T he doctors who treated the first known patient to survive rabies without prior vaccination and previously untested treatment protocol, but they caution that it requires further study.

“Clearly, our experience with this patient requires replication in other patients and proof-of-concept experiments in animal models,” said Rodney E. Willoughby Jr., M.D., of the Medical College of Wisconsin, Milwaukee, and his colleagues.

The 15-year-old patient developed confirmed clinical rabies 1 month after being exposed to the left hind leg of a bat. She was treated with a strategy that involved induction of therapeutic coma, and antiepileptic and antiviral drug therapy under supportive intensive care. The concept was to protect the brain from injury while allowing the launch of a natural immune response against the virus (N. Engl. J. Med. 2005;352:2508-14).

The patient was treated with ketamine, midazolam, ribavirin, and amantadine. Doses were adjusted as needed due to responses and probable drug-related toxicities, which included hemolysis, pancreatitis, acidosis, and hepatotoxicity. She did not receive rabies vaccine or rabies immunoglobulin because she demonstrated immune response and because of concern regarding harm from a potentiated immune response. On the seventh hospital day a lumbar puncture indicated an increased level of rabies antibody, and sedation was tapered. On hospital day 31, the patient was determined to be cleared of transmissible rabies and was removed from isolation. She was discharged to home on hospital day 76.

At a follow-up visit 131 days after her initial hospitalization, the patient was progressing, and had returned to school part time. She continues to experience dysarthric speech, buccolingual choreoathetosis and intermittent dystonia and ballismus, which affect her gait and fine-motor skills.

Prior to this case, five cases of survival following rabies had been well documented, but all received occupational related exposure to rabies virus vaccination or postexposure prophylaxis; this is the first known patient to survive with only naturally acquired immunity. It should be noted that the patient was young and athletic, and may have received a limited quantity of inoculum, the investigators stressed, adding that since the bat was not recovered, it is unclear if the patient’s survival was due to an “unusual, more temperate or attenuated variant of the virus, or a rare host polymorphism.”

“Therapy may have been more effective than in past cases because of the inferred limited exposure to rabies virus, early recognition of the disease, and aggressive management,” the investigators said, noting that the survival of this patient does not change the fact that rabies has the highest case fatality ratio of any infectious disease.

Better Drugs in Sight For Hepatitis in Kids

BY ROBERT FINN
San Francisco Bureau

SAN FRANCISCO — Although some therapies are available for chronic viral hepatitis, it remains unclear whether children should be treated, Frank R. Sinatra, M.D., said at a meeting on clinical pediatrics sponsored by the University of California, San Francisco.

There are good arguments on both sides of the issue, said Dr. Sinatra, director of the pediatric gastroenterology division at the University of Southern California, Los Angeles.

The arguments for treatment include:

► Early treatment can prevent fibrosis and cirrhosis.

► Children do at least as well as—and perhaps better than—adults, with current drugs.

► Treatment can help prevent the spread of chronic hepatitis B and hepatitis C.

► Many clinicians believe any chronic viral infection must be eradicated.

The arguments against treatment include:

► Concern that children with chronic viral hepatitis are asymptomatic. “It’s very hard to make an asymptomatic patient feel good,” Dr. Sinatra said.

► Fibrosis typically develops slowly.

► The side effects from current treatments are significant, and include growth retardation.

► Current therapy has a success rate of only 50%.

► Even without treatment, a small number of children will experience disease progression and need treatment of their chronic infection.

► In Dr. Sinatra’s view, the best argument against treating children who appear to be doing well is that there are better drugs on the horizon. He knows of at least eight that are in phase I, phase II, or phase III clinical trials.

Whether or not a clinician decides on treatment, these children need to be followed closely for evidence of progressive liver disease and the development of hepatocellular carcinoma, he said.

Consider Musculoskeletal Adverse Effects When Using Fluoroquinolones in Children

BY MARK S. LESNEY
Associate Editor

The peak age of acquisition of primary human herpesvirus 6 infection is between 9 and 21 months, according to results of a population-based study of 277 children followed from birth to 2 years of age.

Of the 277, 130 (47%) of the children were infected by the age of 24 months (N. Engl. J. Med. 2005;352:769-76). Human herpesvirus 6 (HHV-6) acquisition was associated with female sex (adjusted hazard ratio of 1.7) and having older siblings (adjusted hazard ratio of 2.1). Of the 227 children, 46% were female, and 52% had at least one sibling, said Danielle M. Zerr; M.D., of the department of pediatrics, University of Southern California, Los Angeles, and her colleagues.

HHV-6 infection was monitored in patients with a sample taken from the child or other family members. Asymptomatic HHV-6 infection was monitored in patients with a sample taken from the child or other family members. Asymptomatic HHV-6 infection was monitored in patients with a sample taken from the child or other family members.

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