

ECT (Electroconvulsive Therapy)

What is ECT?

ECT (electroconvulsive therapy) is a treatment that helps many patients by easing severe depression, bipolar disorder, and some other mental illnesses. No one knows exactly how ECT works to ease symptoms. However, it appears to restore or reset chemical processes in the brain to normal function.

In ECT, an electrical energy device sends electric pulses to the brain. This causes a brief seizure in the brain (a period of rapid nerve impulses) that lasts from 30 seconds to 2 minutes. During ECT, you receive medicines to help you sleep through the treatment and prevent muscle movements that otherwise come with seizures.

The number of treatments can vary from person to person but usually involve 6 to 12, given every other day. Treatments may be more often or less often, depending on your situation and response.

When is ECT recommended?

ECT may be recommended to treat severe depression, bipolar disorder, or other mental illnesses when:

- Medicines you have tried did not help
- Your symptoms are too dangerous or difficult to wait for medicine to work (for example, a strong desire for suicide)
- Medicine side effects must be avoided (for example, during pregnancy)

What do I need to do next?

- 1 Talk to your doctor about what is involved in ECT treatments and the benefits and risks for your particular situation (see [page 4](#)).
- 2 Follow your doctor's orders about what to do before each treatment.
- 3 Arrange a ride home after your ECT treatments — DO NOT DRIVE until you finish all ECT treatments.

How effective is ECT?

ECT doesn't work for everyone. However, **research shows it is usually more effective than other treatments for severe depression**, with fewer side effects overall. (See more about side effects on [page 4](#).)

Studies show that ECT is helpful for 7 to 9 out of every 10 people, but each person's experience is unique. The response to ECT can differ in 2 ways:

- 1 **How symptoms improve.** The treatments may bring a full recovery, a partial recovery, or in some cases, no benefit at all.
- 2 **How long recovery lasts.** The benefits of ECT may last for years or they may disappear in a matter of weeks. After a series of ECT treatments, your doctor may prescribe medicine to help prevent symptoms from returning.

How do I prepare for ECT?

To get ready for your ECT:

- **Talk with your doctor about:**
 - **Medicines you currently take**, including prescription medicines, over-the-counter medicines, and herbal supplements. You may need to stop certain medicines before starting a series of ECT treatments.
 - **Tests you may need to have to make sure ECT is safe for you.** You may need to have blood tests, a check of your heart and lungs, and a heart rhythm test (electrocardiogram).
- **Don't eat or drink after midnight the night before each ECT treatment.** Your doctor may tell you to take some medicines with a sip of water on the morning of your treatment.
- **Arrange for a ride home if you are having ECT as an outpatient. DO NOT drive at any time during a course of treatment.**

ECT and memory loss

This ECT side effect varies from person to person. Although some people have no memory loss, you should keep the following in mind:

- **Most patients have some memory loss** (usually temporary), mostly related to information and events around the time of the treatment series.
- **The more ECT treatments you have, the stronger the memory loss may be.** It may be several days or weeks before your memory returns.
- **Some loss can be permanent**, especially for events around the time of ECT treatments.
- Rarely, patients have extensive and prolonged memory loss (around 1 in 200 patients).
- **Do NOT make important decisions or sign legal contracts until you are cleared to do so by your doctor.**

To compare potential benefits, side effects, and alternatives, review the information on [page 4](#).

What happens before ECT?

ECT treatment is given at the hospital. When you arrive, you will:

- **Talk with your healthcare team.** Be sure to ask your healthcare providers any questions you have. At that time, you will sign a consent form for the ECT treatment series. You may withdraw your consent at any time during treatment.
- **Change into a gown.** You should also go to the bathroom at this time.
- **Remove all of the following items:** Jewelry, glasses or contacts, dentures, bridges, or other dental equipment (tell your doctor if you have any loose teeth or other tooth problems). You can keep these items with you during the treatment, in a purse or pocket. **Valuable items should be left at home.**
- **Have an IV** (intravenous) line placed in a vein in your arm so medicine can be injected.
- **Meet with your anesthesiologist.** You will be taken to the treatment room, where the anesthesiologist will talk to you about your health. You will sign a consent for the anesthesia.
- **Have equipment attached to monitor you.**
 - Electrode patches will be attached to your chest to check your heart rhythm.
 - Electrode patches will be attached to your head to monitor your brain activity.
 - A blood pressure cuff will be placed on your arm, and a clip will be placed on your finger to monitor your oxygen level.

What happens during ECT?

Here's what happens during an ECT treatment:

- **Anesthesia and other medicine.** Through the IV, you'll receive anesthesia and a muscle relaxant. You may also be given other medicines that make the treatment safer or minimize side effects.
- **Tooth protection.** After you are asleep, a tooth guard is placed to protect your teeth during the treatment.
- **Brief seizure.** Leads will be attached to your head to send electrical impulses. This will cause a seizure in the brain (a period of fast nerve impulses). The seizure usually lasts from 30 seconds to 2 minutes. Medicine will help prevent the brain seizure from affecting the rest of your body, so body movements should be slight, if any (see [page 4](#) for information on rare exceptions).

What happens after ECT?

Here's what happens after the treatment:

- **Moving to the recovery area.** You will be moved to a recovery area. Healthcare providers will monitor and take care of you as the anesthetic wears off. The monitoring equipment will be removed as soon as it is no longer needed. You'll wake up gradually. As you wake up, you may be a little confused or not sure where you are. This will not last long.
- **Leaving.** You will be monitored until you are awake enough to return to your room (if you are staying in the hospital) or go home. Some people recover from anesthesia faster than others. The time it takes you to wake up and remember where you are may vary from a few minutes to several hours.

How do I care for myself at home?

After treatment, you may feel tired and need to rest.

Other things you can expect include:

- **Temporary headache or muscle soreness.** This should go away within a couple of days. Use over-the-counter pain medicine if needed.
- **Temporary nausea.** This should also go away within a couple of days. If you have nausea, drink small amounts of fluids and try easy-to-digest foods, like applesauce, jello, puddings, or toast. Stay away from greasy, spicy, or acidic foods.
- **Memory loss.** This side effect varies from person to person (see the box on [page 2](#)) but could last a few weeks after you complete your ECT treatments. **DO NOT sign any legal contracts or make important decisions until you are cleared to do so by your doctor.**
- **Avoid strenuous, dangerous, or complex activities.** Otherwise, you can do whatever you feel like doing around your home. On treatment days, be sure someone is with you when you leave home, and do not drive or go to work.

When should I call my doctor?

Call your doctor (don't wait for your regular follow-up appointment) if you notice any of these problems after ECT treatment:

- **Difficulty breathing or fever.** These may be signs that material from your stomach entered your lungs during the treatment.
- **Headache, muscle pain, or bone pain** that doesn't go away after a few days, or gets worse.

Call your dentist for tooth problems, such as a loose or broken tooth.

Talking with your doctor about ECT

As with many medical treatments, ECT can cause side effects and complications. It's important to weigh the benefits of ECT against these risks, and also consider the risks posed by not treating your condition. The table below lists the most common potential benefits, risks, and alternatives for ECT.

Potential benefits	
<ul style="list-style-type: none">• Relief from symptoms• A full or partial recovery from depression or another mental health condition <p>(While ECT is generally effective, there is no guarantee of effectiveness. There is also no guarantee of how long a positive effect will last.)</p>	
Side effects, potential complications, and risks	
<ul style="list-style-type: none">• Memory loss (usually temporary)• Muscle soreness, headache, or nausea, usually lasting less than 48 hours. These side effects can be treated with medicine.• Problems caused by anesthesia, including serious allergic reaction. Talk to your doctor about any medicine allergies you have. Always follow your doctor's orders about when to stop eating and drinking before a treatment.	<ul style="list-style-type: none">• Problems caused by the procedure:<ul style="list-style-type: none">– In rare cases, a heart rhythm problem can occur. In extremely rare cases (fewer than 1 in 10,000 patients), this can be fatal.– Despite muscle relaxant medicine, muscle contractions can sometimes happen. In very rare cases, they can be strong enough to fracture a vertebra (bone in your spine) or other bone.– Tooth damage can occur. It is important to tell your doctor about any loose teeth, loose caps, bridges, dentures, or other dental appliances.
Alternatives	
<p>Alternatives to ECT include medicine and psychotherapy. Your doctor may recommend ECT if these have been tried and didn't work. Or, your doctor may feel ECT will work better than these alternatives, based on your particular situation.</p>	

Notes

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