



Limbic encephalitis is a condition marked by inflammation of the limbic system and other parts of the brain. The limbic area of the brain controls many types of activities including memory, learning and emotions. The symptoms typically develop over a few weeks or months, but they may occur over a few days.

Delayed diagnosis is common, but improvements are being made to assist in early detection. Early diagnosis and treatment may improve the outcome of limbic encephalitis. The role of cognitive, speech and physical therapy are very important for recovery.

Most forms of limbic encephalitis fall into two main categories:

- 1. Infectious encephalitis This is caused by the direct invasion of the limbic area of the brain by a virus or bacteria.
- 2. Autoimmune encephalitis This is caused by the person's own immune system reacting against a part of the limbic area. Nerve cells may be damaged or destroyed by both the infection and the inflammation. In autoimmune encephalitis, the first sign is often changes in behavior and personality. These changes may be mild at first, but over the course of weeks, behavioral changes often worsen, and many patients are agitated or aggressive. Most individuals will have seizures and uncontrollable movements. The degree of impairment varies, but for some symptoms can be very severe. Affected individuals often require prolonged hospitalization and treatment. The recovery process is slow (often spending several months in the hospital), and many individuals are left with cognitive impairments and residual changes in behavior, which can be aided by cognitive, speech and physical therapy.

# How can limbic encephalitis affect School Performance?

Children with Limbic encephalitis are at risk of poor academic functioning because of the following:

- Severe headache
- Sudden fever or change in blood pressure or heart rate
- Drowsiness
- Confusion
- Seizures
- Problems with senses or movement
- Uncontrollable movements
- Deficits in executive functions (memory, inattention, poor organization)
- Cognitive deficits



## How can schools assist students with Limbic Encephalitis?

### Academic

- Start academic interventions under one of two laws: IDEA for Other Health Impairment or Section 504
- Include PT, OT and ST in relation to IEP.
- Set up homebound or intermittent homebound if the student will miss a lot of school.
- Provide memory aides such as organizers and a detailed schedule for assignments.
- Provide a permanent pass to the nurse's office.
- Assign a moderate workload.
- Extend due dates for lengthy projects during times of illness.

## Social/Emotional

- Provide counseling if the student becomes withdrawn or has difficulty with peers or adults.
- Conduct a staff in-service for those involved with the student.

# Physical

- Allow for use of an elevator if stairs are a safety issue.
- Provide PT/OT/ST evaluations if needed.
- Provide an Individualized Health Plan (IHP) in case of seizures.

#### Resources

www.kidshealth.org www.nlm.nih.gov/ medlineplus/encephalitis.ht ml www.encephalitis.info School Services Department

Children's Health<sup>SM</sup> Dallas Campus: 214-456-7733 Plano Campus: 469-303-4418

