1866. Adverse Outcomes Associated with Potentially Inappropriate Antibiotic Use in Heart Failure Admissions
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Background. Heart failure (HF) is one of the most common chronic diseases in the US, and antibiotic use in patients with HF is often inappropriate. Antimicrobial stewardship programs (AS) are designed to improve antibiotic use. However, antibiotic use remains high in patients with HF. The purpose of this study was to determine the impact of antibiotic use on the outcomes of patients admitted to the hospital with HF.

Methods. This was a single-center, retrospective chart review of patients discharged from the HF ward at a large academic VA medical center between January 1, 2017 and December 31, 2017. Patients who received antibiotics within 48 hours of admission were included. Antibiotics were divided into appropriate and inappropriate categories based on the Antimicrobial Stewardship Practice Guidelines for Heart Failure (JAMA Cardiology, 2017). Outcomes included all-cause mortality and length of stay (LOS). Outcomes were compared between patients who received appropriate antibiotics and those who received inappropriate antibiotics using Fisher’s exact test for dichotomous outcomes and t-tests for continuous outcomes. Logistic regression was used to control for confounders.

Results. Among the 1,230 patients identified, 440 patients received antibiotics. Of these, 160 patients (36%) received inappropriate antibiotics. Compared to patients who received appropriate antibiotics, patients who received inappropriate antibiotics were more likely to have a higher Charlson Comorbidity Index (mean 2.4 vs. 1.8, p=0.04), be discharged to a skilled nursing facility (42% vs. 30%, p=0.05), and have a longer hospital stay (mean 1.4 days vs. 1.1 days, p=0.03). After controlling for Charlson Comorbidity Index and discharge disposition, patients who received inappropriate antibiotics were more likely to die (32% vs. 22%, p=0.04).

Conclusion. This study suggests that inappropriate antibiotic use in patients with HF is associated with higher mortality and longer hospital stays. These findings highlight the importance of implementing effective antimicrobial stewardship programs to improve antibiotic use in patients with HF.

Disclosures. All authors: No reported disclosures.

1867. A Regional Collaboration to Share Antimicrobial Stewardship Resources in Three Geographically Related Veterans Affairs Medical Centers
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Background. Antimicrobial stewardship programs remain essential to improving antibiotic use. Antimicrobial stewardship programs (ASPs) are typically developed and implemented within individual hospitals. However, collaboration among neighboring hospitals could facilitate the sharing of antimicrobial stewardship resources.

Methods. This was a regional project to develop and implement ASPs in three neighboring hospitals. The Veterans Affairs Medical Centers (VAMCs) are geographically located close to each other, allowing for effective collaboration. The project involved the development of ASPs, the implementation of evidence-based practices, and the monitoring of outcomes.

Results. The project resulted in the development of standardized ASPs across the three hospitals. The ASPs included evidence-based practices, such as the use of formularies, guidelines, and algorithms. The ASPs were implemented using a variety of methods, including educational programs, consultation services, and quality improvement initiatives. The outcomes of the ASPs were monitored using institutional databases and electronic health records.

Conclusion. The project demonstrated the feasibility and benefit of regional collaboration in the development and implementation of ASPs. This approach can be replicated in other regions to improve antibiotic use and infection control practices.

Disclosures. All authors: No reported disclosures.