

K. PNEUMONIAE MBL CARRIERS STATISTICS: GROWING CONCERN NOT ONLY FOR PNEUMOLOGY SPECIALISTS

Cieplak M, Chmielewska M, Wardyn K, Zycinska K.

Department of Family Medicine, Internal and Metabolic Diseases, Medical University of Warsaw, Systemic Vasculitis Outpatient Clinic.

Czerniakowski Hospital, Stępińska 19/25, 00-187 Warszawa, Poland tel./Fax: +48 22318 63 25

The rate of *Klebsiella pneumoniae* resistance to antibiotics is rising Worldwide. The MBL *K. pneumoniae* strain produces enzymes able to neutralize the effect of carbapenems, causing serious concern to the Public Health, since alternative therapeutic options remain limited and the mortality is rising.

The aim of the study was to scrutinize *Klebsiella pneumoniae* MBL cases from Internal Medicine Ward of Czerniakowski Hospital between 01.12.2015 - 12.09.2016. Descriptive statistics methods were used to analyze demographic and clinical characteristics of 38 patients. Rectal smear, sputum, blood, urine culture was conducted to obtain primary results. Confirmation of MBL strain was performed with PCR.

Group consisted of 11 men and 17 women. Mean age was 77.4 years old, mean period of hospitalization:17.7 days, previous hospitalization was on average 24 days earlier. The most common cause of hospitalization was pneumonia (n=15). Important concomitant diseases were Heart Failure (n=33), kidney injury (n=19), pulmonary diseases (n=12): chronic obstructive pulmonary disease (n= 7), asthma (n=3), emphysema (n=2).

Pneumonia, pulmonary diseases, heart failure, previous hospitalizations, kidney injury predispose to *K. pneumoniae* MBL carriage. It is important to screen, and if positive - isolate, patients of high risk of carriage to limit the spread of resistant strains.