

Epilepsy and its Management

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EPILEPSY consists of a sudden discharge from cerebral neurosis which usually causes disturbance of consciousness and is often accompanied by motor and sensory phenomena.

When an epileptic discharge starts in a cerebral area it activates the function of that area so that the patient may experience a sensation or movement which is called an aura. The discharge then spreads to adjacent cerebral area, resulting in wide spread motor or sensory disturbance and loss of consciousness. The wide spread motor disturbance gives rise to convulsion or fit. Sometimes the discharge spreads so rapidly that no aura is perceived but that patient goes immediately into a major convulsion. The importance of recognising the aura and observing how the disturbance spreads is of great help in diagnosis and treatment. Witnessing an attack and noting what happens enables a decision to be reached as to the nature of an attack. Things happen so rapidly that the nurse must know what to look for and what is important.

Classification of Epilepsy According to Cause

Group I — Idiopathic
(constitutional)

Group II—Symptomatic

1. **Idiopathic** : The fits usually appear in childhood or adolescence and there is often a history of epilepsy in the members of the family.

2. **Symptomatic** : The symptomatic epilepsy is nearly a symptom of some underlying disease process. Thus a cerebral tumour may irritate the cerebral cortex and so lead to an epileptic discharge.

These cases are often admitted in a hospital and treated for primary as well as general cause.

Factors Precipitating Epilepsy

- (a) Overhydration
- (b) Menstruation

Types of attack

- (1) Major epilepsy (Grandmal)
- (2) Minor Epilepsy (Petitmal)
- (3) Jacksonian epilepsy
- (4) Psychomotor epilepsy

1. **Major epilepsy** develops as follows :

(a) The aura is a warning of the impending attack and may or may not be experienced. It may start with a feeling, rising from the epigastrium, of an unusual smell or taste or a flash of light or a sensation in some part of the body. The patient may squeeze or clutch his affected arm and has no time to describe the nature of the aura but may describe it when the attack is over.

(b) The Tonic stage : The patient usually gives a cry and falls unconscious. Limbs are stiff. Spasm of the chest muscles arrests respiration and he becomes cyanosed. It may last 20 second or so and is followed by clonic stage.

(c) Clonic stage : The muscles of the body starts to contract producing violent clonic movements. The movement of the jaws cause biting of the tongue with the result blood stained froth comes from the mouth. The patient may lose control over sphincter muscles resulting incontinence of urine. This lasts for one to two minutes and the whole musculature then relaxes.

(d) The comatosed stage : The patient remains placid and unconscious for a time after the attack. When recovers he is drowsy and passes into a natural sleep.

2. Minor Epilepsy

In this type there is no convulsion. It lasts only a second or two and all that can be seen is a dazed

expression on the face accompanied with some pallor. The patient may stop speaking but immediately resume from where he left off or if he falls he gets up at once. The patient may be completely unaware of its occurrence.

3. Jacksonian Epilepsy

In this case the clonic movements starts in one part of the body and slowly spreads to adjacent parts. It may continue until the whole body is involved and consciousness lost.

4. Psychomotor Epilepsy

The patient may perform acts unusually but has no recollection. Thus he moves furniture aimlessly around the room, starts to undress in a public place or undertakes a journey, all without any awareness of what he is doing.

The observation of a fit

The important thing to note when a fit occurs is that whether the patient describes or appears to have an aura ; what is the first sign noted. Does his head and eyes deviate to one side or the other and how the attack develops. One should notice the circumstances in which the attack occurred and what the patient was doing immediately before. The duration of unconsciousness, the occurrence of incontinence and behaviour after the attack should also be noted. Note also the time and date of attack.

The following questions should be answered in addition ;

- 1. Was the onset sudden or gradual ?
- 2. Did he fall ?
- 3. Did he make a noise or cry out ?
- 4. Did he appear to lose consciousness ?

5. If conscious, how long.
6. What was the colour of the face: pale, flushed, blue or natural?
7. Were the eyes open or shut; if shut, could it be opened by the observers?
8. Did the limbs become stiff or loose?
9. Were there any movements of eyes, face, limbs of trunk and how long?
10. Where did they start? Has the tongue been bitten?
11. Was there any frothing of the mouth?
12. Did he lose control over the bladder?
13. What was he like after the attack?
14. Any additional observations.

Management of the Epileptic attack

1. If the patient has not already fallen he should be laid on the couch/bed.
2. A padded spatula or rolled handkerchief should be gently placed between the teeth to prevent the patient from biting his tongue. Dentures should be removed if possible.
3. Tight clothing should be loosened.
4. Make sure that patient does not hurt himself by striking against hard objects.
5. Screen the bed if possible during attack.
6. Put the patient if unconscious in a semi-prone position and keep his jaw forward so that the airway is opened and not obstructed by the tongue, 'Coma' position.
7. The patient should be kept under observation until he has completely recovered.

Management of a Status Epilepticus

Status epilepticus means the

occurrence of a series of attacks without recovery of unconsciousness in between. This is most dangerous if allowed to persist for any length of time as it leads to the death of the patient. The best treatment for immediate and prolonged control is to give Paraldehyde in doses which will abolish the convulsions without the risk of toxic effect and respiratory depression.

(1) 10 ml. intramuscular injection as soon as possible.

(2) 5 ml. every half hour if the fit continues until it ceases.

(3) Once the fits have ceased 5 ml. I.M. 2-4 hours for the next 24 hours. After 24 hours of control the Paraldehyde is gradually replaced by anticonvulsant. It is proposed to give the patient long term treatment.

(4) Electro-encephalogram is also very helpful in diagnosis and treatment.

Nursing care

Maintenance of airway
Giving of fluid
Care of skin and bladder
Prevention of respiratory infection

A chart must be maintained showing the time of each fit, each injection of Paraldehyde so that the progress of the patient can be assessed at a glance and excessive medication avoided.

The long term control of epilepsy is by taking drugs regularly. It should be continued at least for 3 years after the last attack. The patient should be trained at the outset to take his/her drugs punctually and regularly at suitable hours so that the patient will have no difficulty in continuing the treatment when leaving the hospital. Each patient should also be provided with a chart so that he/she can mark the date of any attack. The patient should be advised as to the necessity of making suitable adjustment to regulate his/her life from any other factors like excitement,

lack of sleep, too long without food or any other precipitating factor.

The problem of marriages and conception should be discussed with the doctor.

The patient after discharge is advised to report to the doctor by letter, preferably in person, once in every three or six months.

Education of the Patient

There is a great deal of misconception in the public mind about epilepsy and considerable prejudice against those who suffer from it. The nurse by her attitude and remarks can help to dispel some of the harmful effects of such opinions on the patient. The nurse has an important part to play in the management and education of the patient.

Epilepsy can be hereditary if two epileptic patients intermarry; the risk is slightly increased, if one marries a non-epileptic.

Patients of epilepsy should avoid the following:

1. Drinking large quantities of water at the same time; strenuous physical exertion resulting in breathlessness.
2. Indigestion, constipation, pregnancy, excessive alcoholic intake and irregular habits.
3. Swimming, driving of fast vehicles, work at high and dangerous spots.

A few 'Do's and Don't's' should be observed and the patient should be encouraged to live a normal life—suitable occupations like—

1. Remedial activities
2. Pre-vocations—hand work, weaving, caning etc.

A nurse can by her attitude and remarks give a new outlook and give courage and inspiration to overcome his disability and to rehabilitate him back to normal and useful life.