

Abstracts of current literature on epidemiology, diagnosis, and treatment

Series Editor: Jihad Slim, MD

METAPNEUMOVIRUS AND ACUTE RESPIRATORY TRACT INFECTION

The virologic features and clinical findings associated with the new human metapneumovirus (HMPV) were examined retrospectively in Canadian patients hospitalized for various respiratory conditions since 1993. Thirty-eight previously unidentified respiratory viruses from patient samples were found to be positive for HMPV by reverse-transcription polymerase chain reaction, and those strains clustered in 2 phylogenetic groups. The study population included 17 male subjects and 20 female subjects with a mean age of 45.5 years, including 13 persons (35.1%) younger than 5 years and 17 (45.9%) older than 65 years. In infected children, the most frequent diagnoses were pneumonitis (66.7%) and bronchiolitis (58.3%). Clinical findings of 10 patients with HMPV infections who were older than 65 years also were reviewed. Of these patients, 4 (40%) developed pneumonitis, and 6 (60%) had a diagnosis of bronchitis and/or bronchospasm. Of the 15 patients (total) with pneumonitis, 4 (26.7%) had immunosuppressive conditions and 6 (40%) were infants younger than 15 months. Researchers concluded from these results that HMPV infection occurs not only in very young children but also in elderly persons and that, similar to findings with other community-acquired respiratory viruses, being very young or elderly or having comorbid or immunosuppressive conditions may predispose to serious manifestations of infection.

Boivin G, Abed Y, Pelletier G, et al. Virological features and clinical manifestations associated with human metapneumovirus: a new paramyxovirus responsible for acute respiratory-tract infections in all age groups. J Infect Dis 2002;186:1330-4.

CAT-SCRATCH DISEASE AND LYMPHADENOPATHY OF THE HEAD AND NECK

A study systematically evaluated patients with unclear cervical masses to determine the infectious and noninfectious causes of these diseases, with special regard to cat-scratch disease (CSD). From January 1997 through January 2001, a total of 454 patients with unclear masses in the head and neck were examined for symptoms and signs of infection (eg, fever, swelling of the lymph nodes, adynamia, pharyngitis, laryngitis, skin rash). CSD was diagnosed when at least 2 of the following criteria were fulfilled: (1) presence of clinical symptoms typical of CSD; (2) serologic detection of antibodies against *Bartonella henselae*, the causative agent of CSD, including negative results of serologic tests to detect other infectious diseases; and (3) detection of *B. henselae* DNA in the extirpated lymph nodes. Of the 454 patients with enlarged lymph nodes, 61 (13.4%) had CSD, 54 (11.9%) had primary lymphadenopathy caused by other infectious agents,

and 41 (9.0%) had lymphadenopathy occurring in association with primary infections of other organs; 127 (28%) had other conditions, and 171 patients (37.7%) remained undiagnosed. *B. henselae* DNA was detected in extirpated lymph nodes only during the first 6 weeks of lymphadenopathy, indicating that the results of polymerase chain reaction strongly depend on the duration of illness. Researchers recommended that CSD be considered in the differential diagnosis of unclear masses and lymphadenopathy of the cervicofacial region, in order to avoid unnecessary treatment.

Ridder GJ, Boedeker CC, Technau-Ihling K, et al. Role of cat-scratch disease in lymphadenopathy in the head and neck. Clin Infect Dis 2002;35:643-9.

EFFECTS OF PROTEASE INHIBITORS ON ATHEROSCLEROSIS IN PATIENTS INFECTED WITH HIV-1

A longitudinal study measured the lipid profiles, C-reactive protein (CRP) levels, coronary artery calcification (CAC) scores, and blood cell morphologic changes in 98 HIV-infected black adults age 25 to 45 years in Baltimore, MD, in order to determine the effects of protease inhibitors (PIs) on subclinical atherosclerosis. Of those participants, 55 were taking PIs and 43 were not. Participants in both the PI and non-PI groups were similar in age, sex, body mass index, blood pressure, heart rate, and erythrocyte and leukocyte counts. Compared with the non-PI group, patients in the PI group had significantly higher total serum cholesterol (4.8 ± 1.0 vs 3.8 ± 0.7 mmol/L, $P < .001$) and low-density lipoprotein cholesterol (2.9 ± 0.8 vs 2.1 ± 0.7 mmol/L, $P < .001$) levels. Patients in the PI group also had significantly higher mean corpuscular volumes of erythrocytes than patients in the non-PI group (92.2 ± 9.3 vs 86.8 ± 7.2 μm^3 , $P = .048$). The CAC scores in the PI group were significantly higher than were those in the non-PI group (11.0 ± 28.6 vs 1.7 ± 5.8 , $P = .043$). The mean serum CRP level was similar in both groups. The authors concluded that the administration of PIs is associated with CAC, atherogenic lipid changes, and increased erythrocyte volume and may accelerate atherosclerosis.

Meng Q, Lima JA, Lai H, et al. Coronary artery calcification, atherogenic lipid changes, and increased erythrocyte volume in black injection drug users infected with human immunodeficiency virus-1 treated with protease inhibitors. Am Heart J 2002;144:642-8.

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