Community Acquired Pneumonia Screening

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Introduction

The early use of microbiological tests is supported by antimicrobial stewardship
policies. Targeted antibiotic therapy for community-acquired pneumonia (CAP) has been associated with better outcomes. We looked at our unit compliance with CAP screening and implemented a new protocol in order to improve this then re-audited compliance.

Methods

Thirty-nine patients admitted to our ICU between 25/01/2019 and 25/12/2019 with a diagnosis of CAP. We used Trakcare and Clinical Portal to ascertain how many of these patients had the correct investigations sent on admission to ICU.

The results show poor compliance, we worked with local microbiology consultant and laboratory staff to produce CAP screening labels that come on one page with a sticker for each specimen and a copy for the medical notes.

Data was then collected after introduction of CAP screening labels. Sixty-four patients admitted to our ICU between 25/01/2020 and 25/12/2020 with a diagnosis of CAP. We again used Trakcare and Clinical Portal to ascertain how many of these patients had the correct investigations processed on admission to ICU.

Results

Initial data collection showed only 10% of patients had a throat swab sent for respiratory viruses and mycoplasma, 64% of patients had sputum sent for microscopy, culture and sensitivity, 82% of patients had their urine sent for Legionella and Pneumococcus antigens.
After introduction of CAP screening labels, 54% of patients had a throat swab sent for respiratory viruses and mycoplasma, 70% of patients had sputum sent for microscopy, culture and sensitivity, 86% of patients had their urine sent for Legionella and Pneumococcus antigens.

Discussion

We were able to clearly identify an area for quality improvement within ICU. The introduction of our CAP screening labels coincided with the beginning of the pandemic. COVID-19 pneumonia and incidence of concurrent pneumonia with atypical organisms meant that screening labels were particularly relevant.

References

1) Annotated BTS CAP Guideline Summary of Recommendations produced in 2015; www.brit-thoracic.org.uk