Community-acquired pneumonia

Community-acquired pneumonia refers to pneumonia (any of several lung diseases) contracted by a person with little contact with the healthcare system. The chief difference between hospital-acquired pneumonia (HAP) and CAP is that patients with HAP live in long-term care facilities or have recently visited a hospital. CAP is common, affecting people of all ages, and its symptoms occur as a result of oxygen-absorbing areas of the lung (alveoli) filling with fluid. This inhibits lung function, causing dyspnea, fever, chest pains and cough.

Treatment

The clinical efficacy of ceftaroline is as good as comparator therapy in the treatment of acute bacterial infections - CAP and SSSI, and this antibiotic is well tolerated as the comparators [1].

A study aimed to investigate the relationship between obesity and mortality in patients with community-acquired pneumonia (CAP) in China.

In total, 909 patients with CAP were recruited for this study from January 2010 to June 2015. All patients were selected and divided into 4 groups according to their body mass index (BMI) values. All patients' clinical information was recorded. The associations among mortality; BMI; the 30-day, 6-month and 1-year survival rates for different BMI classes; the etiology of pneumonia in each BMI group; and the risk factors for 1-year mortality in CAP patients were analyzed.

With the exception of the level of C-reactive protein (CRP), no other clinical indexes showed significant differences among the different BMI groups. No significant differences were observed among all groups in terms of the 30-d and 6-month mortality rates ($p>0.05$). There was a significantly lower risk of 1-year mortality in the obese group than in the nonobese group, ($p<0.05$). Logistic regression analysis showed that there were seven independent risk factors for 1-year mortality in CAP patients, namely, age, cardiovascular disease, cerebrovascular disease, obesity, APACHE II score, level of CRP and CAP severity.

Compared with nonobese patients with CAP, obese CAP patients may have a lower mortality rate, especially with regard to 1-year mortality, and CRP may be associated with the lower mortality rate in obese individuals than in nonobese individuals [2].

1)
Chen CW, Chang SP, Huang HT, Tang HJ, Lai CC. The efficacy and safety of ceftaroline in the treatment of acute bacterial infection in pediatric patients - a systemic review and meta-analysis of randomized controlled trials. Infect Drug Resist. 2019 May 15;12:1303-1310. doi: 10.2147/IDR.S199978. eCollection 2019. PubMed PMID: 31190919; PubMed Central PMCID: PMC6526920.
2)
Chen J, Wang J, Jiang H, Li MC, He SY, Li XP, Shen D. Lower long-term mortality in obese patients with community-acquired pneumonia: possible role of CRP. Clinics (Sao Paulo). 2019;74:e608. doi: 10.6061/clinics/2019/e608. Epub 2019 Jul 10. PubMed PMID: 31291389.