

Hospitalised Low-risk Community-acquired Pneumonia: Outcome and Potential for Cost-savings

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Abstract

Fine et al from USA have identified a sub-group of patients with community-acquired pneumonia (CAP) with a low risk of mortality and suggested that it may be cost-effective to manage them as outpatients. The aims of this study were: to evaluate the outcome of low risk CAP patients that were hospitalised in our local setting, and to gauge the number of such patients in order to estimate the potential cost-savings by treating them as outpatients, as well as the safety of such an approach.

All patients with CAP admitted to our hospital from 1 April 1997 to 1 March 1998 were enrolled into this prospective cohort study. Low-risk patients were identified, and their hospital outcome compared with other patients. Hospitalisation charges were obtained from the Finance Department.

There were 226 patients with CAP. The average age was 64 years with a range of 12 to 96 years. The median hospital stay was 6 days. Mortality was 13.7%. 16.8% required admission to the ICU; none of these were low-risk patients. There were 47 (21%) low-risk patients, and there was no mortality in this group. They had significantly shorter hospital stay (6.4 days versus 10 days) and lower hospitalisation charges (\$2,160 versus \$5,770) compared to other CAP patients. Only one low-risk patient had a positive blood culture.

In conclusion, nearly one-fifth of our CAP admissions consisted of low-risk patients that experienced no mortality, and required a significantly shorter hospitalisation. The management of such patients who are young (≤ 50 years), with no serious co-morbidities in an outpatient setting may be a cost-effective strategy, and this group of patients consumed 9% of the total hospitalisation charges for CAP.

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