

Classification

CLASSIFICATION OF SEIZURES AND EPILEPSY SYNDROMES

Epilepsy is usually a symptom of an underlying neurological disorder and not a single disease entity. Epilepsy should be classified according to seizure type and epilepsy syndrome, as per internationally accepted classification systems. This helps the PWE in the planning of investigations, treatment, and providing appropriate information.

The common types of seizures are

1. Partial

- Begin focally in a restricted area of the cortex.
- The symptoms could be simple (motor or sensory phenomenon) or complex (automatisms and/or unawareness)
- Partial seizures can spread to other areas and evolve into generalized tonic-clonic seizure

2. Generalized

- Arise diffusely in both hemispheres, with bilateral non-focal onset, usually with impairment of consciousness at the beginning
- The seizures may manifest with absences, tonic clonic seizures, myoclonic jerks, akinetic or atonic attacks

The International League against Epilepsy classification of seizures is given in Appendix I.

Classification of Epilepsies and Epilepsy syndromes

International League Against Epilepsy (ILAE) has proposed a classification of the epilepsies (See Appendix-II). Epilepsies are broadly classified based on the seizure type, age of onset and possible etiology:

- Localization-related epilepsies characterized by seizures that have a focal or partial onset and generalized epilepsies characterized by generalized onset of seizures
- Epilepsies that are inherited or occur without identifiable pathologic cause are labeled idiopathic
- Symptomatic epilepsies are those associated with a known or suspected brain disease or lesion

- Many epilepsy syndromes are age specific and may begin during infancy, childhood or adolescence.

For example, Juvenile Myoclonic Epilepsy (JME) is a common disorder starting in adolescence and usually characterized by myoclonic jerks, generalized tonic clonic seizures and occasional absences. JME is an example where correct diagnosis and classification is important for proper treatment, since a wrong diagnosis of seizure type or syndrome, might lead to the use of carbamazepine or other drugs which may in fact aggravate the seizures.

The International League against Epilepsy (ILAE) classification of epilepsies and epileptic syndromes is given in Appendix II.

PRACTICE POINTS

- Accurate diagnosis of epilepsy is essential for instituting the appropriate treatment and improving quality of life.
- Detailed clinical history from the patient, the family members and the eye witness (if available) about the event is very important for correct diagnosis.
- Epileptic seizures may present with various features and not all features need to be present in an individual person.
- Epileptic seizures and epilepsy syndromes should be classified using the current internationally accepted classification scheme.
- The seizure type(s) and epilepsy syndrome, aetiology, and co-morbidities should be identified. Failure to classify the epilepsy syndrome correctly can lead to inappropriate treatment and persistence of seizures.
- PWE and their family members should be informed about their seizure type(s), epilepsy syndrome, and the prognosis.
- It is recommended that wherever possible all individuals with seizures should be seen by a medical practitioner with knowledge and experience in epilepsy to ensure a correct diagnosis and early initiation of appropriate therapy.