## Acute Disseminated Encephalomyelitis (ADEM)

B



ADEM is a monophasic, immune-mediated demyelinating disorder that can follow immunizations or more often infections including rubeola, rubella, varicella, herpes zoster, mumps, *Mycoplasma pneumoniae*, or, more commonly, other nonspecific upper respiratory tract infections.



In severe cases, onset is abrupt and progression rapid (hours to days).

Fever reappears, and headache, meningismus, and lethargy progressing to coma may develop. Seizures are common. Signs of disseminated neurologic disease are consistently present:

hemiparesis or quadriparesis

lost or hyperactive tendon reflexes

sensory loss and brainstem involvement

#### בדיקות דימות

The hallmark of ADEM is the presence of widely scattered small foci of perivenular inflammation and demyelination. We usually see extensive and relatively symmetric white matter abnormalities.



ource: Pediatr Infect Dis J @ 2004 Lippincott Williams & Wilkins

### MS -אבחנה מבדלת מ

The diagnosis is easily established when there is a history of recent vaccination or exanthematous illness.

The simultaneous onset of disseminated symptoms and signs is common in ADEM and rare in MS. meningismus, drowsiness, coma, or seizures suggest ADEM rather than MS.

Unlike in MS, in ADEM optic nerve involvement is generally bilateral.



## Initial treatment is with high-dose glucocorticoids as for exacerbations of MS.

Treatment may need to be continued for 4–8 weeks.

Patients who fail to respond within a few days may benefit from a course of plasma exchange or intravenous immunoglobulin.

#### פרוגנוזה וסיבוכים

Measles encephalomyelitis is associated with a mortality rate of 5–20%, and most survivors have permanent neurologic sequelae.

Children who recover may have persistent seizures and behavioral and learning disorders.

# Thank You!