

Abstracts

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OBJECTIVES: To describe therapy with a Betalactam antibiotic versus dual therapy with a Betalactam and aminoglycoside treatment regimens in ICU patients with *Pseudomonas aeruginosa* nosocomial pneumonia and to evaluate treatment outcomes of the two groups. **METHODS:** We retrospectively identified adult patients admitted to a non-transplant ICU between August 1, 1999 and August 1, 2003 with documented *Pseudomonas aeruginosa* pneumonia. Patients had to receive at least 7 days of therapy with an anti-pseudomonal antibiotic to be included. Data collected included patient, clinical, treatment, and outcome related details. Independent sample t-test, chi-square and multiple regression analysis was used to evaluate the outcomes of the patients according to antibiotic groups. **RESULTS:** A total of 389 patients were identified with *Pseudomonas aeruginosa* pneumonia. Of these, 208 (53%) were on Betalactam ± fluoroquinolones (Group 1) and 181 (47%) were on Betalactam and aminoglycoside ± fluoroquinolones (Group 2). The mean age of patients was 63.1 and 55.4 years in Groups 1 & 2 respectively ($p < 0.001$). There was no significant difference in the distribution of gender and race between groups. Group 2 patients had more co-morbidities compared to Group 1. The mean length of antibiotic therapy in Group 1 was 24.77 and Group 2 52. Seventy-nine days ($p < 0.001$) and mean ICU length of stay was 27.6 and 55.2 days in Groups 1 & 2 respectively. The mortality in Group 1 was 51 (24.5%) and in Group 2, it was 65 (35.9%) ($p = 0.014$). **CONCLUSIONS:** The mean length of therapy, ICU length of stay and mortality are significantly lower in monotherapy compared to combination antibiotic treatment group.

RESPIRATORY DISEASES/DISORDERS**RESPIRATORY DISEASES/DISORDERS—Cost Studies**

PRS2

COST OF CHRONIC BRONCHITIS (CB) AND CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) IN FRANCE: THE BRONCHECO STUDY

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OBJECTIVES: To describe the management of CB and COPD at stages 1 to 3 (SPLF classification, 1997) and to assess its cost in France. **METHODS:** In total, 409 CB and COPD patients were enrolled in the Broncheco cohort from November 2000 to October 2003 by 10 hospital chest physicians (HP), 50 private chest physicians (PP) and 63 general practitioners (GP). The cohort was followed for 1 year with data collection every 3 months: socio-demographic data, medical history and disease management (medication, oxygen, medical visits, medical procedures, hospitalisations and transportation). Inpatient costs were evaluated using the French Diagnosis-Related Groups and outpatient costs using the French nomenclature. Costs were expressed in 2003 Euro, according to the French societal perspective. Non-parametric statistical analysis was performed. **RESULTS:** In total, 316 patients were analysed (random dropout was tested) with a mean age of 65 years, a history of the disease of 8 years, 75% were male and 37% were current smokers. The distribution in stages was: 21.5%, 42.1%, 22.8% and 13.6% respectively in stages 1, 2a, 2b, and 3. The annual cost (both medical and non-medical) was 794€, 1936€, 3938€ and 7706€ respectively for stages 1, 2a, 2b and 3 ($p < 0.001$). The proportion of outpatient care in total cost decreased when stage of disease increased (94%, 70%, 63% and 62% respec-

tively) while the proportion of inpatient care increased (6%, 30%, 37%, 38% respectively). For a same stage of disease, the costs were higher for HP, lower for PP and the lowest for the GP. High correlations between cost and age, length of disease and number of exacerbations were observed: 0.21, 0.23 and 0.49 respectively ($p < 0.001$). **CONCLUSIONS:** These results showed that the cost of COPD was considerably greater in patient with advanced stage of disease. This would suggest the pertinence of early management of disease.

PRS3

PHARMACOECONOMY AND ANTIBIOTIC TREATMENT WITHIN THE SLOVAK REPUBLIC

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OBJECTIVES: The aim of this study was to collect comparable and reliable data on the antibiotic consumption in Slovakia during the period 1998–2002. The special interest was paid to the trend of the macrolides usage and the resistance of *Str.pyogenes*. Antibiotic treatment and the pharmacoeconomic analysis of tonsillitis treatment was evaluated. **METHODS:** For the period 1998–2002, data for the ambulatory and hospital care were collected following the ATC/DDD classification. The results were expressed in the numbers of the packages, finance units (SKK) and Defined Daily Doses per 1000 inhabitants per day (DID). **RESULTS:** The collected data showed very high consumption of the antibiotic in Slovakia. Comparing to the published international data it was one of the highest consumers of antibiotics in Europe. The amount of packages used during the period 1998–2002 has decreasing tendency. Antibiotic usage expressed in DID showed moderate decrease. Consumption of macrolides was increasing during the studied period. Usage of drugs containing erythromycin and roxithromycin showed significant decrease. However, the usage of the drugs containing clarythromycin and azithromycin showed statistically important increase ($p < 0.001$). Different therapeutic procedures were classified by pharmacoeconomical method of the cost-minimization analysis. **CONCLUSIONS:** According to the results of this analysis, the most effective treatment of tonsillitis was phenoxymethylpenicillin 15.30 SKK and penamecillin 18.50 SKK. Usage of these drugs for the treatment is efficient and economically convenient ($p < 0.001$). According to the direct cost analysis, 52.2% of costs used for the treatment of tonsillitis was “wasted”. Wrong antibiotics were chosen in case of 58.5% of the patients.

PRS4

COST OF TREATMENT AND REIMBURSEMENT OF HOSPITALIZED COMMUNITY-ACQUIRED PNEUMONIA WITH I.V. MOXIFLOXACIN COMPARED TO STANDARD ANTIBIOTIC TREATMENT IN GERMANY

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OBJECTIVES: Inpatient treatment of community-acquired pneumonia (CAP) is generally non-invasive and therefore the financial burden for hospitals is dependent from length-of-stay. A fast recovery of the patients shows the need of rapid acting antibiotic treatment, especially under the German DRG-reimbursement system. This study investigated costs and charges of patients with CAP from the hospitals' perspective. The new gyrase inhibitor moxifloxacin was compared to standard antimicrobial therapy of the participating hospitals. **METHODS:** The