

Lung contusions and pandemic (H1N1) 2009 can cause ARDS (6,7). We do not know the relative role of each in causing the ARDS that our patient had, but the severity of clinical symptoms, although the lung injury was judged to be only of moderate magnitude, suggests that influenza played a major role in the development of his acute lung disease. The infection with oseltamivir-resistant virus, for which he probably did not receive effective therapy, likely had an effect on the duration and severity of his course.

Although our patient had a favorable outcome, the possibility of widespread resistance, similar to the phenomenon observed with seasonal influenza in the 2008–2009 season, is alarming and should be monitored. The suspicion of resistance should be based upon compatible clinical scenario, such as continuation of symptoms in spite of antiviral therapy (even in patients who are not immunocompromised), combined with early performance of resistance assays. Early and rapid detection of oseltamivir resistance and a change of antiviral treatment (if feasible) might benefit the patient.

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Human Infection with Lymphocytic Choriomeningitis Virus

To the Editor: I read with great interest the article regarding lymphocytic choriomeningitis virus (LCMV) meningitis in a New York City resident (1). The authors' conclusion that there is a need to ascertain the true incidence of LCMV infection is worthy of underscoring. Nearly 15 years ago, in this same journal, we described congenital LCMV as an unrecognized teratogen and recommended further "research to define the frequency of LCMV" (2). Five years later, we reiterated that recommendation when reporting acquired LCMV meningoencephalitis in an adolescent from Tucson, Arizona (3). Despite, or because of, the lack of prospective studies, the fact that this author has accrued data regarding >60 congenitally infected infants from all geographic areas in the United States during the past 15 years reinforces the concept that LCMV is a neglected pathogen whose time for more extensive study has indeed come.

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Increasing Incidence of Nontuberculous Mycobacteria, Taiwan, 2000–2008

To the Editor: Lai et al. (1) reported an increase in the number of nontuberculous mycobacteria (NTM) isolates and patients with pulmonary NTM diseases after implementation of the BACTEC system (Becton Dickinson, Sparks, MD, USA) late in 2001. These authors also reported that the increase was mainly in persons infected with *Mycobacterium avium* complex (MAC) and *M. abscessus*. They stated that diseases caused by NTM were defined according to current diagnosis criteria published in 2007 (2). This finding suggests that Lai et al. were able to review the clinical and radiologic information for all patients.

We wonder whether they were also able to identify and exclude people with NTM colonization, i.e., persons with positive cultures for NTM who did not meet the American Thoracic Society disease criteria. It would have been interesting to know the trend in colonized persons. In a previous study from British Columbia (3), we found an increase in the number of NTM isolates mostly in persons with MAC colonization. This finding coincided with implementation of a new laboratory technique in 2000, which suggested that the new technology is more sensitive in detecting MAC. In contrast with the findings of Lai et al., our study from British Columbia

showed that the incidence in patients treated for NTM pulmonary disease (the group used as a surrogate of NTM disease) has been decreasing over time, which is reassuring.

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In Response: We thank Hernández-Garduño and Elwood for drawing attention to the issue of nontuberculous mycobacteria (NTM) colonization (1), which was not described in our study (2). Among 4,786 patients with NTM isolates treated at our hospital during 2000–2008, colonization was found in 76.9% (3,681), and only 23.1% (1,105) had NTM diseases according to the criteria of the American

Thoracic Society and Infectious Diseases Society of America (3).

Annual proportions of NTM isolates causing colonizations ranged from 29.2% in 2001 to 19.8% in 2007. During the study period, annual incidences of NTM colonization and disease increased from 6.6/100,000 inpatients and 2.7/100,000 outpatients in 2000 to 34.5/100,000 inpatients and 10.2/100,000 outpatients in 2008. *Mycobacterium avium* complex (MAC) was the most prevalent species, colonizing 1,282 (34.8%) of 3,681 patients. Annual proportions of MAC isolates causing colonization ranged from 20.0% in 2000 to 12.6% in 2006. Annual incidence of MAC colonization increased from 1.9/100,000 inpatients in 2000 to 12.3/100,000 inpatients in 2008; incidence of MAC disease also increased from 0.5/100,000 inpatients in 2000 to 2.1/100,000 inpatients in 2008. *M. abscessus*, the second most common species in our study (2), caused colonization and disease in 669 and 155 patients, respectively. Annual incidence of *M. abscessus* colonization and infection also increased from 1.49/100,000 inpatients and 0.3/100,000 outpatients in 2000 to 7.0/100,000 inpatients and 1.9/100,000 outpatients in 2008.

Our study and a previous study in British Columbia (4) suggest that improvement in diagnostic methods would detect increased incidence of NTM, especially of MAC; most isolates identified in these studies were associated with colonization. We also demonstrated a gradual increase in the incidence of all NTM, MAC, and *M. abscessus* over time in Taiwan, which may be attributable to increasing vigilance and awareness of these bacteria as human pathogens and the increased population of immunocompromised patients. Thus, clinicians should consider diagnosing NTM diseases with sensitive and advanced laboratory methods because of the increasing population of patients at risk.