

7. Kongres Hrvatskog  
torakalnog društva

7<sup>th</sup> Congress of Croatian  
Thoracic Society

**TORAKS**

2017

Hotel Westin Zagreb  
**26. – 29. TRAVANJ / APRIL**



## **LUNG ABSCESS: AN EARLY COMPLICATION OF LUNG TRANSPLANTATION IN CYSTIC FIBROSIS PATIENT**

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Introduction: Lung transplant recipients (LTRs) are at increased risk for both community-acquired and nosocomial pathogens, which may develop at various time points. Bacterial infection is one of the most serious complications in LTRs and a significant determinant of transplantation outcome, with bacterial pneumonias being the leading cause in this category.

We report a case of multidrug-resistant (MDR) *Acinetobacter baumannii* and *Pseudomonas aeruginosa* infection presenting with lung abscess in LTR with cystic fibrosis (CF).

Case Summary: The patient is a 22-year old woman diagnosed with CF at the age of three years who entered

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end-stage lung disease in 2011, age 16. A double lung transplantation under ECMO support was performed on January 17, 2015 in AKH Wien. The postoperative course was prolonged due to a reperfusion oedema with the need for continuous ECMO support and complicated with MDR *Acinetobacter baumannii* and *Pseudomonas aeruginosa* infection. Computed tomography (CT) of the chest revealed two abscesses on the left lung, one in pleural cavity and other in lung parenchyma.

Lung abscess was drained with a pigtail catheter and antibiotic therapy was initiated: colistin and piperacilin/tazobactam intravenously (i.v.) with tobramycin inhalations. The treatment led to significant reduction of the abscess cavity so after ten days pigtail catheter was removed. After thirty days, intravenous antibiotic treatment was replaced with colistin and tobramycin inhalations. In October 2015, control bronchoscopy failed to reveal of MDR *A. baumannii* and *P. aeruginosa* infection, therefore antibiotic treatment that lasted for six months was discontinued. At the same time, CT chest scan showed complete resolution of abscess. Two years after the surgery, the patient is in a very good condition with satisfactory lung function, receiving standard therapy for CF patients after LT.

**Conclusion:** Bacterial infections are one of the most important complications in LTRs significantly determining the outcome of the procedure.

The goal of LT in all patients is to prolong survival and to improve the quality of life, therefore it is advisable to have an effective strategy in dealing with complications of LT, primarily post-transplant infections. In our experience, lung abscess in lung transplant recipients (LTRs) with CF can be successfully treated with prolonged antibiotic regimen.