improved ECT techniques and clear guidelines for the use of ECT have reduced the risk and severity of memory side effects. Please talk to the ECT team if you suspect memory issues.