OSCOMIAL PNEUMONIA IS RECOGNISED AS A persistent problem in the care of critically ill patients. It is the second most common hospital- or healthcare-associated pneumonia [1], with an incidence ranging 4–50 cases per 1,000 admissions in community hospitals and general medical wards [2], and 120–220 cases per 1,000 admissions in some intensive care units (ICUs) [3]. Clinical and diagnostic approaches for the management of nosocomial pneumonia have been developed that make the best use of available antimicrobial treatments and minimise the increase in microbial resistance rates, a rising challenge to effective management.

As a resource for the practicing clinician, the American Thoracic Society and the Infectious Diseases Society of America have updated their guidelines for treating nosocomial pneumonia [4]. Additionally, at the 16th Annual Congress (Munich, Germany) of the European Respiratory Society, a symposium sponsored by Janssen–Cilag, Pfizer, Wyeth and Novartis. H. Lode has received grants from and is a speaker for Bayer AS, Santarti–Aventis, Janssen–Cilag, Pfizer, Wyeth and Novartis.

INTRODUCTION

H. Lode

Nosocomial pneumonia is recognised as a persistent problem in the care of critically ill patients. It is the second most common hospital- or healthcare-associated pneumonia [1], with an incidence ranging 4–50 cases per 1,000 admissions in community hospitals and general medical wards [2], and 120–220 cases per 1,000 admissions in some intensive care units (ICUs) [3]. Clinical and diagnostic approaches for the management of nosocomial pneumonia have been developed that make the best use of available antimicrobial treatments and minimise the increase in microbial resistance rates, a rising challenge to effective management.

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The emerging antibiotic resistance in the ICU is driving doctors to optimise antibiotic therapy by using a combination of antibiotics, although clinical data in support of this are lacking. Combination therapy is thought to have a broader antimicrobial spectrum, synergism and decreased emergence of resistance, with reduced associated costs and toxicity. The main strategy for treating any suspected nosocomial pneumonia, whether via combination therapy or monotherapy, should be early, appropriate and adequate, based on multidrug-resistant risk factors and local resistance patterns. De-escalation should be based on both clinical response and microbiological results. If pneumonia is confirmed, the duration of therapy should be limited to 7–8 days; if not, antibiotics should be stopped.

In summary, the current group of experts agreed that the cardinal principles of clinical management of nosocomial pneumonia are: 1) to provide early, appropriate and adequate therapy based on risk factors for multidrug-resistant pathogens and local risk factors; 2) to assess the response and de-escalate therapy based on both clinical response and cultures as well as Gram stains (antibiotics should be stopped if there is no evidence of pneumonia); 3) to use extended infusions of β-lactams to increase efficacy, minimise the emergence of resistance and decrease cost and toxicity; 4) to avoid extended (>7–8 days) antibiotic therapy in patients who respond; and 5) to emphasise prevention with zero tolerance for avoidable risk factors.

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