European Respiratory Society
Annual Congress 2012

Abstract Number: 3945

Publication Number: P2506

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Pneumonia **Keyword 2:** No keyword **Keyword 3:** No keyword

Title: Elevated creatinine is a sensitive severity marker in community acquired pneumonia

Dr. Joanne 23277 Sloan joannesloan@nhs.net MD , Dr. Janet 23278 Wilson jwilson35@nhs.net MD , Dr. Carly 23279 Griffin carlygriffin@nhs.net MD , Dr. Morven 23280 Wilkie morvenwilkie@nhs.net MD , Dr. James 23281 Chalmers jameschalmers1@nhs.net MD and Dr. Stuart 25072 Schembri sschembri@nhs.net MD . [1] Respiratory Department, Ninewells Hospital, Dundee, United Kingdom, DD1 9SY .

Body: Background It is recognised that acute kidney injury (AKI), as classified by the International Kidney Disease Group Improving Global outcomes staging classification, is associated with increased 30-day mortality in patients with community acquired pneumonia (CAP). This study aimed to determine if increases in serum creatinine not meeting the criteria for AKI were associated with increased 30-day mortality. Methods A retrospective study of patients admitted over a 6 month period, with radiologically confirmed CAP, was performed in a teaching hospital. Baseline creatinine, admission creatinine, AKI severity and 30-day mortality were recorded. Results 210 patients (52% male, 48% female) were included in the study with a median age of 76 years. 26 (12.4%) patients met the criteria for AKI. 57 (27.1%) patients had rises in creatinine above baseline, but not meeting AKI criteria. As expected AKI scoring was associated with increased 30 day mortality.

Incidence of AKI and 30 day mortality rates

AKI staging	Number of Patients	30 Day Mortality
0	183 (87.1%)	28 (15.3%)
1	15 (7.1%)	4 (26.7%)
2	8 (3.8%)	4 (50%)
3	3 (1.4%)	2 (66.7%)

Table 1

Greater than 20% rises in creatinine above baseline were strongly associated with a higher 30 day mortality rate.

Log rank test p=0.002. Conclusions Creatinine rises as low as 20% above baseline in patients with CAP are associated with higher 30 day mortality rates than for patients without creatinine rises.