

## Electroconvulsive therapy

Electroconvulsive therapy (ECT) is a medical procedure that is used to treat a range of mental illnesses such as severe depression, catatonia and some forms of mania and schizophrenia. The treatment induces controlled seizures in the patient via small electrodes placed at specific locations on the head. ECT has been used for over half a century in many different countries, and its effectiveness is well documented. Approximately eight out of 10 patients who undergo ECT will experience dramatic improvement.

The reason why this treatment is so effective is still mysterious. The brain functions using electrochemical messages, and it is thought that ECT-induced seizures interrupt these messages and 'reset' the brain. ECT is generally used when other forms of treatment, including medication and psychotherapy, have failed. However, ECT is often the first treatment of choice in life threatening situations, such as a potential suicide, because of the rapid results. Sometimes, ECT is prescribed for older patients who can't tolerate medications.

### The procedure

Usually, ECT is performed under supervision by the prescribing psychiatrist. The patient is anaesthetised and given muscle relaxants. The electrodes are placed at strategic points on the patient's skull. Depending on the patient, one or both sides of the head will be stimulated, known as unilateral or bilateral ECT respectively. A series of brief, low frequency electrical pulses prompt a convulsion. The patient won't feel the convulsion because of the anaesthesia, and won't have muscle spasm or move because of the muscle relaxants. The patient wakes up after a few minutes. ECT is typically administered three times per week for six to nine treatments, but the exact course of treatment depends on the nature of the illness and the patient's response to treatment.

### Risks and complications

Research has shown that ECT doesn't cause brain damage because the amount of electricity used is too small to harm tissue. Like any operation involving anaesthesia, ECT carries a small degree of risk. Some of the immediate side effects of ECT (these tend to resolve within a few hours) include headache, sore muscles, queasiness and confusion. During the course of the treatment, many patients experience problems with short term memory, but this side effect only lasts a few days or weeks. A few individuals, however, experience long term difficulties with memory. This effect is more common in patients who undergo bilateral, rather than unilateral, ECT.

### Patient rights

If your psychiatrist suggests that a course of ECT therapy may be helpful, you have certain rights under Victorian law. These rights include:

- A full explanation of the procedure and associated benefits and risks
- A second opinion
- Legal advice
- Representation by a friend or relative
- Having a person of your choice with you during discussions with your psychiatrist or doctor
- The right to complain
- The right to refuse.

### Informed consent

If your psychiatrist considers you are capable of giving informed consent, you can only undergo ECT if you agree. If you are incapable of giving informed consent, or if your health professionals consider that ECT treatment is potentially life saving, then your psychiatrist can consent on your behalf, even if you don't want the treatment. If you are detained as an involuntary patient under the Mental Health Act, you can appeal to the Mental Health Review Board against your involuntary status.

## Where to get help

- Your doctor
- Your psychiatrist
- Mental Health Legal Centre Tel. (03) 9629 4422
- The Chief Psychiatrist (via the Department of Human Services) Tel. (03) 9606 0000
- The Mental Health Review Board Tel. (03) 8601 5270

## Things to remember

- Electroconvulsive therapy (ECT) treats a range of mental illnesses by inducing a controlled seizure in the patient.
- No one knows for sure exactly how ECT works, but it is thought that the seizure 'resets' the brain.
- Common side effects include temporary difficulties with short term memory.

**This page has been produced in consultation with, and approved by:**

Department of Health - Rural and Regional Health and Aged Care Services

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