pressure support and observe the patient’s intrinsic tidal volume and respiratory rate, using this as a starting point for ventilator adjustments. When such a patient demonstrates a preference for nonoptimal ventilator settings (eg, larger tidal volumes in ARDS or smaller tidal volumes in COPD), I defer to the patient’s brainstem and respiratory system. I have yet to see any convincing clinical data that this approach is inferior to any other, and I find that this approach results in a decreased use of sedation and paralysis in this ICU.

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Treatment of Legionella Lung Abscess

Unanswered Questions?

To the Editor:

We read with interest Johnson and Huseby’s (January 1997)1 case report on lung abscess caused by Legionella micdadei. We had previously reported a patient with AIDS and L pneumophila lung abscess who developed a recurrent bacteremia without pneumonia 3 months after therapy was discontinued.2 Thus, we are particularly interested in the therapy required by Johnson and Huseby’s patient. The report states that rifampin, ciprofloxacin, and erythromycin/clarithromycin were used. What were the doses, and how long was therapy continued? What follow-up did the patient have, and was there evidence of recurrence at any site?

Although Legionella organisms are increasingly recognized as pathogens in immunocompromised patients, treatment experience with Legionella cavitary pneumonia is not yet extensive enough to allow for firm recommendations regarding either the nature or duration of therapy. Furthermore, our experience raises the question of need for long-term suppressive therapy for Legionella in AIDS patients, similar to that given for other multiple intracellular infections, such as toxoplasmosis and cytomegalovirus. The experience of Johnson and Huseby would be a useful addition to the accumulated anecdotal information on treatment of this entity.

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REFERENCES


Nonspecific Airway Hyperresponsiveness in HIV Disease

To the Editor:

We read with interest the report by Wallace et al1 about bronchial hyperresponsiveness (BHR) in HIV disease. The authors concluded that HIV-infected patients do not have increased prevalence of BHR and that BHR is associated with asthma. The results of the few published reports on this topic are difficult to extrapolate because of the different methodologies, but their relevance increases when similar results are obtained. We previously reported that in a small group of HIV patients without related lung disease who were assessed by the methacholine test, BHR was more frequent than in a control group2 however, in AIDS patients with previous pulmonary disease, BHR was not more frequent in spite of basal pulmonary function in the mild obstructive range.3 In view of these results, we conducted a larger study involving 44 HIV-infected patients: a group of 23 with asymptomatic disease and 21 that fulfilled AIDS criteria (18 cases with Pneumocystis carinii pneumonia, pulmonary tuberculosis, and/or relapsing pneumonia; 3 with extrapulmonary disease). The control group consisted in 23 healthy volunteers. Data about previous asthma, tobacco use, and injected-drug use were obtained.

Basal pulmonary function was obtained (Vitalograph; Buckingham, UK) and later a methacholine test was performed with 2-min inhalation of diluent (phosphate-buffered saline) and 1, 5, and 25 mg/mL of methacholine administered via a nebulizer (Neb-u-mask; Hudson) connected to a 6 L/min oxygen source. Pulmonary function was measured 3 min after inhalation of each concentration. The test was finished when a 20% decrease in FEV1, was obtained or 25 mg/mL was inhaled. Decreases were compared with postdilutional inhalation. The provocative concentration of methacholine causing a 20% fall in FEV1 (PC20) was plotted by linear interpolation on semilogarithmic paper. BHR was considered mild when PC20 was lower than 25 mg/mL and moderate when lower than 8 mg/mL. The methacholine test was considered negative when a decrease in FEV1 of 20% was not obtained after the inhalation of 25 mg/mL methacholine. Nonpaired Student’s t and Mann-Whitney tests were used to compare the mean PC20 when BHR was established and χ2 or Fisher’s test to compare the number of patients with BHR between groups and qualitative variables.

No differences were observed between HIV-infected patients and controls in age (mean±SD, 34±8 yr vs 31±5 yr), sex, and tobacco use. No differences were observed in these characteristics between both groups of HIV patients. Only one asymptomatic HIV patient was asthmatic. Among the 44 HIV-infected patients, 27 were injected-drug users, 13 were homosexuals (two of them also injected-drug users), and 6 were heterosexuals. No differences were observed in risk factors for HIV between AIDS and asymptomatic subjects. Only two controls had a positive test (PC20=5 and 15 mg/mL), while 19 HIV-infected patients showed a PC20 lower than 25 mg/mL (p<0.01) and 9 lower than 8 mg/mL (p=0.19). The degree of BHR in each group and with injected-drug use risk are disclosed in Table 1.

No differences were observed between asymptomatic HIV-infected subjects and AIDS patients in the response to methacholine, but differences with the control group were maintained (p<0.05) in both cases. Injected-drug users showed more mild BHR than those who did not use drugs (p<0.05) and than controls (p<0.001). No differences were observed between those who did not use drugs and controls. Comparison of subjects with or without previous lung disease did not reveal any differences, but again differences with controls were maintained (p<0.05). Most of these differences disappeared when moderate BHR (≥8 mg/mL) was considered, but a statistically significant difference between asymptomatic HIV patients and controls persisted (p<0.05).

In our study, mild BHR was more prevalent (43.2%) in HIV patients than in controls (8.7%). When moderate BHR was considered, 20.5% of HIV patients had BHR, whereas only 4.3% of controls did. Our percentage of HIV patients with moderate BHR is similar to the 19.3% observed by Wallace et al,1 but the percentage of controls in our study is lower (4.3% vs 12.9%), which could