ECT has the highest rates of response and remission of any form of antidepressant treatment, with 60 to 90 percent of those treated showing significant improvement. In addition, ECT has been associated with improvements in health-related quality of life.

ECT can be beneficial in very ill patients. It may be considered as a first-choice treatment whenever a rapid, definitive improvement is clinically urgent (i.e. when the psychiatric illness poses a threat to the patient's life or health status).

ECT may be particularly beneficial in depressed patients who are: a high suicide risk, having irrational/psychotic thoughts, refusing to eat or drink, or catatonic.

**RISKS AND SIDE EFFECTS**

ECT has a long history which dates back to 1938, though early forms of the treatment bear little resemblance to modern ECT. With advances in both anesthesia and technology, ECT today is very safe; the risk of injury or death is extremely low (mortality less than 1 per 70,000 treatments), far below the risk of childbirth.

Serious complications from general anesthesia are rare, but may include heart and lung problems, stroke, infection, and even death. Given the short period of time that the patient is under anesthesia for ECT, serious/life-threatening risks are very rare.

Common side effects include headaches, muscle soreness and nausea. Most patients experience some degree of temporary cognitive impairment during a course of ECT. Because depression itself and some medications used to treat depression can also produce memory impairment, most patients agree that a small degree of temporary memory difficulty is a reasonable side effect to tolerate, given the likelihood of substantial improvement in depressive and other psychiatric symptoms.

For more information, contact Medical Director Erich Conrad, MD, at (504) 412-1580.
Electroconvulsive therapy (ECT) is a medical procedure used to treat some psychiatric illnesses by causing a short, painless, brain seizure under general anesthesia. Although it is not completely understood, studies suggest ECT leads to the same changes in the brain as antidepressants, but more quickly. ECT is highly effective, with up to a 60 to 90 percent success rate in severely depressed patients.

ECT is endorsed by the National Institute of Mental Health, the American Psychiatric Association, the American Medical Association, and the U.S. Surgeon General.

**WHAT IS ECT?**

- **Severe depression (unipolar or bipolar depression)** - ECT may be considered a first-line treatment when the depression poses an imminent risk to the life or medical status of a patient.

- **Treatment-resistant depression** - this refers to depression that has not improved after several trials of different types of medications and psychotherapy.

- **Severe mania** - which poses a threat to the safety or health of the patient, or is not responding to medication treatment.

- **Catatonia** - a neurological condition in which patients experience extreme immobility or extreme motor excitement, both of which can be life-threatening.

- **Schizophrenia and other psychotic illnesses.**

Once a patient is evaluated by an ECT psychiatrist and deemed an appropriate candidate for ECT, he/she will undergo a medical work up (physical exam and laboratory tests) and be evaluated by an anesthesiologist.

**INDICATIONS FOR ECT**

**HOW MANY SESSIONS?**

ECT treatments are typically given 3 times a week. A typical series consists of 6 to 12 treatments but can be less or more, depending on the patient's specific illness and response to treatment.

**Continuation ECT** refers to ECT treatments that are given for up to 6 months after the initial ECT series. The goal of continuation ECT is to prevent relapse (i.e. becoming depressed again), which can happen, even after a successful ECT series.

For some patients with multiple and/or severe depressive episodes, longer term use of ECT beyond 6 months may be recommended. This is known as **maintenance ECT.**

The schedule of continuation/maintenance ECT can vary from one treatment a week to one treatment every month, depending on the patient's severity of illness and risk for relapse. Continuation ECT usually starts with weekly treatments, since risk of relapse is greatest early on. The treatment interval may be gradually lengthened if the patient remains well. If a patient relapses during continuation/maintenance ECT, another ECT series may be advised. The goal of any ECT service is to provide the fewest treatments necessary to keep the patient well.

**PROCEDURE**

- The patient must not eat or drink at least 8 hours before the procedure. Some required medications may be taken with sip of water.

- Patients are advised to wear comfortable clothes. Once they check in, patients are asked to empty their bladder and remove jewelry, eyeglasses, and removable dentures.

- Upon arrival, the patient's vital signs are obtained, an IV is started and a physical exam is performed.

- Electrodes are placed on the patient's head and chest to monitor electrical activity in their brain and heart.

- The patient is put to sleep using general anesthesia. Once the patient is asleep, he/she is given a muscle relaxant in order to relax the body's muscles and reduce movement. Other medications may be given to reduce oral secretions or to help control heart rate/blood pressure.

- A member of the anesthesia team uses an oxygen mask to breathe for the patient and intubation is not required.

- Once the patient is completely asleep, a small electrical current is delivered to the scalp to induce a short (usually 20-60 second), controlled seizure. If the seizure lasts longer than expected, the physician will stop the seizure using medications.

- The treatment, from the time the patient is asleep to the time the patient wakes up, is usually only about 5-10 minutes.

- After the treatment is completed, the patient is monitored by a nurse until they are stable to be discharged. Due to the anesthesia, the patient should not drive and must arrange transportation from the hospital.