

European Respiratory Society Annual Congress 2013

Abstract Number: 1400

Publication Number: 5045

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Pneumonia **Keyword 2:** Intensive care **Keyword 3:** Acute respiratory failure

Title: Effects of using the 2007 IDSA/ATS minor criteria to manage severe community-acquired pneumonia

Dr. Hui Fang 12676 Lim Hui_fang_lim@nuhs.edu.sg MD ¹, Dr. Jason 12677 Phua jason_phua@nuhs.edu.sg MD ¹, Dr. Amartya 12678 Mukhopadhyay amartya_mukhopadhyay@nuhs.edu.sg MD ¹, Ms. Wang Jee 12679 Ngerng wang_jee_ngerng@nuhs.edu.sg ¹, Dr. Malcolm 12680 Mahadevan malcolm_mahadevan@nuhs.edu.sg MD ¹ and Prof. Tow Keang 12683 Lim tow_keang_lim@nuhs.edu.sg MD ¹. ¹ Respiratory and Critical Care Medicine, National University Hospital, Singapore, Singapore, 119074

Body: Background: Severe community-acquired pneumonia (SCAP) is associated with mortality rates as high as 50%. Delayed intensive care unit (ICU) admission is associated with increased mortality. Pneumonia severity scores may help in early identification of at-risk SCAP patients. This study aimed to evaluate the clinical impact of using the 2007 IDSA/ATS minor criteria in SCAP. Methods: We started using the minor criteria at the emergency department (ED) as a triage tool in 2008. In this cohort study, we categorized patients into control (2004 - 2007) and intervention arms (2008 - 2010). We defined SCAP as fulfilment of ≥ 3 minor criteria regardless of site of care. We compared the site of care, route of ICU admission and hospital mortality. Patients with ≤ 2 minor criteria but required ICU admission were evaluated separately. Results: There were 172 and 176 ICU admissions in the control and intervention arms respectively. The proportion of SCAP patients admitted to the ICU decreased from 52.9% to 38.6% ($p=0.008$). Of those who required ICU admission, direct admissions increased from 39.6% to 61.8% ($p=0.006$). Hospital mortality decreased from 23.8% to 5.7% ($p<0.001$). Being in the control group was an independent predictor for mortality (OR 4.14, 95% CI 1.33 – 13.16, $p=0.014$). There were 65 and 63 patients with ≤ 2 minor criteria requiring ICU admission in the control and intervention arms; ICU admission rates were 18.5% and 46.0% respectively. Conclusion Use of the 2007 IDSA/ATS minor criteria for triage may increase direct ICU admissions and reduce mortality in at-risk SCAP patients. It may not result in treatment delay in patients with ≤ 2 minor criteria and may not increase ICU admission rates.