Neurologic complications of dengue virus infection

Statement of the Problem: Dengue virus infection is an extremely common mosquito borne infection in the world. Neurologic complications are increasingly being reported in dengue cases affecting both the central and peripheral nervous system. This session is aimed to discuss the incidence and clinical spectrum of neurologic complications of dengue, methods of their diagnosis, management and outcome in patients with dengue virus infection.


Findings: The neurologic manifestations may be seen in 0.5-7.4% of dengue cases. These include encephalopathy, encephalitis, aseptic meningitis, stroke (intracranial hemorrhages or thrombosis), myelitis, Guillain Barre syndrome, plexus involvement (brachial plexopathy, neuralgic amyotrophy, lumbosacral plexopathy), nerve involvement (mononeuropathies, polynueropathies) and muscle involvement (myalgias, myositis, rhabdomyolysis, hypokalemic paralysis). Diagnosis of dengue virus infection may be made by a combination of dengue NS1Ag/Real Time PCR and anti-IgM antibody in CSF. In serum samples, dengue infection may be confirmed by PCR/culture positivity, IgM detection or by four fold rise in titers of specific IgG antibodies in paired serum samples.

Conclusion & Significance: In endemic regions, dengue should be considered as a differential diagnosis of neurological disorders. Early recognition of these complications is required for proper management of cases and for preventing further disabilities.

Biography
Amita Jain is a multifaceted Medical Teacher who has contributed immensely in the Field of Microbiology. She has worked in many areas of Medical Microbiology including Tuberculosis, Bacteriology and Virology. She is a keen Researcher and has successfully completed many research and public health projects and published several papers, some of which are highly cited. She has guided 24 PhD students and provided guidance to many Under-graduate and Post-graduate students. She has established new diagnostic and research facilities, which are of immense help to medical students, researchers and patients. She has investigated several epidemics of swine flu, dengue, acute encephalitis, hepatitis, drug resistant TB, etc. She has provided diagnostic services to Uttar Pradesh State Health Services in the field of Virology and Tuberculosis. She has organized trainings for laboratorians and community awareness health programs.

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