

DOI: 10.5152/TurkThoracJ.2019.174

[Abstract:0673] OP-027 [Accepted: Oral Presentation] [Respiratory System Infections]

The Comparison of Hospitalized Patients with Health-Care-Associated Pneumonia and Community-Acquired Pneumonia

Nesrin Kırıl, Kübra Fırıldak, Ali Fidan, Elif Torun Parmaksız, Seda Beyhan Sağmen, Berrin Eraslan, Coşkun Doğan, Sevda Şener Cömert

Clinic of Chest Diseases, Kartal Dr. Lütfi Kırdar Training and Research Hospital, İstanbul, Turkey

Objectives: Health care-associated pneumonia (HCAP) is included in the guidelines because of the increased prevalence of drug-resistant pathogens that are not covered by standard empirical treatment. However, the diagnosis of HCAP, based on detection of any of the risk factors has led to unnecessary use of broad-spectrum antibiotics in many patients. Since some of the risk factors found in the relevant studies are not related to health care, the term “community-acquired pneumonia developing in multi-drug resistant” is now preferred instead of the term HCAP. In our country, there are not enough studies on HCAP population. The aim of this study was to compare the prevalence, pathogens and prognostic factors of hospital-acquired pneumonia and community-acquired pneumonia (CAP).

Methods: The subjects with HCAP and CAP admitted in our clinic between 01/01/2018-22/12/2018 were prospectively evaluated. In addition to the health care risks of the cases; comorbidities, clinical and laboratory findings on admission, microorganisms detected in sputum and blood cultures were recorded. The suitability of the initial empirical antibiotic treatments and the factors determined was investigated. Prognostic factors were duration of hospitalization and survival.

Results: Of the 121 cases admitted in one-year period, 67 (55.4%) were male and 54 (44.6%) were female, and the mean age was 68.9 (17-96). Twenty-seven (22.3%) of the cases were diagnosed as HCAP and 94 (77.7%) of them were diagnosed as CAP. Of HCAP cases; 21 (77.8%) had history of hospitalization for two days or more in the last 90 days; 4 (14.8%) lived in a nursing home, 3 (11.1%) had home wound care. Eleven (40.7%) HCAP cases and 21 (22.3%) TGP cases had positive cultures. The most common isolated microorganisms were *Pseudomonas aeruginosa* and *Acinetobacter* in HCAP and *Klebsiella pneumoniae*, *Pseudomonas aeruginosa* and *Stenotrophomonas maltophilia* in CAP. In seven (25.9%) HCAP cases and 23 (24.5%) CAP cases, the antibiotics started on admission had to be change. Duration of hospitalization (10.4 versus 8.9 days, $p=0.196$) and mortality rate (7.4% vs 6.4%, $p=0.85$) showed no significant difference in HCAP cases compared to CAP group. Comorbidities accompanied in all of the HCAP and CAP patients who died, whereas 92% of HCAP and 84.1% of CAP cases, who survived.

Conclusion: In our study, the duration of hospitalization and mortality were found to be higher in HCAP, although the difference was not statistically significant. Responsible microorganisms differ in HCAP and CAP, however potentially resistant microorganisms are seen in both groups. In all patients hospitalized with the diagnosis of CAP, HCAP risk factors as well as comorbidities should be questioned and potential resistant microorganisms should be considered in empirical antibiotic treatment.

Keywords: Health care-associated pneumonia, community-acquired pneumonia, mortality, prognosis