

LETTERS

Spelling *Pneumocystis* *jirovecii*

To the Editor: Our 2002 article in *Emerging Infectious Diseases* about nomenclature changes for organisms in the genus *Pneumocystis* (*I*) has been widely cited and probably will remain a source for persons seeking information about this subject. Therefore, we need to correct an error in 1 of the species names presented in our article and in the 1999 article by Frenkel (2) on which our article was based. In the 1999 article, Frenkel proposed that the species of *Pneumocystis* found in humans be named to honor the Czech parasitologist, Otto Jirovec. The 1999 article was his second proposal for this change. In 1976, he first named the human pathogen *Pneumocystis jiroveci* (3), at which time it was classified as a protozoan and therefore named according to the International Code of Zoological Nomenclature. By 1999, it had become clear that the organisms in the genus *Pneumocystis* are fungi, which are named according to the International Code of Botanical Nomenclature (ICBN) (4). Differences between the International Code of Zoological Nomenclature and ICBN resulted in the realization of an error in the species epithet proposed by Frenkel in 1999, and our 2002 article contained this error. Frenkel's 1999 article should have modified the species epithet from "jiroveci" to "jirovecii," (ICBN Articles 32.7 and 60.11 and Rec. 60C.1b). The correct and valid name under ICBN is *Pneumocystis jirovecii*. Redhead et al. further explain the basis for this correction (5).

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DOI: 10.3201/eid1503.081060

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Letters

Letters commenting on recent articles as well as letters reporting cases, outbreaks, or original research are welcome. Letters commenting on articles should contain no more than 300 words and 5 references; they are more likely to be published if submitted within 4 weeks of the original article's publication. Letters reporting cases, outbreaks, or original research should contain no more than 800 words and 10 references. They may have 1 Figure or Table and should not be divided into sections. All letters should contain material not previously published and include a word count.

Hypothetical *Pneumocystis* *jirovecii* Transmission from Immunocompetent Carriers to Infant

To the Editor: The recent dispatch article by Rivero et al. reports the transmission of *Pneumocystis jirovecii* from immunocompetent grandparents to their granddaughter (*I*). The authors' conclusion was based on 2 facts: the grandparents were carriers but neither the parents nor the child's brother was a carrier, and the *P. jirovecii* genotype observed in the grandparents was identical to that found in the infant. In our opinion, the data provided by the authors do not support the conclusion that transmission has occurred. First, the 2 markers used for typing show a small number of alleles and thus provide low discrimination among isolates (2). Consequently, the *P. jirovecii* isolates present in the grandparents and in the infant may have been epidemiologically unrelated. Second, the frequency of occurrence of the different genotypes obtained was not investigated. The presence of the same genotype in the grandparents and in the infant may result from a high frequency of this genotype in the geographic area where the family lived. In fact, the use of a validated typing method and the analysis of unlinked control patients have proven necessary in other studies to demonstrate transmission of *P. jirovecii* (3–7). We believe that the reported transmission event remains a hypothesis.

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DOI: 10.3201/eid1503.081350

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In Response: We appreciate the comments from Hauser et al. (1) regarding our article that reported a case of *Pneumocystis jirovecii* transmission from colonized grandparents to their infant granddaughter (2). We agree with the authors that the 2 markers used for typing, which are described in our article, present a small number of alleles and thus provide low discrimination between isolates. However, these typing methods have been validated and have proven useful for molecular epidemiologic applications in *P. jirovecii* colonization studies (3,4). Unfortunately, other typing methods that can identify a high number of alleles, such as the sequence analysis of the internal transcribed spacer no. 1 and 2 gene regions, could not be used in our study because a low amplification rate has been observed for these regions when such methods are used to study colonized subjects (5). On the other hand, the multitarget single-strand conformation polymorphism method has been used only in patients with *Pneumocystis pneumonia*, and its usefulness for epidemiologic studies in colonized subjects has not been proven (6). For our study, we think that genotyping analysis of the mtL-SU rRNA gene together with the dihydropteroate synthase (DHPS) gene provided sufficient epidemiologic information because this strategy allows identification of 24 different combinations of genotypes. However, no typing method is able to demonstrate interhuman *P. jirovecii* transmission conclusively because a common environmental source of infection cannot be ruled out in any case. Therefore, as we noted in our article, “We cannot exclude the possibility that the cases described were infected by the same environmental source,” and we only hypothesized that “the infant was infected by *P. jirovecii* through close contact with her grandparents.” However, we continue to think that the airborne transmission of *P. jirovecii* from the grandfather to the grandmother

and the infant is the most probable explanation based on genotype data. Also, all persons in close contact with the infant were studied, and only her grandparents were colonized by *P. jirovecii*. Future research is needed to assess the importance of colonized subjects in the *P. jirovecii* transmission to susceptible hosts.

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DOI: 10.3201/eid1503.081672

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