times higher than in those from patients with no history of treatment. However, the prevalence of monoresistant strains was low (5.3%, 4.3%, 0.3%, and 4.3% for isoniazid, rifampicin, ethambutol, and streptomycin, respectively) compared with the prevalence of multidrug-resistant strains whose rate reached a peak of 30.4%.

Drug-resistant TB in countries with good national control programs, such as in Western Europe, is not commonly a major health problem, although increasing immigration prompts public health authorities to maintain vigilant surveillance systems. The results of our study indicate that throughout Italy, prevalence of resistance to firstline drugs and multidrug resistance among isolates from new cases was consistently low over the 4-year survey period. Prevalence of multidrug resistance among isolates from previously treated patients was high, although a downward trend could be demonstrated during the last 2 years. Since almost 2 out of 10 isolates resistant to rifampicin were multidrug resistant, using rapid molecular methods to identify rifampicin resistance in questionable cases appears cost-effective to facilitate early detection and control of multidrug-resistant TB (10). Resistance to isoniazid is associated with immigration from countries where isoniazid was used extensively in the past. This information is a useful tool for clinicians, as isoniazid resistance may be suspected early in the disease and properly treated. Finally, the finding of substantial multidrug resistance among isolates from previously treated patients, combined with the evidence that immigrants from areas where isoniazid resistance is endemic contribute substantially to the number of new TB cases in Italy every year, strongly suggests that public health action is needed to improve treatment outcomes.

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Mollaret-like Cells in Patients with West Nile Virus Infection

To the Editor: We have read with interest many of the articles concerning West Nile virus (WNV) published in the July 2003 issue of Emerging Infectious Diseases. Last summer Ohio was one of the leading states with WNV infection in humans. Consequently, requests for tests for this pathogen have increased. Unfortunately, the turnaround time for testing these specimens may be delayed because of shipping difficulties, the limited number of laboratories that can perform these assays, and an increase in requests at testing facilities.

Cytologic examination of cerebrospinal fluid (CSF) from patients with WNV has not been studied.

Although cytologic examination of CSF from patients with encephalitis is likely nonspecific, it may provide supportive information of the suspected disease process, and is useful for excluding other conditions, such as neoplasia. Of the 22 patients that were hospitalized at our institution last year with WNV meningoencephalitis, documented by serologic tests and/or reverse transcription-polymerase chain reaction, CSF of 4 of these patients was submitted for cytologic examination. Of these 4, 3 had a sufficient number of cells in the CSF specimen (47, 213, and 495 cell/μL) to afford cytologic examination, whereas one had a paucicellular CSF, with only 2 white blood cells/μL. The cytologic features from the 3 patients, >10 cells/μL consistently demonstrated a mixture of lymphocytes at various stages of activation and occasional large monocytic-like cells with cerebriform nuclei reminiscent of the Mollaret cells described in CSF of patients with recurrent meningitis (Figure).

Mollaret described cells with enlarged nuclei and cerebreform nuclear contours in CSF of patients with recurrent, aseptic meningitis (1). Although he believed these were of endothelial origin, immunohistochemical studies have subsequently shown that they are monocytes (2). This type of meningitis, now commonly known as Mollaret meningitis, has been associated with herpes simplex virus encephalitis, but the definitive cause of all cases remains unclear (3).

One of the patients infected with WNV meningoencephalitis who had Mollaret-like cells in CSF died. Postmortem neuropathologic examination showed an extensive perivascular lymphocytic infiltrate which contained mononuclear cells consistent with the Mollaret-like cells in CSF. These mononuclear cells were stained with an immunohistochemical stain directed against the CD68 antigen, which supports a monocytic origin (4). Further studies are needed to delineate the consistency of Mollaret-like cells in CSF of patients with WNV meningoencephalitis. Finding Mollaret-like cells admixed with activated lymphocytes may be a useful, readily-available test that provides supportive evidence of viral encephalitis in the appropriate clinical setting, until more definitive tests are available.

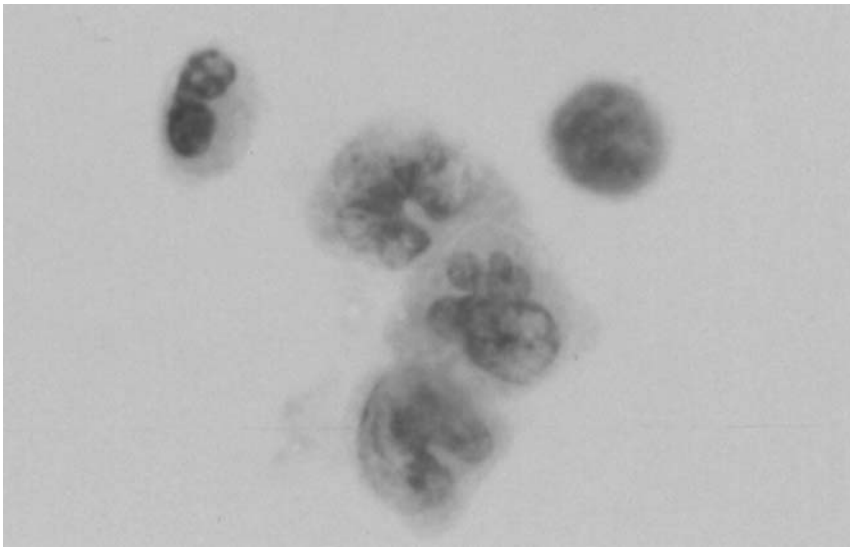

Figure. Three Mollaret-like cells are present (center), with a neutrophil (upper left) and a lymphocyte (upper right) in cerebrospinal fluid from a patient with West Nile virus encephalitis, confirmed by reverse transcription–polymerase chain reaction and serologic testing (Papanicolaou stain; magnification x500).

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Newly Isolated *Vibrio cholerae* Non-O1, Non-O139 Phages

To the Editor: The epidemic cholera caused by *Vibrio cholerae* O1 appeared in Latin America in 1991 after a 100-year absence. Following its explosive appearance in Peru, travelers on the Amazon River brought cholera to Brazil by April 1991. It spread southward along the Atlantic Coast of Brazil, reaching Rio de Janeiro in February 1993.

Phage typing is a useful tool for studying the source or origin of *V. cholerae* for epidemiologic importance. Because of limitations of the Basu and Mukerjee scheme, a new