

Cystic Bronchiectasis in a 38 year old female

**Theodoros Karampitsakos¹,
Myrsini Melachroinou¹,
Maria Kaponi¹,
Serafeim Chrysikos¹,
Argyris Tzouvelekis²,
Demosthenes Bouros²,
Katerina Dimakou¹**

¹5th Pneumology Department, Athens Chest Hospital "Sotiria", Greece

²First Academic Department of Pneumology, Athens Chest Hospital "Sotiria", Medical School, National and Kapodistrian University of Athens, Athens, Greece

A 38 year old non-smoker female was admitted to our hospital 7 months ago because of severe worsening of her symptoms: cough, purulent sputum, dyspnea, wheezing, fever, fatigue and hemoptysis. The patient had symptoms since childhood and recurrent exacerbations all her life. At the age of 28, she was diagnosed with bronchiectasis and *Pseudomonas aeruginosa* was isolated in sputum. During the last ten years the patient did not refer to a chest physician for follow up, she was self-prescribing antibiotics during exacerbations of her symptoms (3 times/year).

Her clinical examination on admission to the clinic revealed: SaO₂ 88%, FiO₂ 21%, HR 120 beats/min, RR 20/min and wheezing. The patient received antipseudomonal IV antibiotics, ceftazidime and amikacin, nebulized bronchodilators, mucolytics, oxygen therapy, physiotherapy. Sputum culture and bronchial washing grew again *Pseudomonas aeruginosa*, indicating chronic infection. HRCT was performed showing severe bilateral cystic bronchiectasis lesions affecting all lobes, more excessive in middle lobe, lingula and lower lobes bilaterally. Spirometry showed a severe obstructive pattern. Patient's symptoms improved and she was discharged from hospital.

Subsequently, she was under follow up in the outpatient clinic. A complete etiologic investigation of bronchiectasis was performed and resulted to post infective etiology (severe pertussis in infancy). Eradication treatment was administered with ciprofloxacin 750mg×2 for 14 days, followed by nebulized colistin 1MU twice a day for 3 months. She then started chronic suppressive treatment with Azithromycin (250 mg 3 times a week). After these therapeutic interventions, a significant improvement was observed: improvement of dyspnea and fatigue, reduced sputum volume, improvement of sputum purulence, without any new exacerbation during the last 7 months.

Collectively, eradication treatments with systematic and nebulized antibiotics is indicated in patients with chronic infection with *Pseudomonas aeruginosa* as well as long term antibiotics for anti-inflammatory effect, in order to improve symptoms and reduce exacerbations.



FIGURE 1. HRCT was performed showing severe bilateral cystic bronchiectasis lesions affecting all lobes, more excessive in middle lobe, lingula and lower lobes bilaterally.

Correspondence:

Theodoros Karampitsakos,
5th Pulmonology Department,
Athens Chest Hospital "Sotiria", Greece
E-mail: thodoriskarampitsakos@gmail.com