medi-notes THOMAS WESLEY ALLEN, DO Editor in Chief

Rochalimaea henselae infection of humans by domestic cats

In order to determine the reservoir and vector(s) for *Rochalimaea henselae*, a causative agent of bacillary angiomatosis (BA) and cat scratch disease, and to estimate the percentage of domestic cats with *R henselae* bacteremia, the authors conducted a hospital-based survey in the Greater San Francisco Bay Region of Northern California.

The patients surveyed were those with or without human immunodeficiency virus infection, with biopsy-confirmed BA, who also had prolonged exposure to at least one pet cat.

Cultures and laboratory studies were performed on blood drawn from pet cats associated with patients with BA. The *Rochalimaea* species infecting pet cats and fleas and causing the BA lesions in human contacts of these cats was identified by culture, polymerase chain reaction-restriction fragment length polymorphism analysis, and DNA sequencing. The presence of *R henselae* bacteremia in pet cats was documented, and predictor variables for culture positivity were evaluated.

Four patients who met the survey criteria were identified. The *Rochalimaea* species causing BA lesions in these patients was determined to be *R henselae*. The seven pet cats were found to be bacteremic with *R henselae*. This bacterium was also detected in fleas taken from an infected cat.

The researchers documented that the domestic cat serves as a major persistent reservoir for R

henselae, with prolonged, asymptomatic bacteremia from which humans, especially the immunocompromised, may acquire potentially serious infections. Antibiotic treatment of infected cats and control of flea infestation are potential strategies for decreasing human exposure to *R henselae*.

Koehler JE, Glaser CA, Tappero JW: Rochalimaea henselae infection: A new zoonosis with the domestic cat as reservoir. JAMA 1994;271:531-535.

Association of chronic sinusitis with allergy, asthma, and eosinophilia

The association between sinus disease and asthma is generally accepted, although the mechanisms involved are not completely understood.

This study evaluated, in patients with chronic sinusitis who were scheduled for sinus surgery, the interrelationships and correlation among the extent of sinus disease, asthma, allergy, culture results, peripheral eosinophilia, and tissue eosinophilia.

The researchers evaluated the patients' computed tomographic scans, serum samples, peripheral blood samples, and surgical biopsy specimens. Extensive disease was present in 30% of the subjects and correlated well with asthma, specific IgE antibodies, and eosinophilia, but not with elevated total IgE. Among patients with peripheral eosinophilia, 87% had extensive disease. All cultures grew aerobic bacteria; anaerobes and fungi were uncommon.

With the use of computed tomo-

graphic scans of patients with chronic sinusitis, the researchers developed a system for quantitating the extent of the disease.

The well-accepted associations of chronic sinusitis with asthma and allergy appear to be restricted to the group with extensive disease. The presence of peripheral eosinophilia in patients with sinusitis indicates a high likelihood of extensive disease.

Newman LJ, Platts-Mills TAE, Phillips CD, et al: Chronic sinusitis: Relationship of computed tomographic findings to allergy, asthma, and eosinophilia. *JAMA* 1994;271:363-367.

Alzheimer's disease and general anesthesia

An association between prior general anesthetic exposure and Alzheimer's disease (AD) has been hypothesized, but no positive link has been found. Nevertheless, repeated exposure and cumulative total of exposure to neurotoxic factors, such as anesthetics, may accelerate the cognitive decline seen in elderly patients.

This population-based, casecontrol study was conducted to evaluate prior exposure to general anesthesia as a potential risk factor for AD. Incident cases of AD in the Olmsted County, Minnesota, population from 1975 to 1984 were compared with control subjects matched for age and gender, selected from all registrations for care at Mayo Clinic.

The case and control groups each had 252 individuals. Of these, 208 cases and 199 control subjects had at least one exposure to gen-

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