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EARLY DIAGNOSIS AND TREATMENT STRATEGIES OF ABSENCE SEIZURES IN YOUNG CHILDREN

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Abstract: This article explores the early diagnosis and effective treatment strategies for absence epilepsy in young children. It describes the clinical presentation, differential diagnosis, EEG characteristics, and drug selection, as well as psychopedagogical approaches. The study emphasizes the importance of early intervention in preserving children's neurological and cognitive development.

Keywords: Absence, epilepsy, children, early diagnosis, EEG, valproate, ethosuximide, neurology, pediatrics, antiepileptic treatment

Introduction

Epilepsy is one of the most common neurological disorders in children. Absence epilepsy, a mild form of epilepsy, typically occurs in children aged 4–8 years. Although absence seizures are brief and non-convulsive, late diagnosis can significantly impair a child's cognitive and emotional development.

Clinical Features of Absence Epilepsy

Absence seizures are characterized by sudden onset and short duration (5–15 seconds) loss of consciousness. Children appear to stare blankly, become unresponsive, and may stop speaking or moving temporarily. Parents often misinterpret these episodes as attention deficits or daydreaming.

Diagnosis Methods

Electroencephalography (EEG) is crucial for diagnosing absence epilepsy, revealing typical 3 Hz spike-and-wave discharges. Video-EEG monitoring helps correlate clinical symptoms with brain activity. Additional assessments include neurological exams, MRI (to exclude structural brain issues), and cognitive evaluations.

Treatment Approaches

First-line antiepileptic drugs for absence seizures include ethosuximide (for pure absence) and valproate (for mixed types). Lamotrigine is an alternative option. Regular sleep, limited screen exposure, and stress management are important non-pharmacological measures. Psychopedagogical support, including special education and memory-attention training, is essential for comprehensive care.

Discussion

Many cases of absence epilepsy are misdiagnosed or diagnosed late due to subtle symptoms. This can lead to long-term developmental delays. Although specialized epilepsy centers are expanding in Uzbekistan, early screening systems in preschools remain underdeveloped. There is a need for more awareness among parents and educators.

Conclusion and Recommendations

Conclusion:

1. Absence epilepsy is a treatable and often transient form of epilepsy if diagnosed early.

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2. EEG remains the primary diagnostic tool.
3. Appropriate drug selection and regular follow-up are crucial.
4. Psychopedagogical interventions help ensure better social adaptation.

Recommendations:
- Implement routine neurological screening in schools and kindergartens.
- Extend EEG diagnostics to primary care facilities.
- Provide parental education about seizure types and management.
- Ensure specialist-led antiepileptic therapy.

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