Seizures May Point to Cat-Scratch Encephalopathy

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ASPEN, COLO. — Consider the possibility of cat-scratch disease encephalopathy in anyone with new-onset seizures—especially status epilepticus—and no alternative diagnosis, Dr. Karen Dahl urged attendees at a conference on pediatric infectious diseases sponsored by Children's Hospital, Denver.

The literature demonstrates that full recovery of patients with cat-scratch disease encephalopathy (CSDE) can be anticipated without need for antimicrobial therapy or long-term antiseizure medications, added Dr. Dahl, chief of the pediatric infectious disease division at Helen DeVos Children's Hospital, Grand Rapids, Mich.

"I'm not treating the next patient I see with cat-scratch encephalopathy because based on the large series they all recover without antimicrobials," she said at the conference, which was also sponsored by the University of Colorado.

"However, when I take a poll of ID [infectious disease] doctors at meetings, many will treat with antimicrobials anyway although the data doesn't support it. Encephalopathy is scary," she said in a later interview.

Most patients with CSDE will have lymphadenopathy. Half or more may be febrile. Brain imaging studies, WBC, and cerebrospinal (CSF) fluid protein and glucose levels are usually normal. CSF pleocytosis, if present at all, is typically mild. The EEG often shows background slowing.

The largest published study of CSDE is a 61-patient series that's 16 years old, predating the advent of serologic diagnosis. This is a major problem with the cat-scratch disease literature in general: The largest studies, which certainly aren't all that big, are old. They come from an era when the diagnosis required a typical history, the presence of regional lymphadenopathy, and positive skin prick test results.

"If you didn't have lymphadenopathy no one thought to do the skin-prick test. So I don't think the illness in all its manifestations has been fully described yet," Dr. Dahl said.

Indeed, more contemporary albeit smaller studies that have been conducted in the era of serologic diagnosis and based on high *Bartonella henselae* titers make it clear that patients can have CSDE without lymphadenopathy.

In the 61-patient series, nearly half of the patients with CSDE had status epilepticus. A variety of other seizures also were described, with the notable exception of absence seizures. Altered mental status ranging from lethargy to coma was extremely common. More than one-third of patients exhibited combative behavior, particularly when touched on the head or neck. Half of the subjects had fever. Other common symptoms were malaise and generalized and persistent headache.

None of the patients received antimicrobial therapy, yet all fully recovered, most within a month, and all by 12 months. The most persistent symptoms were headache, lethargy, weakness, fatigue, and anorexia (Am. J. Dis. Child. 1991;145:98-101).

Similarly favorable outcomes have been reported for other studies in which antimicrobials were avoided.

Typically, patients with status epilepticus are sent to the ICU and started on antiseizure medication immediately, but Dr. Dahl said in a later interview that after she diagnoses patients, she calls their neurologists to let them know that the patients will not need long-term antiseizure treatment.

Cat-scratch disease occurs mainly from September through March in warm, humid climates where fleas are a problem, such as the Southeast, Midwest, coastal California, and Hawaii. The disease is strongly associated with outdoor cats younger than 1 year old. Once a kitten becomes bacteremic, it is likely to remain so for weeks to months.

"I don't reassure people in the household that nobody else is going to get sick. If you've got that bacteremic vector in your house, it can still go on," according to Dr. Dahl. ■