Antiviral Therapy for Neurological Manifestations of Enterovirus 71 Infection

SIR—An analysis of 97 enterovirus 71 (EV 71) culture-positive cases from Taiwan revealed CNS involvement in 35% of cases [1]. MRI showed involvement of the midbrain, pons, and medulla oblongata, which seem to be the target foci for EV 71 replication. It was demonstrated that early detection of a CNS lesion by MRI and CSF examination was likely to provide useful information regarding the brain stem encephalitis [1] and thus contribute to judicious clinical management.

In all probability, the clinical course of illness in Taiwanese patients may have been modified by an early therapeutic intervention with IFN. IFN-α therapy within 24 h of admission halted progression of disease in 2 patients. A 16-month-old child with bulbar paralysis due to type 1 wild poliovirus was treated with 1 million doses of im IFN-α, and a 34-year-old man with bulbar paralysis due to type 2 vaccine poliovirus was treated with 3 million doses of im IFN-α, both for 16 days [2]. Both showed improvement within a day or two. IFN therapy, after an indication of brain lesions by MRI, could ensure prompt recovery with no residual sequelae and might lower the existing mortality associated with EV 71 infections.

In addition to the usefulness of MRI to diagnose EV 71 infection, proton magnetic resonance spectroscopy (MRS) is also of value to monitor the functional activity of neurons by scrutinizing the metabolic changes among individual neurons. In a 53-year-old woman with Creutzfeldt-Jakob disease, neuronal loss was demonstrated by reduced N-acetylaspartate, reduced creatinine-phosphocreatinine ratio and increased sorbitol levels [3].

Earlier detection of viral involvement of EV 71 target nuclei as determined by MRI and MRS, if followed by immediate IFN-α therapy, should reverse the viral damage to neurons. Furthermore, such early detection could help in deciding whether to prescribe IFN-α along with the promising antienteroviral drug pleconaril [4]. This combined therapeutic recipe would be associated with reduced mortality and negligible residual morbidity.

Subhash C. Arya
Centre for Logistical Research and Innovation, New Delhi, India

References

Clinically Relevant Aeromonas Species

SIR—In the October 1999 issue of Clinical Infectious Diseases, an update of the current nomenclature, taxonomy, and classification of aerobic and facultative bacteria is presented [1]. While checking the species of Aeromonas in the updated list, we were surprised to find Aeromonas enteropelogenes included as a valid species, although it was synonymized a long time ago with Aeromonas trota on the basis of 16S rRNA sequences [2]. This synonymization has been further confirmed in recent studies with other molecular methods [3–5] and with phenotypical tests [6].

It is encouraging, however, that Aeromonas sobria, a misnomer classically used by clinicians to refer to Aeromonas veroni biovar sobria, was not included in the list. In fact, Aeromonas sobria sensu stricto is considered a valid species of environmental origin that is not commonly reported in clinical cases [7].

Another important consideration are the criteria employed for inclusion of species on the list. The genera Aeromonas now encompasses 14 species. In the recent overview/review of the genus carried out by Janda and Abbott [7], only 5 species, including 1 with 2 biovars, were considered pathogenic. Three of these are referred to as major pathogens (Aeromonas hydrophila, Aeromonas caviae, and Aeromonas sobria sensu stricto) and the list published in Clinical Infectious Diseases includes these 5 species, as well as 5 others (Aeromonas