

## A. baumannii Infections Emerge in Vets, Families

BY DAMIAN McNAMARA

SINT MAARTEN, NETHERLANDS ANTILLES — Be on the lookout for *Acinetobacter baumannii* infections among wounded military personnel returning to the United States, an expert warned.

"This is a major problem with our soldiers returning from Iraq and Afghanistan," according to Dr. Theodore Rosen, adding that the pathogen causes soft tissue and skin infections, osteomyelitis, and if left untreated, fatal bacteremia.

It is also a concern for their family members. "You have to ask them if a family member was fighting over in the Middle East and injured," Dr. Rosen said. "You need to pay attention because this can save a life," he said at the Caribbean Dermatology Symposium.

Primary care physicians and dermatologists may be the first to see the cutaneous manifestations of *A. baumannii* infection.

"We have people who are reservists, they come back, and they come in with a boil or cellulitis," Dr. Rosen explained. "Culture them, consult ID fast, and get them in the hospital—they need intravenous drugs we don't normally give."

Multidrug resistance and a delay of weeks or months before clinical symptoms appear are other causes for concern with this gram-negative pathogen. *A. baumannii* is only 100% sensitive to colistin, 80%-plus to imipenem, and 50% to amikacin, according to a 2004 report (MMWR 2004;53:1063-6).

In that report, the Centers for Disease Control and Prevention had noted an in-

creasing number of *A. baumannii* bloodstream infections in patients at military medical facilities that treated service members injured in the Iraq/Kuwait region during Operation Iraqi Freedom and in Afghanistan during Operation Enduring Freedom. Officials identified 102 patients at military hospitals who met the CDC criteria for *A. baumannii* infection between January 2002 and August 2004.



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DR. ROSEN

*A. baumannii* is found in soil and water. Combat trauma is often the cause of initial infection, which was the case for a 55-year-old man injured by a grenade in Iraq. The explosion caused material to enter his anterior thigh and created a large posterolateral hip exit wound and an open left subtrochanteric femur fracture. He was successfully treated with debridement and antibiotic therapy, according to the case report (Emerg. Infect. Dis. 2008;14:512-4).

Infection also can be nosocomial. *A. baumannii* was implicated in the deaths of five noncombat patients at Walter Reed Army Medical Center in Washington (Clin. Infect. Dis. 2006;43:1045). All of these patients were infected by returning soldiers. ■

## RSV Burden Much Worse Than Previously Recognized

BY MARY ANN MOON

An estimated 2 million children under age 5 years require medical attention for respiratory syncytial virus each year, a "much larger burden than previously recognized," according to an analysis of surveillance data on more than 5,000 children.

Recent data from the Centers for Disease Control and Prevention's New Vaccine Surveillance Network show that respiratory syncytial virus (RSV) infection prompts 1 of every 13 visits to primary care physicians in the United States, as well as 1 of every 38 emergency department visits and 1 of every 334 hospitalizations, in this age group. Hospitalization rates for children who prove to have RSV are three times higher than those for children whose illness is caused by influenza or parainfluenza, even in populations where the rate of flu vaccination is quite low.

The virus's major burden on health care resources occurs in healthy children who are not considered at risk and many of whom are well beyond infancy, said Dr. Caroline Breese Hall, professor of pediatrics and medicine at the University of Rochester (N.Y.), and her associates.

The heavy outpatient burden in particular "is probably not fully recognized by health care providers and by public health officials, since only 3% of outpatients with confirmed RSV infection received the specific diagnosis of RSV infection; bronchiolitis was diagnosed in 20% of such children," and other missed diagnoses included simple

upper respiratory tract infection (32%), asthma (13%), and pneumonia (8%).

The investigators analyzed surveillance data gathered from November through April in each year from 2000 to 2004 on acute respiratory infections among children under age 5 years in three geographically diverse U.S. populations. The children enrolled in the study were hospitalized, treated in outpatient emergency departments, or seen in pediatricians' offices.

This study involved 5,067 children, of whom 919 (18%) were found by culture and/or reverse transcriptase polymerase chain reaction to have RSV infection. RSV was associated with 20% of hospitalizations, 18% of outpatient visits to the emergency department, and 15% of office visits for acute respiratory infections in this population. (New Engl. J. Med. 2009;360:588-98).

"If we extrapolate from our population-based data to the entire U.S. population, an estimated 2.1 million children under 5 years of age with RSV infection would require medical attention each year." Nearly three-fourths of the affected children would be treated in private practices, 3% would be hospitalized, and the remaining 24% would be treated in emergency departments.

Fully 78% of RSV-infected children would be older than 1 year. Most would have no coexisting medical conditions or traits that would identify them as being at risk, the investigators said.

Dr. Hall reports receiving grant support and consulting fees from MedImmune Inc. ■

## Non-AIDS-Defining Cancer Rates Still High in HIV Infected

BY DIANA MAHONEY

MONTREAL — Although the rates of AIDS-defining cancers have declined significantly among people with HIV infection since the advent of antiretroviral therapy, the rates of non-AIDS-defining cancers—particularly those associated with an underlying infectious pathogen—continue to be significantly higher than those observed in the HIV-negative population.

At the 16th Conference on Retroviruses and Opportunistic Infections, Michael J. Silverberg, Ph.D., of Kaiser Permanente in Oakland, Calif., presented findings from a retrospective cohort study comparing the incidence of non-AIDS-defining cancers (cancers other than Kaposi's sarcoma, non-Hodgkin's lymphoma, and cervical cancer) in HIV-positive and HIV-negative persons during 1996-2006. With the use of data from the managed health program, Dr. Silverberg and colleagues identified 18,890 HIV-positive patients and 189,804 age-, sex-, and year-matched HIV-negative patients and followed the cohort members from

first enrollment after Jan. 1, 1996.

From Surveillance, Epidemiology, and End Results program-based Kaiser Permanente cancer registries, the investigators identified incident, non-AIDS-defining cancers in the study population and grouped the cancers as infection related (anal, head and neck, liver, Hodgkins lymphoma, and others) or infection unrelated. In the HIV-positive population, there were 482 reports of non-AIDS-defining cancers, including 220 that were infection related and 269 that were not related to infection; seven patients had both. In comparison, 3,065 non-AIDS-defining cancers were identified in the HIV-negative population, including 398 infection related and 2,698 infection unrelated (31 had both), Dr. Silverberg said.

Calculated per 10,000 person-years, the rate of infection-related, non-AIDS-defining cancers was nearly seven times greater among the HIV-positive group, at 29.7, compared with 4.4 in the HIV-negative group, Dr. Silverberg stated, noting also that the age- and sex-adjusted relative risks "did not change over time." Specifically, the relative risks for the periods of 1996-

1999, 2000-2003, and 2004-2006, were 6.4, 7.6, and 6.2, respectively. In terms of specific infection-related cancers, the significant relative risks for anal cancer, Hodgkin's lymphoma, head and neck cancer, and gynecologic cancer were 81.4, 17.4, 2.1, and 2.9, respectively, he said.



**The cancers were nearly seven times more likely among the HIV-positive group compared with the HIV-negative group.**

DR. SILVERBERG

Despite the increased risk, compared with HIV-negative individuals, "the risk of developing an infection-related non-AIDS-defining cancer did drop by approximately 4% [between 1996 and 2006]," Dr. Silverberg said. The risk of anal cancer in particular decreased in the HIV-positive population by about 6% per year, he said. During the same period, the risk of infection-related cancer remained

constant among HIV-negative individuals.

With respect to infection-unrelated non-AIDS-defining cancers, the incidence rates per 10,000 person-years were 36.4 and 30.6 for the HIV-positive and HIV-negative groups, respectively, Dr. Silverberg noted. The only significant rate ratio was that observed for the 2004-2006 period, at 1.3, he said. Significant cancer-specific rate ratios were observed for kidney cancer, lung cancer, melanoma, and prostate cancer at 1.8, 1.7, 1.7, and 0.7, respectively.

The study findings may not be generalizable to women because nearly three-quarters of the cancer cases identified through the registry were men who have sex with men, Dr. Silverberg noted. Additionally, because the study data came from a managed care database, the findings may not be generalizable to uninsured persons, he said.

The conference was sponsored by the Foundation for Retrovirology and Human Health and the Centers for Disease Control and Prevention.

Dr. Silverberg reported no potential conflicts of interest. ■