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Electroconvulsive therapy

Electroconvulsive therapy (ECT) uses an electric current to treat depression and some other mental illnesses.

Description

During ECT, the electric current triggers a seizure in the brain. Doctors believe that the seizure activity may help the brain "rewire" itself, which helps relieve symptoms. ECT is generally safe and effective.

ECT is most often done in a hospital while you are asleep and pain free (general anesthesia):

- You receive medicine to relax you (muscle relaxant). You also receive another medicine (short-acting anesthetic) to put you briefly to sleep and prevent you from feeling pain.
- Electrodes are placed on your scalp. Two electrodes monitor your brain activity. Another two electrodes are used to deliver the electric current.
- When you are asleep, a small amount of electric current is delivered to your head to cause seizure activity in the brain. It lasts for about 40 seconds. You receive medicine to prevent the seizure from spreading throughout your body. As a result, your hands or feet move only slightly during the procedure.
- ECT is usually given once every 2 to 5 days for a total of 6 to 12 sessions. Sometimes more sessions are needed.
- Several minutes after the treatment, you wake up. You do not remember the treatment. You are taken to a recovery area. There, your health care team monitors you closely. When you have recovered, you can go home.
- You need to have an adult drive you home. Be sure to arrange this ahead of time.

Why the Procedure is Performed

ECT is a highly effective treatment for depression, most commonly severe depression. It can be very helpful for treating depression in people who:

- Are having delusions or other psychotic symptoms with their depression
- Are pregnant and severely depressed
- Are suicidal
- Can't take antidepressant medicines
- Haven't responded fully to antidepressant medicines

Less often, ECT is used for conditions such as mania, catatonia, and psychosis that do not improve enough with other treatments.

Risks

ECT has received bad press, in part because of its potential for causing memory problems. Since ECT was introduced in the 1930s, the dose of electricity used in the procedure has been decreased significantly. Also, it may be given with the electrode placed on only one side of the skull (unilateral ECT). These changes have greatly reduced the side effects of this procedure, including memory loss.

However, ECT can still cause some side effects, including:

- Confusion that generally lasts for only a short period of time
- Headache
- Low blood pressure (hypotension) or high blood pressure (hypertension)
- Memory loss (permanent memory loss beyond the time of the procedure is uncommon and is much less common than it was in the past)
- Muscle soreness
- Nausea
- Rapid heartbeat (tachycardia) or other heart problems

Some medical conditions put people at greater risk for side effects from ECT. Discuss your medical conditions and any concerns with your health care provider when deciding whether ECT is right for you.

Before the Procedure

Because general anesthesia is used for this procedure, you will be asked not to eat or drink before ECT.

Ask your provider whether you should take any daily medicines in the morning before ECT.

After the Procedure

After a successful course of ECT, you will receive medicines or less frequent ECT to reduce the risk of another episode of depression.

Outlook (Prognosis)

Some people report mild confusion and headache after ECT. These symptoms should only last for a short while.

Alternative Names

Shock treatment; Shock therapy; ECT; Depression - ECT; Bipolar - ECT

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Updated by: Fred K. Berger, MD, addiction and forensic psychiatrist, Scripps Memorial Hospital, La Jolla, CA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

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