

## LETTER TO THE EDITOR

Dear Editor:

There is a surprise on page 1475 of the 2004 edition of *Current Medical Diagnosis and Treatment: Pneumocystosis (Pneumocystis jiroveci Pneumonia)*.<sup>1</sup> In his general conclusions, the author of the chapter states that *Pneumocystis carinii* is a fungus found in the lungs of both wild and domesticated animals and that *Pneumocystis jiroveci*, the species that affects humans, is distributed the world over. The source cited for these declarations is an article by Stringer et al., published in 2002 in the journal *Emerging Infectious Diseases*.<sup>2</sup>

*P. carinii* was first described in 1909 by Carlos Chaga, who mistook it for a cystic form of *Trypanosoma cruzi* in a guinea pig experimentally infected with *T. cruzi*. In 1910, the Italian-Brazilian Antonio Carini observed similar cysts in rats with experimental trypanosomiasis, suspecting, however, that the cysts were attributable to an unknown agent. He sent samples to his colleague Laveran, of the Pasteur Institute, for evaluation. In 1912, Delanoe and Delanoe, two students of Laveran, found similar cysts in trypanosome-free rats. They named this new agent *P. carinii*, paying homage to the Brazilian researcher.

*P. carinii* was first associated with clinical pneumonia in humans just after the Second World War, when it was found in malnourished European orphans living in close quarters. From then until the 1980s, pneumonia caused by *P. carinii* was rare, occurring primarily in cancer patients whose treatments had rendered them immunocompromised, or in patients with congenital immunologic deficiencies. Then the incidence of *P. carinii* increased markedly, coinciding with the advent of AIDS.

New molecular biology techniques developed over the last decade for analyzing DNA have been used to demonstrate that pneumocystis is a fungus, albeit a unique one that contains no ergosterol and is difficult to culture. Not long after pneumocystis had been appropriately classified, additional DNA studies revealed that the various strains of pneumocystis differ considerably, a fact which, in 1999, led Frenkel<sup>3</sup> to propose the name *P. jiroveci*, as a tribute to the Czech parasitologist Otto Jirovec, who the author credits with describing the agent in humans. The 2002 article by Stringer et al.<sup>2</sup> supported Frenkel's suggestion and the name was subsequently adopted by this popular medical text.<sup>1</sup>

In a letter to the editor of the journal in which Stringer et al. suggested the name change, Walter T. Hughes of the University of Tennessee questioned the suggestion. He based his challenge on two points: 1) The rationale behind the choice of "jiroveci" was unconvincing (the International Code of Botanical Nomenclature states that "the nomenclature of a taxonomic group is based upon priority of publication") and 2) the article published by Jirovec in 1952 was not the first to report *P. carinii* infection in the lungs of humans; that distinction belongs to two German researchers who published their work in 1942.

We will stick with Antonio Carini. Remember the recent and ongoing debate regarding Santos-Dumont vs. the Wright brothers? Any similarity is more than mere coincidence.

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## REFERENCES

1. Hamill RJ. *Infectious diseases: Mycotic*. In: Tierney LM; MaPhee SJ; Papadakis MA (Eds). *Current diagnosis and treatment*. Mc Graw Hill , New York, 2004, p. 1471-85
2. Stringer JR, Beard CB, Miller RF, Wakefield AE. A new name (*Pneumocystis jiroveci*) for *Pneumocystis* from humans. *Emerg Infect Dis*. 2002; 8: 891-6.
3. Frenkel JK. *Pneumocystis pneumonia, an immunodeficiency-dependent disease (IDD): a critical historical overview*. *J Eukaryot Microbiol*. 1999; 46: 89S-92S
4. Hughes WT. *Pneumocystis carinii vs. Pneumocystis jiroveci: another misnomer*. *Emerg Infect Dis*. 2003; 9: 276-7.