



Service Priorities and Programmes
Electronic Presentations

Convention ID: 897

Submitting author: Dr Samuel Lee

Post title: Associate Consultant, Tseung Kwan O Hospital, KEC

Improvement in Antibiotic Usage in Community Acquired Pneumonia

*S Lee(1), SWC Tsang (1) , WCT Ip (1), CM Chung (1), WK Luk(2), IT Lau (1)
(1) Department of Medicine, Tseung Kwan O Hospital. (2) Department of Pathology,
Tseung Kwan O Hospital.*

Keywords:

Community acquired pneumonia

Antibiotic

Audit

Introduction

Community acquired pneumonia (CAP) is a common cause of morbidity & mortality. Appropriate prescription of antibiotics is essential in order to improve patient outcome and reduce cost.

Objectives

1) To audit the use of antibiotics and clinical outcome in the management of CAP. 2) To develop a local guideline for antibiotic usage in the management of CAP. 3) To re-audit the antibiotic usage & clinical outcome after promulgation of the new guideline.

Methodology

Patients with diagnosis of pneumonia between 10/10/2011- 19/10/2011 were identified by CDARS and from medical wards' admission database. Hospital acquired pneumonia were excluded. Demographic, treatment and clinical outcome data were retrieved from hospital records. The initial antibiotic of choice was audited against the IMPACT guideline. Thereafter, a local antibiotic treatment protocol based on the severity of disease (CURB-65) and IMPACT guideline was disseminated to colleagues in the Department of Medicine (January 2012). A follow-up audit was performed between 01/03/2012-15/03/2012 to assess the effectiveness of the new treatment protocol.

Result

Thirty-four patients (59% male) were included in the 1st audit and 32 (41% male) in the follow-up audit. The median ages were 74 (range 34-98) and 75 (40-95) years respectively. Twenty-three (69%) patients in the 1st audit and 29 (91%) in the follow-up audit were treated with 1st line antibiotics ($p=0.048$). There were no differences in the use of "big gun" antibiotics (4 v 2, $p=ns$), ICU admission (0 vs 0, $p=ns$), length of stay (4.2 vs 5.7, $p=ns$), intravenous antibiotics on presentation (10 vs 10, $p=ns$) and inpatient mortality (3 vs 1, $p=ns$). Twenty-nine (91%) cases adhered to the new local protocol. Conclusion: High compliance to the new treatment protocol was observed in the management of CAP resulting in significantly higher prescription

rate of 1st line antibiotics. Although a reduction in the use of inappropriate “big gun” antibiotics, and a decrease in inpatient mortality rates were observed, these did not reach statistical significance.