Antibiotic treatment in community and hospital acquired pneumonia complicated by *Clostridium difficile* infection

*Clostridium difficile* infection (CDI) is one of the most common gastrointestinal complications after an antimicrobial treatment. It is estimated that CDI after the pneumonia treatment is connected with a higher mortality than other causes of hospitalization. The aim of the study was to assess the relationship between individual antibiotic intake and mortality of *Clostridium difficile* infection after pneumonia treatment. A retrospective analysis of 217 patients with CDI in the Internal Medicine Ward, Medical University of Warsaw was conducted. In 94 patients who were treated for pneumonia CDI was diagnosed. To emphasize a correlation between mortality of CDI and the antibiotic therapy the fraction test was performed. 94 patients 52% went through a severe and complicated infection. Among severe cases 62.5% (n=30) of records were provided respectively with ceftriaxone, 45.8% (n=22) ciprofloxacin, 41.6% (n=20) amoxicillin with clavulanic acid, 29.2% (n=14) clarithromycin, 22.9% (n=11) cefuroxime, 20.8% (n=10) imipenem. The fraction test revealed statistically significant mortality rate in a group of patients who were provided with ceftriaxone. The study shows there is a correlation between the antibiotic treatment of pneumonia and mortality rate in patients who developed CDI due to the chosen therapy. There was a significant mortality rate according to ceftriaxone intake; therefore, it should be avoided in patients with the higher risk of CDI.

**Biography**

Katarzyna Zycinska, MD, PhD. Professor graduated from the Medical University of Warsaw and is board certified in internal medicine and family medicine. Professor Zycinska is currently the Head of Chair and Department of Family Medicine, Medical University of Warsaw. She is a member of the Polish Internal Medicine Society and a board member of Polish Family Medicine Society. She is also a member of the College of Family Physicians in Poland and of the Association of Medical Education in Europe. Her main research areas are systemic vasculitis and nephrology. She is published in leading international medical journals.

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