We aimed to identify factors at presentation that were associated with the requirement for IV antibiotic therapy delivered in hospital and 30-day readmission” Palani Velu et al (2016).

Abstract:

BACKGROUND: The safety and efficacy of domiciliary intravenous (IV) antibiotic therapy compared to inpatient hospital treatment for exacerbations of bronchiectasis has been established. Factors that determine the setting for IV antibiotic therapy need to be characterised further.

AIM: We aimed to identify factors at presentation that were associated with the requirement for IV antibiotic therapy delivered in hospital and 30-day readmission.

DESIGN: Retrospective cohort study of all IV antibiotic courses administered to patients with bronchiectasis by a specialist respiratory unit over a 2-year period.

METHODS: We assessed demographic data, treatment outcomes, morbidity, mortality and 30-day readmission rates. Multiple linear regression analysis was performed to identify factors associated with inpatient IV antibiotics and 30-day readmission.

RESULTS: 106 patients received 243 courses of IV antibiotic therapy in two years. Sixty-six cases (27.2%) were managed in hospital, 28 cases (11.5%) required initial admission prior to early supported discharge (ESD) to complete IV antibiotics at home and 149 cases (61.3%) received domiciliary IV antibiotics. Bronchiectasis Severity Index (BSI) (p<0.0001) and Emergency presentation with an exacerbation (p<0.0001) were independent factors associated with the requirement for inpatient IV antibiotic therapy. There were no differences between mortality (p=0.06) and morbidity (p=0.1) between groups. 30-day readmission following ESD was higher compared to inpatient or domiciliary therapy (p=.0004).
CONCLUSION: A higher BSI and emergency presentation with an exacerbation are independently associated with the need for IV antibiotics delivered in hospital. We could not identify any factors that predicted 30-day readmission in a multi-variable model.

Reference:


Thank you to our partners for supporting IVTEAM