

It is essential that you tell the staff if you have any metal implants or a pacemaker. All body piercing must be removed. The scan takes about forty minutes, and during this time, you lie still inside the machine. The machine is well lit and ventilated, and you are able to listen to music while the scan takes place.

**Positron Emission Tomography (PET) and Single-Photon Emission Computerised Tomography (SPECT)**

These brain scans provide information about the function of the brain. A low-dose radioactive substance is injected intravenously just before each scan. A SPECT scan determines the blood flow to the brain during a seizure, and the injection for the scan is performed as soon as the seizure starts, with the scan occurring in the next two hours. Accompanying friends or family can help staff detect the early changes of a seizure. A PET scan measures the glucose metabolism (energy use) in the brain. PET scans are not performed during a seizure, and are done after a seizure free period of 24 hours.

**Clinical Neuropsychology**

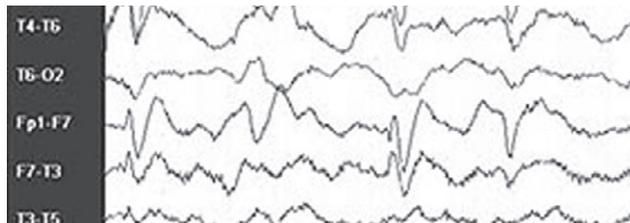
Experienced clinical neuropsychologists assess the memory, language and psychological functions of epilepsy patients. Psychosocial assessment is also undertaken as this can have considerable impact upon the success of epilepsy surgery.

**Follow-Up and Rehabilitation Program**

For those patients suitable for epilepsy surgery, the postoperative period can be a challenging time, with a process of readjustment. An experienced clinical team follows up surgical patients with regular reviews and phone contact, which ensures that each patient has access to support for a long period following surgery.

**Psychiatry**

All patients undergo psychiatric assessment because psychological problems are common in people with epilepsy. A psychiatrist looks for symptoms of depression and examines how the patient will cope with epilepsy surgery.



**Visiting Hours**

These are between 12–2pm and 4–8pm. A family member is welcome to stay with patients during the day to help detect seizures. In the case of children, a parent or carer is expected to stay with the child.

**The CEP team at Austin Health**

- Director:** Professor Sam Berkovic
- Epileptologists:** Dr John Archer, Professor Graeme Jackson, A/Prof Richard Macdonell, Dr Mark Newton, Dr Peter Bladin
- Paediatric Epileptologist:** Professor Ingrid Scheffer
- Neurosurgeon:** A/Prof Gavin Fabinyi
- Neuropsychologists:** A/Prof Michael Saling, Dr Marie O'Shea, Dr Silvana Micallef, Dr David Weintrob, Dr Sarah Wilson
- Psychiatrist:** A/Prof Malcolm Hopwood

**Contact the CEP**

- Epilepsy Clinic Bookings**  
(+61 3) 9496 2444
- First Seizure Clinic Bookings**  
Lisa Johnson (+61 3) 9496 2330
- Epilepsy Liaison Nurse**  
Penny Kincade (+61 3) 9496 5791

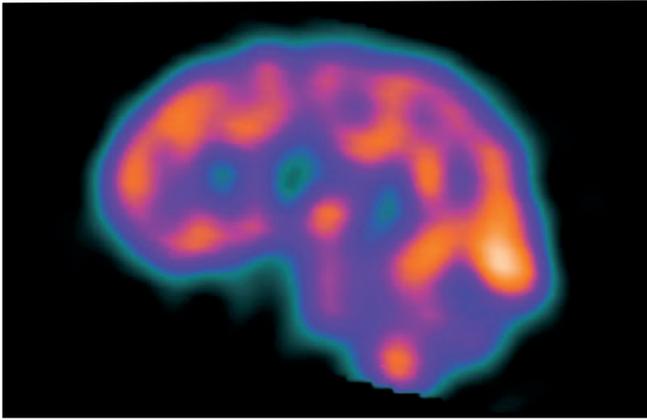
For maps to the Austin, check [www.austin.org.au](http://www.austin.org.au)  
[www.epilepsyresearch.org.au](http://www.epilepsyresearch.org.au)



**Comprehensive Epilepsy Program at Austin Health**



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## What is the Comprehensive Epilepsy Program (CEP)?

The Comprehensive Epilepsy Program at Austin Health is an international leader in clinical care and research in epilepsy. Established in 1978, the program's multi-disciplinary team provides exceptional care for people with epilepsy. The CEP involves neurologists, neurosurgeons, neuropsychologists, radiologists, nuclear medicine specialists, psychiatrists, nurses, EEG technicians, neurophysiologists, researchers, and administrative staff. We assess and treat people with new-onset epilepsy as well as people with established epilepsy, and have special facilities for both adults and children. Our program is strengthened by internationally leading research in epilepsy at the Epilepsy Research Centre (University of Melbourne).

## Outpatient care

### Epilepsy Clinic

This is a multi-disciplinary clinic providing care for children and adults with epilepsy. You will need a doctor's letter of referral eg, from your general practitioner. Appointments are made via outpatients.

### First Seizure Clinic

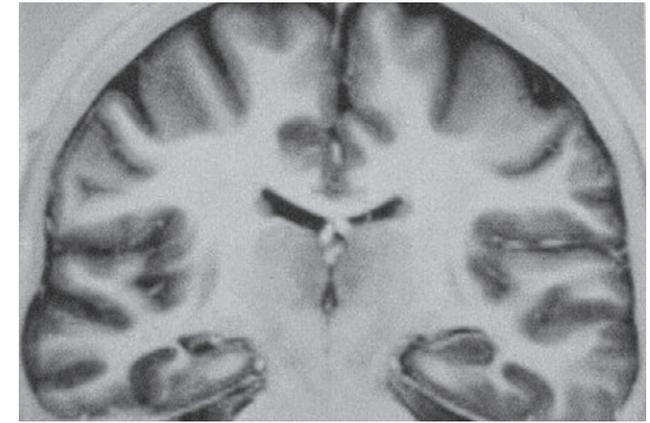
This clinic provides rapid assessment and treatment for adults and children over five who have just had their first attack. Your doctor can refer you by calling the Neurology Registrar at Austin Health: (+61 3) 9496 5000. If appropriate, the registrar will arrange an urgent EEG, usually within 48 hours. After the brainwave recording (electroencephalograph, EEG), you can make an appointment in the clinic, which is run on a Tuesday morning at the Repatriation Hospital campus, Outpatient Department, Clinic D.

## Inpatient care

In the majority of people with epilepsy, seizures can be controlled with anti-epileptic medication, but for up to 30% of patients, medication does not provide full seizure control. The CEP runs an inpatient program providing comprehensive assessment of patients with uncontrolled epilepsy. The program aims firstly to determine the nature and type of the patient's episodes, as not all attacks are due to epilepsy. Secondly, the program aims to determine whether surgical treatment of epilepsy may be suitable. Tests conducted during the program give vital information to doctors on whether the patient would benefit from epilepsy surgery. The CEP requires an admission to Austin Health and takes place in the video-EEG monitoring (VEM) suites in the neurology ward (Ward 6 East) and the children's ward (Ward 2 West).

### What happens during admission?

You will have video-EEG monitoring (VEM) to investigate the type and frequency of your episodes. VEM involves having a continuous EEG recording of brainwaves whilst being videotaped. You have electrodes glued to your scalp, which are then attached to an EEG machine. This measures the brain's electrical rhythms, and if you have a seizure while connected to the machine, your brainwaves are recorded as are your physical movements, which may give information as to where in the brain the seizure has started. A member of the nursing staff monitors the cameras closely, which ensures a quick reaction and maximum safety should a seizure occur. This monitoring continues overnight, with staff using audio monitors. A family member or carer is required to be present 24 hours a day to assist with rapid seizure detection.



You are not permitted to have a shower, although water and towels are provided. You remain in the room at all times except for toilet breaks, and should remain in full view of the camera at all times. You sleep with the lights on and without sheets or blankets as they hide movements during a seizure. You are encouraged to bring warm clothes that can be buttoned down the front, as the connection to the EEG machine prevents clothes being removed over the head. You should bring things to occupy yourself during your stay, eg. DVDs, books etc.

There is a strict no smoking policy on the ward.

### What about medication?

Please bring in your regular medication. This will then be stored safely by nursing staff and Austin Health will supply medication for your stay. During the admission, your medication is usually decreased or altered to provoke seizures or to determine which medications will be best post-admission. We aim to capture the typical attacks, but there is a risk of more severe seizures, or even status epilepticus (very prolonged seizures), with a very small risk of injury, or even death. Patients are closely monitored 24 hours a day, and usually an intravenous canula is placed in the arm throughout the admission to allow rapid administration of drugs to terminate seizures if necessary.

### What investigations will be performed?

Some tests may be arranged prior to admission.

#### **Magnetic Resonance Imaging (MRI)**

An MRI scan produces clear pictures of the structure of the brain to identify any abnormalities that may be causing seizures. The MRI machine uses magnetic fields so there is no radiation involved.