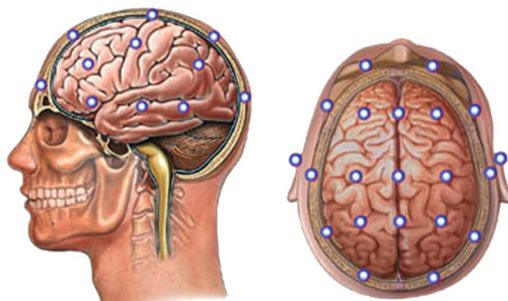


"We cure because we care..."



"We cure because we care..."

"We cure because we care..."



Abnormal

The two sides of the brain show different patterns of electrical activity. This may mean a problem in one area or side of the brain is present.

The EEG shows sudden bursts of electrical activity (spikes) or sudden slowing of brain waves in the brain. These changes may be caused by brain tumor, infection, injury, stroke or epilepsy. When a person has epilepsy, the location and exact pattern of the abnormal brain waves may help show what type of epilepsy or seizures the person has. Keep in mind that in many people with epilepsy, the EEG may appear completely normal between seizures. An EEG by itself may not diagnose or rule out epilepsy or a seizure problem.

The EEG records changes in the brain waves that may not be in just one area of the brain. A problem affecting the entire brain - such as drug intoxication, infections (encephalitis), or metabolic disorders (such as diabetic ketoacidosis) that change the chemical balance in the body, including the brain - may cause these kinds of changes.

They show delta waves or too many theta waves in adults who are awake. These results may mean brain injury or a brain illness is present. Some medicines can also cause this.

The EEG shows no electrical activity in the brain (a "flat" or "straight - line" EEG). This means that function has stopped, which is usually caused by lack of oxygen or blood flow inside the brain. This may happen when a person has been in a coma. In some cases, severe drug induced sedation can cause a flat EEG.

Facilities Offered :

- **Cath-lab**
Angiography & Angioplasty
DSA
Pace Maker
- **Cardiac OT**
CABG (Bypass Surgery)
Valve Surgery
ASD, VSD, PDA.
- **Ortho OT**
Orthopaedic Surgery
Joint Replacement Surgery
Arthroscopy
- **Neurosurgery**
- **Bariatric Surgery**
- **Cosmetic Surgery**
- **Urology & Nephrology Dept.**
Urogenital Surgery
Lithotripsy
Dialysis
- **Endoscopy**
- **ENT Dept.**
- **Dental Dept.**
- **Ophthalmology Dept.**
- **General OT**
- **Paediatric Dept.**
- **ICCU**
- **General Ward**
- **Polyclinic**
- **EECP (Enhanced External Counter Pulsation)**
- **DEXA (Bone Densitometry)**
- **EEG / EMG / BERA**
- **ECG**
- **2D Echocardiography**
- **USG (Sonography)**
- **Computerised Stress Test**
- **Pulmonary Function Test**
- **Audiometry**
- **Digital X-ray**
- **Holter Monitoring**
- **Ambulatory BP**
- **Ventilators**
- **Computerised Pathology**
- **Arterial Blood Gas**
- **Complete Health Check-up Plan**
- **Physiotherapy**
- **Cardiac Ambulance**
- **24x7 Pharmacy**
- **Canteen Facility**



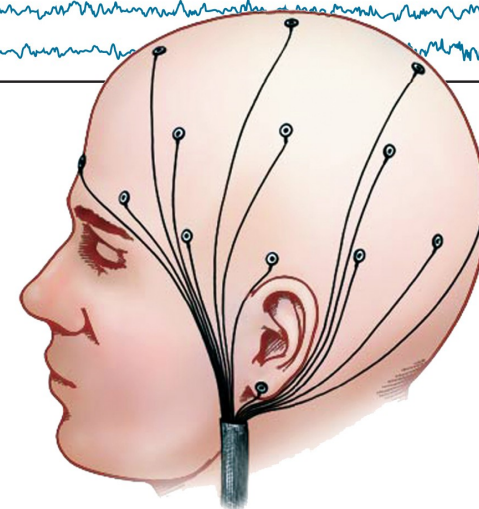
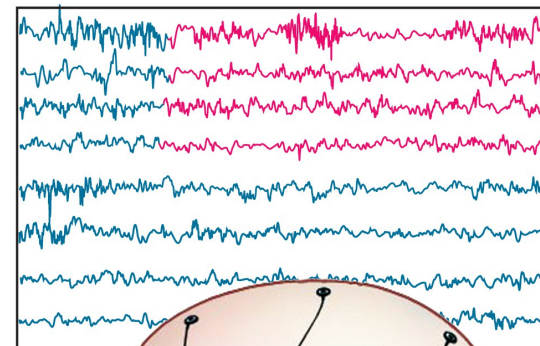
Vishal Complex, S.V. Road, Malad (W), Mumbai-400 064
Tel. : 2807 4040 / 4208 6000 Fax : 4208 6001

Sainath Road, Near Malad Subway, Off. S.V. Road, Malad (West), Mumbai-400064
Tel. : 4206 6700 / 2888 5001 / 8767076009 Fax : 4206 6701

Geeta Nagar, Phase-7, Near Mira-Bhayander Flyover, Mira-Bhayander Road,
Mira Road (East), Mumbai-401105. Tel. : 2813 1125

Electroencephalogram (EEG)

The quick information resource for patients



Electroencephalogram (EEG)

An electroencephalogram (EEG) is a test that measures and records the electrical activity of your brain. Special sensors (electrodes) are attached to your head and hooked by wires to a computer. The computer records your brain's electrical activity on the screen or on paper as wavy lines. Certain conditions, such as seizures, can be seen by the changes in the normal pattern of the brain's electrical activity.

Why it is done ?

An electroencephalogram (EEG) may be done to :

- Diagnose epilepsy and see what type of seizures are occurring.
- EEG is the most useful and important test in confirming a diagnosis of epilepsy
- Check for problems with loss of consciousness or dementia.
- Help find out a person's chance of recovery after a change in consciousness.
- Find out if a person who is in a coma is brain - dead.
- Study sleep disorders, such as narcolepsy.
- Watch brain activity while a person is receiving general anesthesia during brain surgery.
- Help find out if a person has a physical problem (problem in the brain, spinal cord or nervous system) or a mental health problem.

How it is done ?

An electroencephalogram EEG may be done in a hospital or in a doctor's office by an EEG technologist. The EEG record is read by a doctor who is specially trained to diagnose and treat disorders affecting the nervous system (neurologist).

You will be asked to lie on your back on a bed or table or relax in a chair with your eyes closed. The EEG technologist will attach 16 to 25 flat metal discs (electrodes) to different places on your head, using a sticky paste to hold the electrodes in place.

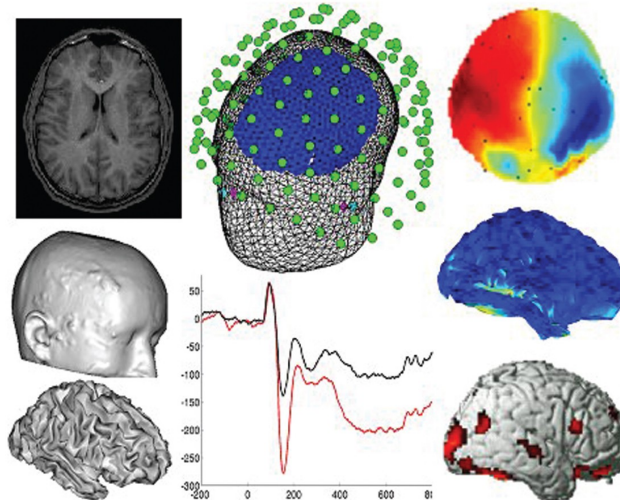
The electrodes are hooked by wires to a computer that records the electrical activity inside the brain. A machine can show the activity as a series of wavy lines drawn by a row of pens on a moving piece of paper or as an image on the computer screen.

Lie still with your eyes closed during the recording, The recording may be stopped from time to time to allow you to stretch and reposition yourself.

The technologist may ask you to do different things during the test to record what activity your brain does at that time.

- You may be asked to breathe deeply and rapidly (hyperventilate). Usually you will take 20 breaths a minute for 3 minutes.
- You may be asked to look at a bright, flashing light called a strobe. This is called photic or stroboscopic stimulation.
- You may be asked to go to sleep. If you cannot fall asleep, you may be given a sedative to help you fall asleep. If an EEG is being done to check a sleep problem, an all - night recording of your brain's electrical activity may be done.

An EEG takes 1 to 2 hours. After the test, you may do your normal activities.



Result

An electroencephalogram (EEG) is a test that measures and records the electrical activity of your brain.

There are several types of brain waves :

Alpha waves have a frequency of 8 to 12 cycles per second . Alpha waves are present only in the waking state when you are alert. Alpha waves go away when your eyes are open or you are concentrating.

Beta waves have a frequency of 13 to 30 cycles per second. These waves are normally found when you are alert or have taken high doses of certain medicines, such as benzodiazepines.

Delta waves have a frequency of less than 3 cycles per second. These are normally found only when you are asleep or in young children.

Electroencephalogram results

Normal

In adults who are awake, the EEG shows mostly alpha waves and beta waves.

The two sides of the brain show similar patterns of electrical activity.

There are abnormal bursts of electrical activity and no slow brain waves on the EEG tracing.

If flashing lights (photic stimulation) are, used during the test, one area of the brain (the occipital region) may have a brief response after each flash of light, but the brain waves are normal.

