

R. helvetica (5), *R. slovacica* (6), and *R. felis* (7). The serologic findings indicated antibodies at a higher level to *R. aeschlimannii* than to other tested species. *R. aeschlimannii* is phylogenetically distant from *R. conorii* but is closely related to *R. rhipicephali* and *R. montanensis*, which have never been described as human pathogens. This patient appeared to have a typical case of *R. conorii* infection, with seasonal and geographic characteristics favoring this diagnosis (3). This case was clinically and epidemiologically mistaken for *R. conorii* infection, suggesting that *R. aeschlimannii* may be another cause of Mediterranean spotted fever in Morocco.

The systematic identification of rickettsial species in human infections continues to increase the number of recognized human pathogens (3). This finding has demonstrated once again that more than one species or serotype of tick-transmitted rickettsia may be prevalent in the same area, as observed, for example, with *R. slovacica*, "*R. mongolotimonae*," and *R. conorii* in southern France (3); *R. africae* and *R. conorii* in sub-Saharan Africa (8); and *R. conorii* and Israeli spotted fever rickettsia in Sicily and Portugal (9). *Rickettsia* species first identified in ticks should be considered as potential human pathogens, as all recently described tick-transmitted rickettsiae pathogenic for humans were initially found in ticks and were considered nonpathogenic for several years (3).

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Cost-Effective Screening for Trichomoniasis

To the Editor: I read with interest a recent article in your journal, "*Trichomonas vaginalis*, HIV, and African Americans" (1), and I commend the authors' suggestion to implement screening and reporting of trichomoniasis for high-risk populations.

In the article, a cost-effective screening approach is mentioned, which includes culturing only for those women whose wet-mount tests are negative. In 1999, my colleagues and I reported on the validity of this method for diagnosing trichomoniasis in women (2). During our study, an additional vaginal swab was collected during the pelvic examination and placed into a glass tube. If the wet

mount was negative, this swab was later added to a culture pouch for *T. vaginalis*. We found no statistically significant difference in the sensitivity of this method compared with that of adding swabs immediately to pouches at bedside. This method of delaying the second test until the results of the first test are known should be considered in screening women for trichomoniasis, especially in high-prevalence populations.

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Reply to Dr. Schwebke

To the Editor: We welcome Dr. Schwebke's thoughtful comments about decreasing the cost of screening for *Trichomonas vaginalis*. Dr. Schwebke and her colleagues have demonstrated that storing a vaginal swab for 15–20 minutes in a glass tube at room temperature does not affect the viability of *T. vaginalis* or reduce the sensitivity of subsequent culture. This finding shows that vaginal swabs may be stored briefly while a wet-mount preparation is made and examined. If the wet mount is negative for *T. vaginalis*, the stored swab can then be processed for culture. If the wet mount is positive for *T. vaginalis*, no further culture of the specimen is needed, thereby reducing unnecessary costs. Given that the prevalence of this infection often exceeds 20% in high-risk populations, this approach can reduce costs substantially without compromising the accuracy of the tests. Any method that reduces the cost of diagnosis will advance further

screening for trichomoniasis and promote the ultimate goal of implementing intervention efforts.

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Hot-Tub–Associated Mycobacterial Infections in Immunosuppressed Persons

To the Editor: I read with interest the report by Mangione et al. regarding *Mycobacterium avium* infection in a Colorado family who used an inadequately sanitized hot tub (1). The authors noted that the source of the *M. avium* complex was not clear, although the reservoir did appear to have been the hot tub.

Twenty years ago, I helped treat a patient with a local infection caused by *M. fortuitum* in his amputation stump (2). The patient had sat in his hot tub postoperatively three to four times per week. Although he had added disinfectants as recommended by the manufacturer, he had not cleaned the tub mechanically at any time during the incubation period of his infection. We recovered what appeared to be the same strain of *M. fortuitum* from the abscess on his amputation stump and specimens from the hot tub water and filter. However, we could not recover any mycobacteria from his or his neighbor's tap water.

Three years after our experience with this patient, *M. chelonae* was found to cause colonization of sputum of patients with cystic fibrosis after they had been treated in a hydrotherapy pool (3).

Very recently, an outbreak of 110 cases of furunculosis was attributed to *M. fortuitum* contamination of a footbath at a nail salon (4).

These experiences indicate the absolute need for careful cleaning of hot tubs. Not only are immunosuppressed patients at risk for atypical mycobacterial infections but even otherwise healthy persons may be susceptible.

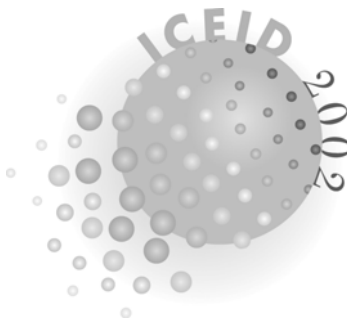
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