count of 315 cells/mm³. Biopsy of bone marrow demonstrated hypercellular marrow with mild hemosiderosis, mild eosinophilia, and megaloblastosis; a bone marrow sample obtained by aspiration and cultured on Lowenstein-Jensen medium was positive for acid-fast bacteria. By means of restriction endonuclease analysis of the 65-kDa hsp gene [5], we found that the isolate had a pattern compatible with that of M. mucogenicum. Identification was subsequently confirmed by high performance liquid chromatography of mycolic acids at the Centers for Disease Control and Prevention (Atlanta). The patient was treated with ethambutol and clarithromycin with a successful clinical evolution. Results of additional tests were all negative.

To our knowledge, this is the first reported case of a disseminated M. mucogenicum infection in a patient with idiopathic CD4⁺ T lymphocytopenia. A case of infection due to a related species has been previously reported in a man with lymphocytopenia and mycetoma due to M. chelonei and Exophiala jeaneselmei [6]. Mycobacterial infections due to other species are infrequently reported in patients without HIV infection [7, 8]. M. mucogenicum has been identified as a water contaminant in hospitals and has been implicated in cases of nosocomial infections [8]. Because this patient presented with fever of unknown origin 4 months before hospitalization, it is unlikely that this infection was iatrogenic. It is more probable that the infection was acquired by ingestion of water or contact with a contaminated environmental water source outside the hospital.

Although this patient responded to treatment with ethambutol and clarithromycin, no established optimal regimen exists for the treatment of M. mucogenicum infection [9]. It is commonly susceptible to ciprofloxacin, and drugs such as telithromycin, roxithromycin, clarithromycin [9], and linezolid [10] have demonstrated good in vitro activity against it. M. mucogenicum is most often encountered in environmental water sources, but it is also encountered in infected humans. The scope of disease caused by this organism could include disseminated infections, as it did in this patient.

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References


Hepatitis B Virus Infection Risks among Diabetic Patients Residing in Long-Term Care Facilities

Sir—We read with interest Rajagopalan’s review [1] of the wide range of serious bacterial and fungal infections that affect elderly patients with diabetes mellitus. In addition to being more susceptible to some infections due to reduced effectiveness of immune defenses, many elderly diabetic patients reside in long-term care facilities where exposure to certain infectious agents might be increased [2]. As numerous reports over the past 15 years have shown, hepatitis B virus (HBV) is a prime example of such agents, and HBV infection should be added to the list of infections that providers caring for elderly diabetic patients need to consider [3, 4].

Recently, we and our colleagues described 3 separate outbreaks of HBV infection in 2 nursing homes and an assisted living center [4]. Approximately 30 acute HBV infections and 2 deaths occurred among diabetic patients who received routine fingersticks from nursing staff in these facilities. Transmission was attributed to the use of shared equipment and lapses in aseptic technique or infection control practices associated with blood glucose monitoring. Initial symptomatic cases were not diagnosed, reported, or investi-
likely become more prevalent among newly admitted long-term care residents. Because infection control errors that facilitate HBV transmission between diabetic patients also have the potential to spread HCV [7] or HIV, these risks demand increased attention.

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References


Efficacy of Echinilin for the Common Cold

Str—As coinvestigator in a clinical study of echinacea [1] discussed in the recent article by Caruso and Gwaltney [2], I would like to point out numerous errors in their characterization of our study as “not well designed.” They claim that our study lacked proper randomization, intention-to-treat analysis, proof of blinding, and validated case definition. Our study was misrepresented in all of those points.

With respect to random assignment, our study states that “subjects were randomly assigned to receive either the Echinacea or placebo” [1, p. 77]. The method we used is the same as that used in the study by Barrett et al. [3], which Caruso and Gwaltney [2] concluded met their criteria for randomized assignment.

With respect to intention-to-treat analysis, again, the authors failed to note that our results, which were based on intention-to-treat, were published alongside the per protocol results. Every figure in our paper contained intention-to-treat analysis as well as the per protocol analysis. The discussion of both results is included.

With respect to blinding, our study states that “blinding was also maintained adequately during the treatment period. On completion of the study, ~50% of the subjects in both groups could not guess correctly whether they had received echinacea or placebo” [1, p. 78]. Our assessment of blinding is almost identical to that made in the study by Taylor et al. [4], which Caruso and Gwaltney [2] considered to have met their criteria for proof of blinding.

With respect to the validated case definition, once again, Caruso and Gwaltney [2] failed to note that the symptom scale used in our study is the same 10-point Likert scale used in Barrett et al. [3]. In our study, the subjects were enrolled at onset of the first symptom, whereas in the study by Barrett et al. [3], study subjects were enrolled after the onset of 2 symptoms. It should be noted that the random-