

Zika Virus Infection in the Central Nervous System and Female Genital Tract

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To the Editor: On April 9, 2016, a 32-year-old woman from Italy traveled to Santo Domingo in the Dominican Republic. She worked as a volunteer nurse in the outpatient clinic of a primary school of a nongovernmental organization based in Italy. She returned to Italy on April 17. She did not have sexual intercourse during her stay abroad.

On April 26, she was referred to the travel clinic of the National Institute for Infectious Diseases Lazzaro Spallanzani in Rome for a febrile syndrome with rash, generalized headache, and weakness, which started on April 21. Approximately 24 hours later, she was admitted to the institute's medical facility for a suspected neurologic involvement. At admission, she had abnormal gait, strong asthenia, and a disseminated pruritic rash on her face, abdomen, chest, and arms, but she did not have a fever.

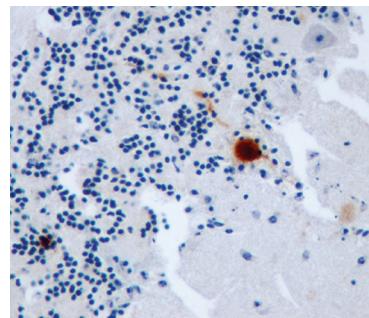
During physical examination, the patient was alert and fully oriented. Temperature was 36.9°C, pulse rate 90 beats/min, blood pressure 100/60 mm Hg, and respiratory rate 20 breaths/min. She had a diffuse erythematous macular rash and bilateral nonpurulent conjunctival hyperemia without meningeal signs. Findings of a neurologic examination of the upper limbs were within reference ranges. Muscular strength was reduced in both legs (left > right), whereas tendon reflexes and all sensory modalities were within reference ranges. Results of a contrast-enhanced magnetic resonance imaging of the brain and spinal cord (on day 7), nerve conduction studies

etymologia

Usutu [oo-soo'too] virus

Usutu virus, named for the Usutu River in Swaziland, is a mosquito-borne flavivirus closely related to Japanese encephalitis virus, West Nile virus, Murray Valley encephalitis virus, and St. Louis encephalitis virus. Usutu virus was first isolated in 1959 from *Culex neavei* mosquitoes in South Africa. The first recognized infection in a human was in an African man with fever and rash in 1959 but was not reported until 1981.

In 2001, Usutu virus emerged in Europe, when it was identified as the etiologic agent of bird—mainly blackbird—mortality. Retrospective analysis of archived tissue samples from wild bird deaths in the Tuscany region of Italy in 1996, however, revealed an earlier introduction of the virus to Europe. It was not thought to be associated with severe or fatal disease in humans until a neuroinvasive infection was reported to have occurred in an Italian woman in 2009.



Immunohistochemical staining for Usutu virus antigen in a Purkinje cell of the cerebellum of a song thrush that died of encephalitis. Original magnification ×400.

Sources

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