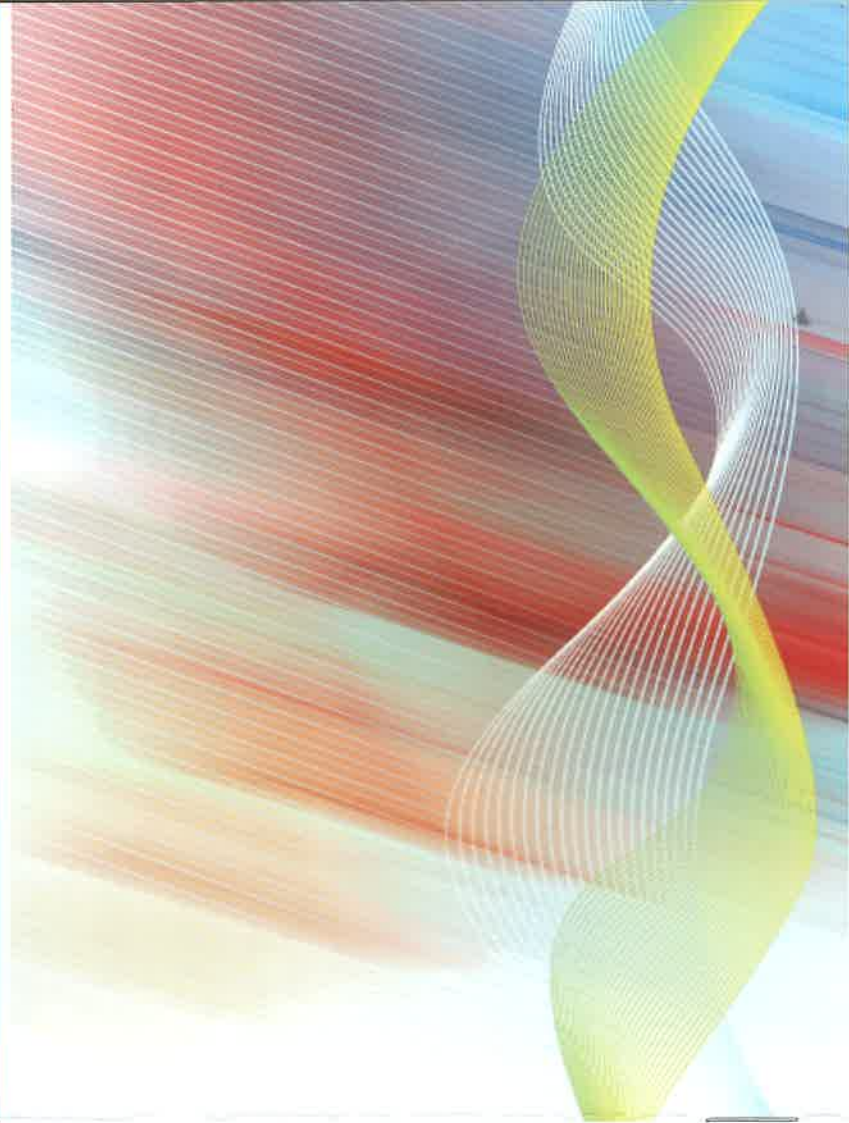
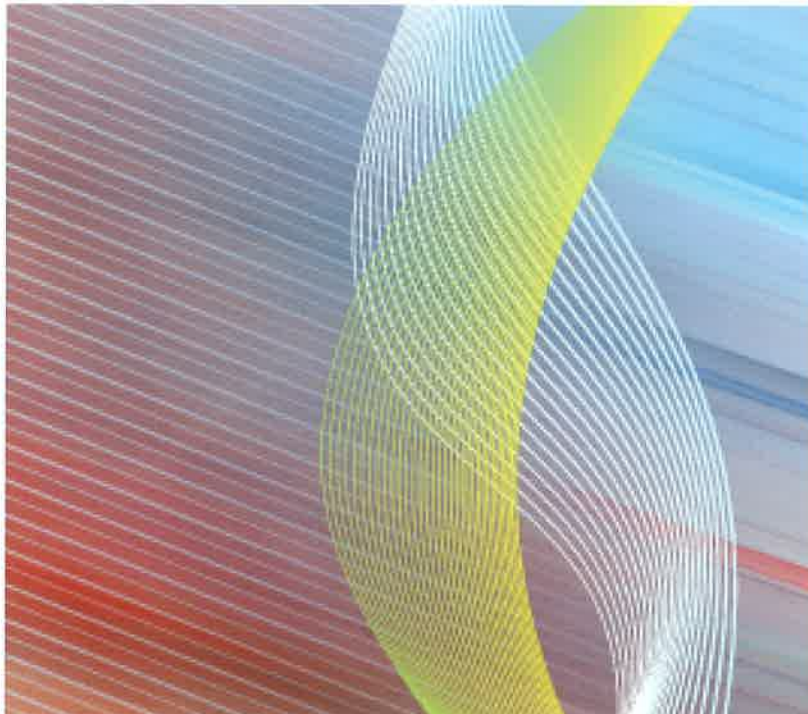


Electro-Convulsive Therapy (ECT)



Information for patients and carers



BT14 - 955



Summary Sheet: Electro-convulsive Therapy

ECT is a treatment for a small number of severe mental illnesses. It consists of passing a brief electrical current through the brain to produce a seizure (fit). ECT is a safe and effective treatment, especially for severe depression.

ECT is not performed while you are awake; it is given under a very brief general anaesthetic as well as muscle relaxants (to prevent body spasms).

ECT is used mainly for people who are not responding to conventional treatments or for treating people with mental illnesses where the current illness is seen as life threatening and when a rapid response is required.

ECT is performed in the Mater Hospital, Day Procedure Unit, twice weekly on Tuesdays and Thursdays from 9am.

The person having ECT will often be in hospital. In some situations it may be possible for you to attend as a day-patient, however, there are extra safety requirements that must be adhered to in this event.

Like any significant medical or surgical treatment, you will be asked to give consent, or permission for ECT to be done. The consent form is a record that ECT was explained to you, that you understand what is going to happen, and that you give your consent to it. You can withdraw your consent at any point.

If you make it very clear that you do not wish to have ECT, then you should not receive it. If you decline ECT you may take longer to recover. There is also an increased risk of suicide if your depression is severe and has not been helped by other treatments.

- Most people need several treatments to get completely better. A course will on average be 6 to 8 treatments, although as many as 12 may be needed.
- ECT is one of the safest procedures performed under general anaesthesia but as with any treatment, it can cause a number of side-effects.
- The most common side-effect is memory loss, which can be short-term or long-term. Memory loss may last days or weeks after the final treatment. Temporary confusion, nausea, headaches and muscle aches can also occur but are usually brief.
- Some people, particularly elderly people; may be quite confused for several hours after treatment. This can be reduced by changing the way ECT is administered (such as changing to unilateral ECT).
- Risks associated to general anaesthesia as with any surgical procedure also exist.

More detail is provided in the full patient information leaflet provided.



What is ECT?

ECT is a treatment for a small number of severe mental illnesses. It is an important, but controversial, and often misunderstood treatment. ECT consists of passing a brief electrical current through the brain to produce a seizure (fit).

ECT is not performed while you are awake; it is given under a very brief general anaesthetic as well as muscle relaxants (to prevent body spasms).

ECT was developed in the 1930s, at a time when there was no form of effective medication for depression or schizophrenia. It was widely used during the 1950s and 1960s without general anaesthesia and was subsequently scary and unpleasant for patients. Most of the bad publicity about ECT originates from this early time in its use.

As a result of thorough research and modernisation of equipment, ECT is now a safe and effective treatment, especially for severe depression.

How does ECT work?

It remains unclear how or why ECT works, although there are a number of theories.

Research suggests that the effect is due to the seizure rather than the electrical current.

ECT is thought to cause the release of several “messenger chemicals” which are active in areas of the brain that controls our mood, and make the chemicals more likely to work.

ECT can change the pattern of blood flow through the brain and recent research suggests that it can stimulate the growth of new cells and nerve pathways in certain areas of the brain.

What is ECT used for?

ECT is used mainly for people who are not responding to conventional treatments.

The National Institute of Health and Clinical Excellence (NICE) is an independent organisation responsible for providing guidelines on how specific illnesses should be treated and making recommendations about the use of specific treatments.

NICE have looked in detail at ECT and have recommended that it should be used only for:

- Severe depression
- Prolonged or severe manic episodes
- Catatonia (associated with schizophrenia and mood disorders – usually total lack of, or excessive movement).

Medications and ‘talking therapies’ are the first option for treating people with mental illnesses. NICE recommends that ECT be considered only for acute treatment where the current illness is seen as life threatening and when a rapid response is required, or when other treatment options have failed. It should not be used for the general management of schizophrenia or depression.

Why is ECT given when there are other treatments available?

ECT has been shown to be the most effective treatment for severe depression. It would normally be offered if:

- Several other medications have been tried but have not helped.
- The side-effects of medication are too severe
- ECT has been helpful in the past
- Your life is in danger because you are not eating or drinking
- You are seriously considering suicide

What are the alternatives?

If you decline ECT, there are several other options. Your medication may be changed, new medication added or a ‘talking therapy’ may be offered, although this should have already been tried.

Where and when is ECT performed?

ECT is performed in the Mater Hospital, Day Procedure Unit, twice weekly on Tuesdays and Thursdays from 9am.

ECT is generally used to treat severe illnesses, so the person having it will often be in hospital. In this situation your transport will be arranged by the nursing staff.

In some situations it may be possible for you to attend as a day-patient, however, there are extra safety requirements that must be adhered to in this event.

These include signing an agreement that you will refrain from driving for the duration of treatment, abstain from alcohol, ensure a responsible carer provide supervision for 24hrs after each session and not care for children unsupervised for 24hrs after each session.

If you are an outpatient, you must arrange for a carer/ advocate accompanying you to the Hospital.



What happens before ECT?

A few days before ECT is commenced your doctor will complete a full physical examination and some investigations (including blood tests, ECG and Chest X-ray) to ensure you are physically fit for ECT and undergoing anaesthesia.

What happens on the day of ECT?

On the morning of ECT, you will be asked to fast for 6 hours prior to ECT. You may be allowed your regular medication; however, some medication may be withheld such as benzodiazepines or anti-epilepsy medication as they can affect the quality of the seizure.

An experienced nurse will accompany you to the ECT suite where you will meet the ECT Team including a Consultant Psychiatrist responsible for administering ECT, a Consultant Anaesthetist and the ECT Nurse. Other members of medical or nursing staff and students may be present.

You will be assisted on to a bed and the ECT team will connect monitoring equipment to measure your blood pressure, heart rate, oxygen levels and EEG during the procedure.

A needle will be put into your hand, through which the Anaesthetist will give you the anaesthetic drug and muscle

relaxant. While you are going off to sleep, the anaesthetist will give you oxygen to breathe.

Once you are asleep and fully relaxed the ECT doctor will administer the treatment. At your first session the doctor will adjust the dose of electricity to ensure that the smallest amount possible is used to provoke a seizure ideally between 20 – 50 seconds. This is known as the “seizure threshold”. The dose may require further adjustment during the course of treatment.

The length of the seizure is measured by both EEG recording of your brain wave activity and observing the seizure.

What happens after ECT is delivered?

After the treatment the muscle relaxant and anaesthetic agent wear off quickly, and when the anaesthetist is happy that you are waking up, you will be taken to a recovery area by an experienced nurse. You will wake up with an oxygen mask and monitoring equipment connected. You may feel groggy and nauseated for a short time. These effects should wear off quickly. The ECT doctor will review you before allowing you to return to your ward and you will be provided light refreshments by staff.



What is bilateral and unilateral ECT?

In bilateral ECT, the electrical current is passed across the whole brain; in unilateral ECT, it is just passed across one side. Both types cause a seizure in the whole brain.

Bilateral ECT appears to work more quickly and effectively but can cause more side effects, in particular memory difficulties.

Unilateral ECT is less effective than bilateral ECT but is thought to cause less memory loss.

How many ECT treatments will I need?

Most people need several treatments to get completely better. A course will on average be 6 to 8 treatments, although as many as 12 may be needed.

You will be reviewed after each treatment by your doctor or a member of the mental health team to see how you are responding to treatment and check that you are not experiencing any serious side-effects.

Your Consultant will decide how many treatments are needed. ECT should be stopped as soon as you have made a recovery, or if you say you don't want to have it anymore.

What are the risks or side effects of ECT?

ECT is one of the safest procedures performed under general anaesthesia but as with any treatment, it can cause a number of side-effects.

NICE recommends that you and your doctor should carry out an assessment of risks and benefits before ECT is commenced.

The most common side-effect is memory loss, which can be short-term or long-term. Memory loss is usually short-term (affecting the time immediately before and after treatment), but longer term memories can be affected too. Memory loss may last days or weeks after the final treatment.

Many people complain of headache or aching muscles immediately after ECT. You may feel groggy or a bit sick. These effects usually settle within a few hours.

Occasionally people have some temporary confusion just after an ECT treatment.

Some people, particularly elderly people, may be quite confused for several hours after treatment. This can be reduced by changing the way ECT is administered (such as changing to unilateral ECT).

ECT can affect heart rhythm and blood pressure. Pre-existing medical conditions



should be discussed with the ECT team before commencing ECT.

NICE recommends that extra care be taken when considering ECT for pregnant women and older or younger people because the risk of complications can be higher for people in these groups.

There is a small risk of damage to cosmetic dental work.

Other rare immediate complications include:

- Risk of prolonged seizure (which can be terminated by IV diazepam)
- Laryngospasm (closing up of muscles which makes breathing difficult)
- Peripheral nerve palsy (nerve damage which affects movement of muscles).

There is a small physical risk from having general anaesthesia, similar to the level of risk in dental anaesthesia. Death or serious injury occurs in about 1 in 50,000 treatments.

Giving consent for ECT


Like any significant medical or surgical treatment, you will be asked to give consent, or permission for ECT to be done.

The ECT treatment process, the reasons for doing it, the intended benefits and possible side-effects and alternative options should be explained to you in a way that you can understand. Except in an emergency, you will be given time to decide, then you will be asked to sign a consent form if you agree to proceed.

The consent form is a record that ECT was explained to you, that you understand what is going to happen, and that you give your consent to it. You can withdraw your consent at any point.

What if I decline ECT?

If you decline ECT you may take longer to recover. If you are very depressed and are not eating or drinking enough, you may become physically ill or die. There is also an increased risk of suicide if your depression is severe and has not been helped by other treatments.



If you have strong feelings about ECT, you should make them known to your doctor, nurse and also family, friends or an advocate who can speak for you. Doctors must consider these views when they consider what to do.

If you make it very clear that you do not wish to have ECT, then you should not receive it.

Can ECT be given to me without my permission?

You cannot be given ECT against your wishes, even if you are detained in hospital under the Mental Health (Northern Ireland) Order 1986. Sometimes, however, people become so unwell that they are unable to fully understand the issues – perhaps because they are severely withdrawn or they have beliefs about themselves or others that stops them fully understanding their position.

In these circumstances, it may be impossible for them to give proper informed consent. When this happens it is still possible to give ECT. There must be a second opinion from an independent specialist who is not directly involved in their care who agrees that ECT is the most appropriate option for treatment.

Further information

Further concerns or queries can be discussed with your doctor. Further ECT information leaflets that may be helpful include:

- Royal College of Psychiatrists information leaflet
- National Institute for Clinical Excellence (NICE) ECT leaflet

Information leaflets in other languages is available from the Royal College of Psychiatrists website: <http://www.rcpsych.ac.uk>

An interpreter will be arranged to help you fully understand the information provided if necessary.