Electroconvulsive therapy (ECT) is a relatively safe and effective treatment that involves passing a small and carefully controlled electrical current through a person’s head to produce a seizure in the brain. This causes changes in brain chemistry that can relieve symptoms of certain psychiatric disorders such as depression. The procedure is painless and is always performed under general anesthesia.

Is ECT Considered a Standard Psychiatric Treatment?
Yes. ECT has been used for over 70 years. In the United States, about 100,000 individuals receive ECT each year, and the numbers are increasing every year. The National Institute of Mental Health, the American Psychiatric Association, and the U.S. Surgeon General all have endorsed ECT as a valuable treatment for certain mental illnesses, particularly for major depression.

When is ECT used?
Antidepressant medications and psychotherapy are often effective treatments but can take time to work. This delay can be dangerous for severely depressed patients who have intense suicidal thoughts or suffer from psychosis. ECT works faster than antidepressants and is a valuable treatment when patients are at risk for suicide. ECT can also be used when patients do not respond to antidepressant medications or cannot tolerate antidepressants, especially in elderly patients. Patients suffering from bipolar disorder and schizophrenia may also benefit from ECT. ECT is often a treatment of choice in severely depressed pregnant women who don’t want to expose the fetus to antidepressant medications.

Who Administers ECT, and Where?
A treatment team administers ECT. The team consists of psychiatrists, nurses, and certified registered nurse anesthetists. ECT is administered in a special unit at The Acadia Hospital. This unit includes a waiting area, a treatment room, and a recovery room. ECT can be done either on an in-patient or out-patient basis.

How is ECT Given?
ECT is given under general anesthesia. Patients are asked not to eat or drink from midnight the night before ECT. Before the treatment an intravenous line is inserted for giving medications. During the procedure, the patient receives a short acting anesthetic agent which puts the patient to sleep for about 5-10 minutes.

Once the patient falls asleep, a muscle relaxing medication is given to the patient to stop the muscles from moving during the seizure. When the patient is completely asleep and the muscles are well relaxed, a small electrical current is applied to the electrodes on the head. This stimulates the brain and produces the seizure, which lasts for about 15 seconds to two minutes.

Throughout the procedure, vital signs, heart rhythm, and brain electrical activity are closely monitored and the patient receives oxygen through a mask. When the treatment is completed, the patient is taken to a recovery area for monitoring by trained staff. Usually within 30 to 60 minutes, the patient can leave the recovery area. (cont. on back)
How Many Treatments Are Needed and How Often?
ECT is given two to three times a week, on Monday, Wednesday and Friday, for a total of six to twelve treatments. Some patients may need more or fewer treatments. Once symptoms are resolved, ECT is usually discontinued.

Continuation/maintenance ECT is recommended for patients whose depression has not responded well to medications (treatment-resistant depression) or patients who are unable to tolerate antidepressants. It is usually given for a period of several months with each treatment separated in time by one or more weeks. Continuation/maintenance ECT is expected to prevent the return of the psychiatric condition.

What Are the Side-Effects of ECT?
The most common side effects are headache, nausea, muscle aches, disorientation and confusion. The confusion typically clears within one hour. Patients may develop memory problems such as difficulty in learning and retaining new information and remembering events that have happened before and while receiving ECT. Memory problems especially ability to learn and form new memories improve in the weeks and months following the last ECT treatment. In some people, the memory problems can be more severe and irreversible. Unilateral ECT, a type of electrode placement, has been shown to have less incidence of memory impairment.

What About Informed Consent?
Informed consent for ECT is obtained in writing after an explanation of the procedure, its potential benefits, risks and side effects, and a description of available alternative treatments. Patient can withdraw his/her consent at any time. Legal guardians can provide informed consent for patients unable to participate in the informed consent process.

Please let us know if you have any further questions by calling 973-6419.

Vijay Amarendran, MD (left) is board certified in psychiatry, a Diplomate of the American Board of Addiction Medicine and a Fellow of the American Psychiatric Association.

Dr. Amarendran has seven years experience providing ECT services.

Glenn Prentice, MD (left) has 17 years experience providing ECT services.

The entire ECT care team has years of experience working with patients and their families. They work hard to make the patient experience safe and comfortable.