A prospective, observational study reveals Hospital Acquired Pneumonia (HAP) to be a blind-treated, high mortality, hospital-wide disease associated with cardio-respiratory comorbidities.

Introduction

- Pneumonia (HAP) is the highest mortality, most frequent UK hospital acquired infection.
- Little evidence exists to support management of the majority of cases which occur outside Intensive Care.
- We developed a surveillance system for HAP, and describe management and outcome in a large UK hospital.

Aims & Objectives

- To evaluate management of Hospital Acquired Pneumonia and develop a surveillance system to improve patient outcomes

Methods

- All patients with HAP in a large UK teaching Hospital were prospectively recruited during October 2017.
- Patient recruitment was performed as a 3 stage screening process including
  1. Daily surveillance of hospital-wide electronic antibiotic prescribing
  2. Radiological cross-referencing
  3. Same day clinical confirmation of HAP cases from whom anonymised data were collected.

Results

- 97 cases were distributed across all hospital wards, but concentrated on respiratory 27.8%, surgical 17.5% and care of the elderly 13.4% wards.
- Age ranged from 31 to 98y with a median age of 77y.
- The most frequent comorbidities were cardio-respiratory (44.3%).

Discussion/Conclusion

- HAP affected all wards within the hospital and was associated with high rates of both short and long-term mortality.
- Antibiotic therapy was always empirical and rarely supported by microbiology.
- Duration of treatment varied enormously.
- We demonstrate an effective method of HAP surveillance to aid quality improvement and facilitate further research.

References