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A Brief Note On Epilepsies And Epileptic Syndromes

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Commentary Article

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DESCRIPTION

Epilepsy is a long-term neurological disorder characterised by spontaneous seizures. Seizures, on the other hand, are periodic occurrences caused by aberrant neural discharges. Both seizure disorder and epilepsy relate to unprovoked seizures that occur on a regular basis. In reality, epilepsy is mentioned in Hippocrates' works from around 700 BC. Epilepsy affects anywhere from 0.5% to 3% of the population in the United States. Young children and the elderly have the highest rates of infection.

Classification

Seizures are classified based on individual seizures rather than epilepsy as a whole. Epilepsies and epileptic syndromes were classified in 1989 in an attempt to systematise epilepsies and epilepsy syndromes. It defined an epileptic syndrome as "an epileptic disorder characterised by a cluster of signs and symptoms that typically occur together; these items include things like seizure type, ethology, anatomy, precipitating factors, age of onset, severity, chronicity, diurnal and circadian cycling, and sometimes prognosis." A syndrome does not always have the same aetiology or prognosis. In order to classify the items, two significant divides were used. The initial distinction was made between epilepsies with widespread onset seizures (generalised epilepsies) and epilepsies with focal onset seizures (localization-related, partial, or focal epilepsies). The other division distinguished between epilepsies of known and unknown ethology. Idiopathic epilepsies were defined as epilepsies that were "not preceded or induced by another condition" and were "not preceded or occasioned by another condition." Other than

a probable familial tendency, these epilepsies were thought to have no underlying cause. As a result, they were assumed to be genetic. Idiopathic epilepsies were also distinguished by their age-related onset and clinical and Electro-Encephalographic (EEG) characteristics. If epilepsies of unknown ethology were assumed symptomatic but had an occult ethology, they were referred to as cryptogenic epilepsies.

Although the term cryptogenic was frequently used in the epilepsy area, there was some disagreement about its specific meaning, leading to a suggestion that it be replaced with the term possibly symptomatic. The 1989 categorization of epilepsies and epileptic syndromes classified symptomatic partial epilepsies into temporal, frontal, parietal, and occipital lobe epilepsy based on lobar anatomical placement of the epileptogenic zone. Frontal lobe epilepsy was classified into seven subgroups: supplementary motor, cingulate, anterior frontopolar, orbitofrontal, dorsolateral, opercular, and motor cortex. Temporal lobe epilepsy was further subdivided into amygdalo-hippocampal and lateral temporal epilepsy. The 1989 classification of epilepsies and epileptic syndromes needed to be revised in light of new information. The ILAE classification commission proposed in 2010 that epilepsies be classified by age of onset, characteristic constellations, or underlying cause, rather than by localization-related and generalised epilepsies. The list included epileptic conditions that had just been discovered or defined. The International League Against Epilepsy (ILAE) published a new taxonomy of epilepsies in 2017. Seizure types (from the classification of epileptic seizures), epilepsy types, and epilepsy syndromes were the three levels of classification. Although it is preferable to achieve all three levels of classification, it is not possible for all patients.

In some cases, classification of the seizure types may be the only option, especially when medical resources are scarce. Physicians are advised to consider/investigate the ethology of the epilepsy and handle comorbidities at all levels of classification. The two basic categories of focal and generalised epilepsies were retained, but a new category of combination generalised and focal epilepsies were introduced to accommodate patients who experience both focal and generalized-onset seizures. The list of ethology categories includes structural, genetic, infectious, metabolic, immunological categories.