

P84 IS THE CURB-65 SCORE A RELIABLE TOOL FOR GUIDING INITIAL ANTIBIOTIC THERAPY IN ACUTELY UNWELL PATIENTS WITH COMMUNITY ACQUIRED PNEUMONIA?

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Introduction Prompt appropriate antibiotics for community acquired pneumonia (CAP) reduces mortality, length of stay and adverse events. Antibiotic choice is directed by the CURB-65 score and clinical judgement.¹ Admission is recommended for most CURB-65 ≥ 2 .¹ Recent national data showed an unexplained non-compliance of 40% (>2000 patients) with CAP antibiotic guidelines using CURB-65 scores alone. Antimicrobial misuse and resistance are a global concern. We investigated compliance with our Trust CAP guidelines and used an early warning score (EWS)² to quantify clinical judgement.

Methods Data were collected retrospectively for adults attending the emergency department with CAP⁴ over 4 months. The CURB-65 and the Trust's EWS (Physiological Observations Track and Trigger system – POTTs)² were calculated at presentation. A POTTs score of 2 triggers escalation of care. Prescriptions were compliant when the initial antibiotic concurred with the Trust guideline. Patients receiving broader spectrum agents than recommended were 'over-treated'. Admission was noted.

Results (Table 1) Of 77 patients with CAP, 11 (14%) received 'compliant' antibiotics (Table 1). 38 (49%) patients were over-treated, 25 (66%) of whom had POTTs ≥ 2 , though 15 (60%) of these patients had low severity CURB-65 of 0–1. Of 49 patients with POTTs ≥ 2 , 27 (55%) had a CURB-65 of 0–1, 26% a CURB-65 of 2. 44% and 68% of those with a CURB-65 of 0 or 1 were admitted, with higher average POTTs than those discharged.

Conclusion The majority of patients incorrectly prescribed broad spectrum antibiotics had a CURB-65 score that failed to categorise them as sick enough to warrant them despite an EWS ≥ 2 . Hospital admission demonstrated similar findings. Over half of those with an elevated EWS had a low severity CURB-65. We did not collect outcome data but the 'over-treatment' and admission appear appropriate. Prompt, effective and empiric antimicrobials for septic patients give better clinical outcomes. Seemingly non-compliant antimicrobial prescriptions may have punitive implications for Trusts. We suggest that CURB-65 under-recognises sepsis syndrome and thus the EWS should be included and further validated in CAP guidelines and audits.

REFERENCE

- 1 BTS CAP guidelines
- 2 RJ Oakey, V Slade. Physiological observation track and trigger system. *Nursing Standard*. 2006;20:48–54

P85 HIV-RELATED ACUTE RESPIRATORY ADMISSIONS – GOOD OUTCOMES AND AN OPPORTUNITY FOR TESTING

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Introduction The burden, changing pattern and outcome of HIV-associated lung disease following the introduction of anti-retroviral therapy (ART) remains to be defined. We sought to

investigate these factors in an unselected cohort of individuals admitted acutely to our London teaching hospital.

Methods Consecutive admissions were prospectively collected between June 2013 and May 2014. In those where the cause for admission was an acute respiratory illness, patient notes and electronic records were interrogated. Patients were allowed >1 diagnoses and in-hospital outcomes only were reported.

Results Fifty-three of 149 (35%) acute HIV admissions were with respiratory causes, (3 patients had 2 admissions >30 days apart). Median age was 45 years and 28% (15) were female. Median CD4 count was 109 (range 3–867) cells/uL; 14 (26%) had fully suppressed HIV loads (VL <20 copies/ml).

4 of 53 (8%) were admitted with non-infectious diagnoses: 2 with lung cancer, 1 non-infective COPD exacerbation and 1 non-specific interstitial pneumonia. The remainder had infections: 12 (23%) had culture-confirmed bacterial pneumonia, 11 (21%) were treated for PCP, 8 (15%) had culture-confirmed Mycobacterium tuberculosis (1 MDR), 4 had confirmed viral pneumonia (8%). 20 (38%) patients completed treatment for pneumonia with no specific laboratory confirmation. The most common bacterial isolates were streptococcus pneumoniae (4 cases), haemophilus influenzae (3), pseudomonas aureginosa (2) and klebsiella pneumoniae (2). In 11 of 53 (22%) a new diagnosis of HIV was made at the time of admission, 10 of whom presented as acute community acquired pneumonia (CAP). In 9 of 11 (82%) CD4 count was <200 cells/uL and 6 of 11 (55%) required ICU care. In total 20 of 53 (38%) were admitted to ICU, and 8 (15%) required mechanical ventilation. Median length of stay in hospital was 9 (2–397) days. 1 of 53 (2%) patients died.

Conclusions Acute respiratory illness remains a significant cause of HIV admissions, with opportunistic and non-opportunistic pathogens commonly identified. Outcomes were reassuringly good despite the frequent need for ICU support. We believe our data underlines the important opportunity that a presentation with acute respiratory illness provides to test for and diagnose HIV infection.

P86 DO WE NEED A SPECIFIC GUIDELINE FOR THE MANAGEMENT OF ASPIRATION PNEUMONIA (AP)?

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Introduction and objectives Aspiration-related pneumonia accounts for 10–15% of cases hospitalised with community acquired pneumonia. Guideline-directed pathways for the diagnosis and management of AP are lacking in detail (BTS/ATS/IDSA). The local practice of assessing patients admitted with primary diagnosis of AP and outcome was evaluated in a large tertiary hospital in the UK.

Methods A retrospective cohort study that reviewed the case notes of 34 consecutive patients admitted to hospital with a high likelihood for a diagnosis of community acquired aspiration pneumonia (CAAP). Aspiration risk assessment on admission, appropriate antimicrobial therapy, dietetic and Speech and Language Therapy (SALT) team input, airway assessment, length of hospital stay and mortality were included in the data analysis.

Results A crude risk assessment for aspiration was performed in all patients on admission. An aspiration event was witnessed in 35% of cases. Pre-existing neurological pathology was the predominant risk factor (70%). Appropriate antimicrobial therapy was commenced within 4 h of admission in 14 (58%) cases.