

**Electroencephalogram (EEG)** is done to increase the certainty of the diagnosis made and to ascertain the type of seizure. It helps to determine proper medication and prognosis. However, EEG is not required in all cases and management of epilepsy in a given case can be done without the help of EEG if not available. Normal EEG does not rule out epilepsy.

### **Management**

It consists of the following important steps:

- Treatment of the cause if detected by investigations.
- Avoidance of known provoking factors.
- Drug therapy.
- Balanced adjustment of daily routine and social acceptance.

The General practitioner or family doctor and family members play a key role to help the patient achieve this.

### **Commonly used antiepileptic drugs:**

- Phenobarbitone
- Phenytoin
- Carbamazepine
- Sodium Valproate

These drugs suppress the neuronal hyperexcitability responsible for seizures and gradually may cool down the potentially hyperexcitable epileptic focus so that over the years after the last attack, they could be withdrawn gradually. In few cases recurrence of seizures is still a possibility, so a plan for withdrawal of drugs should be done strictly under medical supervision.

### **Response to the single drug or combination of the drugs is variable and depends on:**

- The gap between the first seizure and initiation of the proper treatment.
- Proper drugs in proper doses.
- Regularity and proper compliance of all the instructions.
- Type of seizures and causes of the seizures.

The treatment of every epilepsy patient is highly individualized and strictly under medical supervision. The choice of the drug, the dosage, total duration of treatment after the last attack and mode of withdrawal of drugs are highly individualized. As the cost of drugs like Carbamazepine and Sodium Valproate is high and since the duration of the treatment is in years, economic constraints become an important factor for the choice of drug.

A record of attacks and drug therapy must be maintained. It is important to follow the doctor's instructions on periodic follow up examinations. This helps the physicians to monitor the patient's progress and detect any side effects of the drugs that may develop. Common side effects are nausea, vomiting, skin rash, gum hypertrophy, unsteadiness, double vision, drowsiness, weight loss or weight gain. These must be reported to the doctor. There is a general belief that these antiepileptic drugs dull the intelligence due to long-term use and often this is the major reason to discontinue treatment. The drugs do have mild effect on cognitive function but the advantages outweigh the side effects.

In selected cases it may be necessary to estimate the concentration of the drug in serum so that the optimal efficacy of the drug is combined with minimum side effects. This is known as serum level estimation or therapeutic drug monitoring.

In chronic patients total seizure control may not be possible and in such cases one may have investigate if surgery is a suitable option or strike a balance between seizures and the side effects of drugs.

### **Restrictions**

#### **Persons with epilepsy can do every thing except:**

- Drive a vehicle.
- Work with open machines or fire.
- Swim alone (once fits are properly controlled swimming can be done under supervision).

**There are more cans than cant's, so do not give up**

**History tells us...**

**Many great men like Julius Caesar, Napoleon Bonaparte, Vincent Van Gogh and Alfred Noble had epilepsy. Epilepsy is no bar to achieve greatness in any sphere.**