

**WEST NILE VIRUS ENCEPHALITIS PRESENTING AS ACUTE ONSET
HEADACHE WITH TRUNK AND LIMB TREMOR IN AN URBAN
CONSTRUCTION WORKER**

A. Busza, M.H. Saint-Hilaire

*Department of Neurology, Boston University School of Medicine, Boston
University Medical Center, Boston, USA*

INTRODUCTION: West Nile virus is a mosquito-borne flavivirus initially identified in Uganda and now endemic in Africa, the Middle East, Europe, Australia, and North America. Most human infections are subclinical or present as a mild febrile illness, however a small percent (<1%) of infected individuals develop acute neurologic illness including headache, confusion, paralysis, and movement abnormalities. The illness is of global clinical significance because of increasing incidence in both rural and urban areas.

CLINICAL CASE: A 45 year old male construction worker presented with headache and vomiting after accidentally breaking through a septic pipe and being exposed to aerated powdered dry sewage. He was admitted due to concern for toxin exposure. Neurology was later consulted when he was noted to have abnormal movements. Neurological examination revealed mild encephalopathy, eye movement abnormalities, and trunk and limb tremor. Head CT and MRI brain with contrast were unremarkable. Lumbar puncture was performed and CSF findings were consistent with aseptic meningitis. Several weeks later, West Nile virus PCR returned positive.

CONCLUSION: In the past 20 years, the incidence of West Nile virus infections in North Africa, Europe, North America, and the Middle East has increased. It is no longer restricted to rural areas and is seen with increasing frequency in urban centers, including patients such as this one who deny any travels or known exposures to mosquitoes. The practicing Neurologist needs to consider viral encephalitides in all patients presenting with acute onset movement abnormalities, especially if accompanied by headache or change in cognition.