Consider Cat Scratch Disease in Unknown Fever

BY ROBERT FINN
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SAN FRANCISCO — Cat scratch disease is a surprisingly common cause of prolonged, alarming fever in children, Sheldon L. Kaplan, M.D., said at a meeting on clinical pediatrics sponsored by the University of California, San Francisco.

Typically presenting with a fever of unknown origin along with abdominal pain, children with cat scratch disease (CSD) typically go for 3-6 weeks before being referred to an infectious disease specialist and receiving a proper diagnosis, said Dr. Kaplan, of Baylor College of Medicine, Houston.

He described the case of a 12-year-old girl who was admitted to Texas Children’s Hospital following a 3-week history of intermittent fevers between 38.3°C and 40.6°C and 2 days of right upper quadrant pain. She also reported a weight loss of 4.5 kg.

The patient had a history of dog and kitten scratches, and a physical exam revealed enlarged and tender left and right inguinal lymph nodes. Her erythrocyte sedimentation rate was very high at 93 mm/hr, but two blood cultures and a urine culture were sterile, and a stool culture for routine pathogens also was negative.

An ultrasound exam found two mildly enlarged lymph nodes in the right lower quadrant, but an abdominal CT scan was normal.

Serologies for toxoplasmosis, cytomegalovirus, and Epstein-Barr virus were all negative, and no antinuclear antibody was detected. Transaminase and bilirubin concentrations were normal. Serum markers for inflammatory bowel disease were normal, but the child underwent a colonoscopy on the seventh hospital day that was essentially normal as well.

Finally her physicians ordered a Bartonella henselae titer, and she proved to be positive for the causative organism of CSD.

Dr. Kaplan offered a few tips for making a CSD diagnosis in a somewhat more timely fashion, and for treating the disease:

- Children with CSD almost always have exposure to cats. Kittens are more likely to be infected, and fleas provide the most common mode of transmission. There’s no good evidence that fleas can transmit B. henselae directly to humans, however.
- Patients typically present with a prolonged but intermittent fever and abdominal pain. They feel well between bouts of fever.
- “If you’re lucky and very observant, you may see a papule at the site where the cat scratched,” Dr. Kaplan said. These papules may last for 2 weeks, and there also may be some lymphadenopathy.
- Often there will be hepatosplenomegaly, and the liver will be tender to palpation.
- An ultrasound of the liver or spleen will show characteristic granulomas.
- Children with CSD typically respond within 48 hours to rifampin (20 mg/kg per day in two divided doses for 14 days), sometimes with the addition of an aminoglycoside.

Autonomic Neuropathy Due to Metronidazole

SAVANNAH, Ga. — Brief metronidazole treatment has been associated with a case of reversible autonomic neuropathy in a 15-year-old girl, Lisa Hobson-Webb, M.D., reported in a poster at the annual meeting of the American Association of Electrodiagnostic Medicine.

“This has never been reported in the literature,” said Dr. Hobson-Webb of Wake Forest University, Winston-Salem, N.C. “There are cases of motor or sensory neuropathies after a large dose or an extended treatment period but not any reports of autonomic involvement.”

Within 2 weeks of initiating 3-day metronidazole treatment for bacterial vaginitis, a 15-year-old girl developed such a severe, burning pain in the soles of her feet that she found relief only by keeping her feet and lower legs submerged in buckets of ice water at all times.

Nerve conduction studies showed reduced sensory nerve and compound muscle action potential.

The patient was placed on gabapentin and carbamazepine for pain control, and improved over several weeks. After 3 months, her neuropathy had clinically resolved and conduction studies showed normalization of autonomic function.

—Michele G. Sullivan