Childhood Absence Epilepsy (CAE)

Childhood Absence Epilepsy is a type of idiopathic generalized epilepsy that usually begins between the ages of 4 and 10, with a peak around 6 years old. It is one of the most common pediatric epilepsy syndromes and is characterized by frequent absence seizures.

 Key Clinical Features Typical Absence Seizures:

Sudden, brief episodes of impaired consciousness lasting 5 to 30 seconds.

The child may appear to be “daydreaming” or staring blankly.

There may be no postictal confusion (the child resumes activity as if nothing happened).

Sometimes associated with eyelid fluttering, lip smacking, or minor automatisms.

Frequency:

Can occur dozens or even hundreds of times per day, especially when untreated.

 Etiology and Risk Factors Usually genetic in origin, although the exact mechanism is not always identified.

Often a positive family history of epilepsy.

Typically occurs in otherwise healthy children with normal neurodevelopment.

 Diagnosis EEG (electroencephalogram) is key:

Shows a generalized 3 Hz spike-and-wave pattern, especially with hyperventilation, which can trigger seizures.

MRI is usually normal and only done if there are atypical features.

 Treatment First-line medications:

Ethosuximide: most effective specifically for absence seizures.

Valproic acid: especially if other seizure types are suspected.

Lamotrigine: alternative with a favorable side-effect profile.

Avoid medications like carbamazepine or phenytoin, which can worsen absence seizures.

 Prognosis Generally excellent:

About 60–70% of children outgrow the seizures by adolescence.

Normal intellectual development is expected if seizures are well controlled.

A small subset may develop other seizure types or progress to juvenile absence epilepsy or juvenile myoclonic epilepsy.