LETTERS TO THE EDITOR

Pulmonary Infection Due to Nocardia nova

To the editor: The genus Nocardia includes various species that have been implicated in human infection. N asteroides is the species most frequently isolated in patients with infection by Nocardia. During a recent taxonomical review, 2 new species were added to this genus: N farcinica and N nova.1 Below we describe a case of pulmonary disease due to N nova which contributes to the small body of literature on the role of this microorganism in pulmonary infections.2

The patient was a 78-year-old man with a personal history of rheumatic polymyalgia undergoing treatment with 10 mg/day of oral corticosteroids for more than 9 months. He also met clinical criteria for chronic bronchitis, with grade II/IV dysnea in stable condition. He came to our hospital complaining of dysnea with minimal effort which had steadily increased over the 4 weeks prior to admission. He also showed signs of orthopnea and paroxysmal nighttime dysnea. Up to 90 mg/day of oral prednisone was prescribed to treat the increase in dysnea and the rheumatic polymyalgia. The patient reported having cough and purulent sputum as well as a fever of around 38 °C on the days prior to admission. On physical examination the patient was alert and oriented; his blood pressure was 160/90 mm Hg and temperature was 38 °C. Dependent edema with pitting was noted along the full length of the lower extremities (including the groin). Basal crackles on both sides, best heard over the lower third of the right hemithorax, were detected on pulmonary auscultation. Respiratory rate was 24 breaths/min. Arterial blood gas analysis showed an arterial carbon dioxide pressure of 35 mm Hg, an arterial oxygen pressure of 55 mm Hg, an arterial pH of 7.44, and oxygen saturation at 89%. A chest x-ray showed edema persisted although it had gradually decreased in the last days of his stay. He was afhrile and chest x-rays revealed satisfactory improvement.

N nova was first isolated and described by Tsukamura6 in 1982. This group is mainly characterized by its sensitivity to ampicillin and erythromycin.6,7 N nova has been described as the cause of skin infection and sinusitis, as well as infection through catheters. Three cases of pneumonia caused by N nova have also been reported: one after a heart transplant coinfected with Aspergillus fumigatus,2 another in a patient with lung cancer,3 and a third case, similar to the one presented here, of a 52-year-old Japanese woman previously treated with steroids and cyclophosphamide for polymyositis.4 The application of appropriate identification methods, among them techniques from molecular biology, increases the number of isolates of this identified microorganism.

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Figure. Profile of bands obtained by polymerase chain reaction/restriction fragment length polymorphism of gene hsp65 usingMsp1 and Hinf1 restriction enzymes. Lane 1: molecular weight marker VIII (Roche); lane 2: restriction fragment using Hinf1 enzyme; lane 3: restriction fragment using Msp1 enzyme.

with trimethoprim-sulfamethoxazole was initiated, and the patient responded favorably. At discharge, edema persisted although it had gradually decreased in the last days of his stay. He was afhrile and chest x-rays revealed satisfactory improvement.