

**Bronchiectasis Due to *Flavimonas*  
*Oryzihabitans* in an  
Immunocompetent Patient**

**To the editor:** *Flavimonas oryzihabitans* is an uncommon pathogen described in the literature as an infectious agent almost always linked to implanted or indwelling materials or to invasive procedures. We present a case of bronchiectasis due to infection by *F oryzihabitans*.

An 86-year-old woman suffering from diffuse bronchiectasis with respiratory insufficiency secondary to infection was transferred from another hospital. Upon admission she was receiving

treatment with bronchodilators, inhaled corticosteroids, and antibiotics (ceftazidime and tobramycin). No mention of systemic corticosteroids was included in the reports provided by the transferring hospital. After an evaluation of the patient's progress and a hemogram (10 500 leukocytes), antibiotics were withdrawn after 10 days of treatment. When the patient subsequently experienced an exacerbation, we decided to collect a sputum sample and initiate systemic corticosteroid therapy. The sputum culture grew *F oryzihabitans*. A new course of treatment with cefepime, amikacin, and ciprofloxacin achieved a favorable outcome in the following days. Testing showed *F oryzihabitans* to be susceptible to all the antibiotics included. On the 12th day of treatment, the aminoglycoside was withdrawn due to hearing loss, while the other 2 drugs were continued for 6 more days, until discharge.

*F oryzihabitans* is a motile gram-negative aerobic bacillus with a single flagellum.<sup>1</sup> It is found in soil and thrives in moist environments (including water pipes and inhalation therapy equipment). In one case a bath sponge was identified as the vehicle of infection.<sup>2</sup> Although *F oryzihabitans* had been isolated in wounds, abscesses, tissue, body fluids and hospital equipment, it was at first not considered pathogenic. Many cases of infection have been described, mainly in patients with implanted or indwelling materials,<sup>3</sup> those who underwent aggressive procedures (surgery, dialysis, invasive tests),<sup>1,3,4</sup> immunocompromised patients (patients with blood disease, acquired immunodeficiency syndrome, renal insufficiency, neoplasia, cirrhosis, or those receiving corticosteroid therapy, etc),<sup>1,4</sup> and especially in hospital environments.

The number of antibiotics active against *F oryzihabitans* has decreased steadily. A little over a decade ago it was susceptible to ampicillin, trimethoprim sulfamethoxazole, piperacillin, aminoglycosides, tetracyclines, third-generation cephalosporins, and quinolones, and was only resistant to first- and second-generation cephalosporins.<sup>1</sup> Resistance to cefixime and ampicillin, and to a lesser degree, tetracyclines, trimethoprim sulfamethoxazole, and aztreonam emerged some years later.<sup>3</sup> Recently resistance to amoxicillin-clavulanic acid and chloramphenicol has emerged.<sup>2,5</sup> Finally, a strain resistant to all  $\beta$ -lactams and susceptible only to aminoglycosides, tetracyclines, and quinolones was described last year.<sup>4</sup>

The case we present involves bronchiectasis due to infection by *F oryzihabitans* infection. This bacterium was isolated and given a different name 25 years ago, when it was not considered pathogenic. Its presence as an infectious agent has been observed in the upper airway,<sup>4</sup> in the lower respiratory tract leading to pneumonia (nosocomial and community-acquired, in both immunocompromised and immunocompetent patients), and in the pleural space (empyema).<sup>6</sup>

This patient has been the only one in whom this bacterium has been isolated in our hospital. We believe the infection to have been nosocomial, in view of the time the patient had spent in hospital and the greater incidence of such infections in hospital environments.

Another hospital in our health care area also reported a case of the same etiology,<sup>5</sup> but comparison of susceptibility tests ruled out a common origin. It must be emphasized that the patient showed none of the characteristics associated with immunosuppression, except for slight malnutrition and the use of corticosteroids, administered almost exclusively by inhalation (she had only received 2 intravenous doses). The failure of the first antibiotic treatment (ceftazidime and tobramycin), especially in view of the susceptibility of the strain to both antibiotics as shown by susceptibility testing, is noteworthy. Possible explanations are that *in vitro* and *in vivo* conditions differ, that it is difficult for antibiotics (especially aminoglycosides) to reach high concentrations in bronchial secretions (especially in bronchiectasis), or that duration of treatment was insufficient.

In summary, we believe that this case reinforces the argument for considering *F oryzihabitans* to be pathogenic under many conditions and in many tissues, and we advocate the use of susceptibility testing to correct empirical antibiotic therapy, given the constant emergence of resistances and their differing local patterns.

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