

## Community-acquired *Pseudomonas aeruginosa* pneumonia in a previously healthy young woman

To the Editor,

*Pseudomonas aeruginosa* is a rare cause of community-acquired pneumonia (CAP) in an immunocompetent host. *P. aeruginosa* CAP is prone to develop septicemia, is often rapidly progressive.<sup>[1,2]</sup> Mortality may be as high as 50%.<sup>[3]</sup> This report describes a case of *P. aeruginosa* CAP in a previously healthy woman.

A previously healthy 27-year-old-woman, a nonsmoker referred to our hospital with a 4-day history of cough, high fever, and dyspnea.

A pulmonary physical examination indicated the following: temperature, 38.5 C; blood pressure, 140/80 mmHg; pulse rate, 138 beats/min; and a respiratory rate of 44 breaths/min. Blood oxygen saturation level was 88%. A pulmonary physical examination revealed rales at the right lung. Chest radiograph indicated heterogeneous and homogeneous density in the all zones of the right lung. The initial abnormal serum laboratory findings were as follows: Hgb: 10.4 and elevated C-reactive protein at 201, 5 mg/L. She was admitted to the intensive care unit.

Moxifloxacin treatment was started empirically. Radiologic and clinical response was partial with this treatment. *P. aeruginosa* was isolated in the sputum. Blood cultures were negative. Antibiotherapy was changed to imipenem-cilastatin due to antibiogram, and the patient developed dramatic clinical, radiological, and laboratory response to this therapy.

*P. aeruginosa* is frequently found in soil, water, plants, and moist environments. Henderson *et al.* suggested that *P. aeruginosa* CAP should be suspected in any patient who has environmental risk factors and has Gram-negative bacilli seen on the Gram stain of the sputum sample, and who presents with pneumonia with overwhelming sepsis.<sup>[4]</sup>

Any lobe of the lung can be involved, but two-thirds of the patients experience involvement of the right upper lobe.<sup>[1,5]</sup>

Initial empirical antibiotic treatment decision is controversial in previously healthy patients. Sibila *et al.* suggested that patients who received antipseudomonal antimicrobials within the first 48 h of admission were more likely to survive at 30 days.<sup>[3]</sup>

A physician should consider *P. aeruginosa* CAP in previously healthy individuals with critical clinical conditions and with right upper lobe infiltrations in the lung. It would be better to start empirical antimicrobial treatment against *P. aeruginosa* initially.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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Access this article online	
Quick Response Code:	Website: <a href="http://www.eurasianjpulmonol.com">www.eurasianjpulmonol.com</a>
	DOI: 10.4103/ejop.ejop_24_19

**How to cite this article:** Şimsek A, Babalık M, Mor GÇ. Community-acquired *Pseudomonas aeruginosa* pneumonia in a previously healthy young woman. Eurasian J Pulmonol 2019;21:76-7.

**Received:** 25-04-2018 **Revised:** 22-07-2018 **Accepted:** 22-07-2018

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