



# MIDDLEBORO PEDIATRICS

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## VIRAL ENCEPHALITIS

### BASIC INFORMATION

#### Description

An acute inflammation involving the brain caused by a viral infection. The viral infection may cause encephalitis as the only problem or the encephalitis may be part of a viral illness with other symptoms such as measles, chickenpox, German measles (rubella), and other lesser known viruses listed below.

### FREQUENT SIGNS AND SYMPTOMS

#### Mild Cases:

- No symptoms (sometimes)
- Fever
- General ill feeling

#### Severe cases:

- Vomiting
- In infants, a swelling or bulging of the soft spot of the skull
- Headache
- Stiff neck
- Pupils of different size
- Unconsciousness
- Personality changes
- Seizures
- Occasional weakness or paralysis of an arm or leg
- Double vision
- Speech impairment
- Hearing loss
- Drowsiness that progresses to coma

#### Causes

- Viruses that cause other illnesses such as polio, herpes, measles, mumps, chickenpox, infectious mononucleosis, infectious hepatitis, German measles (rubella), coxsackievirus, echovirus disease, Eastern and Western equine virus, and West Nile virus.
- Viruses carried by mosquitos or other insects
- Lead poisoning
- Leukemia

### RISK INCREASES WITH

- Newborns and infants
- Adults over 60
- Illness that has lowered resistance
- Crowded or unsanitary living conditions
- HIV or AIDS

## **PREVENTIVE MEASURES**

- Avoid contact with anyone who has encephalitis.
- Consult medical help for treatment of any infection in your body, especially those mentioned as causes, to attempt to prevent the spread of infection.
- Use insect repellent and mosquito netting if you travel to an area of risk.

## **EXPECTED OUTCOMES**

- Mild viral encephalitis is common and may go unnoticed. Severe cases usually require hospitalization.
- Complications and fatalities from encephalitis are most common in infants and the elderly. People in other age groups usually recover completely. Unless the attack is severe, an affected person can expect full recovery within 2 to 3 weeks.

## **POSSIBLE COMPLICATIONS**

A very small percentage of patients suffer permanent brain damage that impairs mental or muscle functions.

## **TREATMENT**

### **General Measures**

- Diagnostic tests may include laboratory studies of blood and cerebrospinal fluid, skull x-ray, CAT scan, MRI, electroencephalography (studying the brain by measuring electric activity (“brain waves”).
- Treatment involves appropriate medications, depending on diagnosis and supportive care.
- Patient may need care in an intensive care unit.
- Supportive care is provided for respiratory or circulation problems.

### **Medications**

- Acetaminophen or Ibuprofen for headache or fever.
- Antiviral drugs, such as Acyclovir or Amantadine, may be prescribed.
- Cortisone drugs to suppress inflammation (rare).
- Drugs to control seizures if needed.
- If tests indicate a bacterial or fungal cause, then specific medicine for that organism would be started.

## **ACTIVITY**

After a case of encephalitis, a person will need bed rest and a 2-3 week period of recovery. Activity level will increase as strength and feeling of well-being allow.

## **DIET**

No special diet. May require intravenous fluids. Medical personnel will monitor fluid and electrolyte levels.

**IF YOU SUSPECT YOUR CHILD HAS SYMPTOMS OF ENCEPHALITIS, HE/SHE SHOULD BE BROUGHT TO THE NEAREST EMERGENCY ROOM.**