Epilepsy: An Overview of Types

Epilepsy is a neurological disorder **characterised by the propensity for recurrent, unprovoked seizures**, which are transient occurrences of signs and/or symptoms due to abnormal excessive or synchronous neuronal activity in the brain. The disorder encompasses a spectrum of conditions with varying aetiologies, clinical presentations, and seizure types.

Classification Based on Seizure Type

The primary classification of epilepsy is determined by the **type of seizure**, which is categorised into two main groups:

- **Focal Seizures**: Originating within networks limited to one hemisphere. These are subdivided based on the level of consciousness:
  - **With Retained Awareness**: Formerly known as simple partial seizures.
  - **With Impaired Consciousness**: Previously referred to as complex partial seizures.
  - **Evolution to Bilateral Tonic-Clonic Seizures**: Presenting with a progression of muscle rigidity followed by rhythmic muscle contractions.
- **Generalised Seizures**: Engaging networks distributed across both hemispheres simultaneously. Types include:
  - **Absence Seizures**: Manifest as brief lapses in awareness.
  - **Myoclonic Seizures**: Characterised by sudden, brief muscle jerks.
  - **Tonic-Clonic Seizures**: Known for convulsive movements.
  - **Atonic Seizures**: Leading to sudden loss of muscle tone.

Aetiological Classification

Epilepsy can also be categorised based on its **aetiology**, such as:

- **Structural**
- **Genetic**
- **Infectious**
- **Metabolic**
- **Immune**
- **Unknown Causes**

These aetiologies significantly influence the treatment and management of the condition.

Epilepsy Syndromes

In addition to seizure type and aetiology, **epilepsy syndromes** are recognised by a cluster of features that occur together, which can include:

- **Specific Seizure Types**
- **EEG Findings**

- **Age of Onset**

This concept is instrumental in directing specific management strategies.