Introduction

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Respiratory tract infections (RTIs) remain one of the most common infections seen in general practice and hospital medicine. It is estimated that more than 20% of general practice consultations refer to RTI. Infections of the upper respiratory tract like otitis media, tonsillitis, pharyngitis and sinusitis are very common especially in children where they are a major indicator for the prescription of oral antimicrobial agents. Chronic bronchitis is common and affects about 10-25% of the adult population while community-acquired pneumonia is estimated to cause approximately 1.5% of all RTIs [1]. Within the upper respiratory tract, *Streptococcus pyogenes*, *Streptococcus pneumoniae*, *Haemophilus influenzae* and *Moraxella catarrhalis* are major pathogens. *H. influenzae*, *S. pneumoniae* and *M. catarrhalis* are the most commonly isolated pathogens in sputum cultures from patients with chronic bronchitis, but their role in the infection is an enigmatic problem. Although most community-acquired pneumonias result from influenza and the common cold, *S. pneumoniae* remains the most common cause of community-acquired pneumonia in adults. *H. influenzae* is less common although it may be more frequent in children and the older population. *Staphylococcus aureus* follows, and *Klebsiella pneumoniae* is an uncommon cause of community-acquired pneumonia in the elderly and in alcoholics [2, 3]. *M. (Branhamella) catarrhalis* is now recognized to be responsible for both community- and hospital-acquired lower RTIs and it is considered to be a major respiratory pathogen [4]. Newly recognized pathogens such as *Chlamydia pneumoniae* and atypical pneumonias caused by *Mycoplasma pneumoniae*, *Legionella pneumophila*, *Coxiella burnetii* and *Chlamydia psittaci* contribute significantly to community-acquired pneumonias [5-8].

A major problem with infections caused by these organisms is their antibiotic sensitivity profile, as they are generally resistant to the usual first-choice antibiotics given for streptococcal and *Haemophilus* infections. On the other hand, the increasing percentage of resistant strains of the common bacteria make us sceptical in using penicillin, amoxicillin or cephalosporins in the treatment of community-acquired RTIs [9-11].

The variety of clinical and microbiological features involved in community-acquired RTIs and the complexity of diagnosis necessitates an empirical treatment as the first choice before an etiologic diagnosis can be made.

Penicillin is the drug of choice in normal hosts developing typical pneumonia while cephalosporins offer an alternative in the complicated host or where resistant strains may be involved. On the other hand, a macrolide represents the best empirical cover in atypical pneumonia.

The challenge of community-acquired RTIs and the role of cephalosporins in their treatment are going to be addressed in this supplement, which records the proceedings of a symposium held during the 8th Mediterranean Congress of Chemotherapy in Athens on May 25, 1992.

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