Mesial temporal lobe epilepsy clinical features

History

● higher incidence of complicated febrile seizures than in other types of epilepsy

● common family history of epilepsy

● onset in latter half of first decade of life

● auras in isolation are common

● infrequent secondarily generalized seizures

● seizures often remit for several years until adolescence or early adulthood

● seizures often become medically refractory

● common interictal behavioral disturbances (especially depression)

● most have aura (especially epigastric, emotional, olfactory or gustatory) × several secs

● complex partial seizures (CPS) often begin with arrest & stare; oroalimentary & complex automatisms are common. Posturing of contralateral arm may occur. Seizure usually lasts 1–2 mins

● postictal disorientation, recent-memory deficit, amnesia of ictus and (in dominant hemisphere) aphasia usually lasts several mins

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Recurrent seizures (epilepsy) which originate in the temporal lobe of the brain with progressive neurological disabilities, including cognitive deficit, anxiety and depression.

The seizures involve sensory changes, for example smelling an unusual odour that is not there, and disturbance of memory.

Olfactory function was significantly impaired in patients with MTLE compared with healthy controls in all domains, namely threshold, discrimination, and identification. In addition, the olfactory bulb volume was smaller in patients with olfactory dysfunction [1].

Earlier tachycardia for seizures originating from the right versus left hemisphere in a patient with bilateral mesial temporal lobe epilepsy [2].

A strong association of this ailment has been established with psychiatric comorbidities, primarily

mood and anxiety disorders. The side of epileptogenic may contribute to depressive and anxiety symptoms; thus, in a study, Radaelli et al. performed a systematic review to evaluate the prevalence of depression in TLE in surgical patients. The literature search was performed using PubMed/Medline, Web of Science, and PsycNet to gather data from inception until January 2019. The search strategy was related to TLE, depressive disorder, and anxiety. After reading full texts, 14 articles meeting the inclusion criteria were screened. The main method utilized for psychiatric diagnosis was Diagnostic and Statistical Manual of Structured Clinical Interview for DSM Disorders. However, most studies failed to perform the neuropsychological evaluation. For those with lateralization of epilepsy, focus mostly occurred in the left hemisphere. For individual depressive diagnosis, 9 studies were evaluated, and 5 for anxiety. Therefore, from the data analyzed in both situations, no diagnosis was representative in preoperative and postoperative cases. In order to estimate the efficacy of surgery in the psychiatry episodes and its relation to seizure control, the risk of depression and anxiety symptoms in epileptic patients need to be determined before surgical procedures. Rigorous preoperative and postoperative evaluation is essential for psychiatry conditions in patients with refractory epilepsy candidates for surgery [3].

Hippocampal seizure

see Hippocampal seizure

1)
Türk BG, Metin B, Tekeli H, Sayman ÖA, Kızılkılıç O, Uzan M, Özkara Ç. Evaluation of olfactory and gustatory changes in patients with mesial temporal lobe epilepsy. Seizure. 2020 Jan 7;75:110-114. doi: 10.1016/j.seizure.2020.01.001. [Epub ahead of print] PubMed PMID: 31945715.
2)
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3)
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