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Background. Antibiotics are commonly overused in the treatment of ventilator-associated tracheitis (VAT). Antimicrobial stewardship programs (ASP) optimize antibiotic prescribing and decrease unnecessary antibiotic use. At our institution, clinicians who have initiated antibiotics for the treatment of tracheitis do not agree with ASP recommendations in 35% of cases. The goal of this study was to compare antibiotic duration and treatment failure in children treated for VAT who did and did not receive an ASP recommendation.

Methods. We performed a retrospective cohort study to evaluate VAT treatment courses and subsequent treatment failures. For this study, we included all children who were hospitalized from January 2009 to February 2013 and reviewed by ASP for receiving a monitored drug with an indication of VAT. Treatment failure was defined as a patient requiring a repeat course of antibiotics with an indication of VAT within 14 days of completing a previous antibiotic course.

Results. A total of 220 VAT cases were included. ASP provided recommendations to optimize antibiotics in 44 cases (20%) and stop antibiotics in 53 cases (24%). The shortest duration of treatment (days) was prescribed when ASP recommended stop therapy (median 4.7, IQR 3.0–6.5) when compared with no intervention (6.0, 4.3–7.0; $P = 0.01$). Treatment failure occurred in 33 (15%) cases. No difference in antibiotic duration was observed between those who did or did not fail (6.3 vs. 5.9, respectively; $P = 0.11$). Additionally, treatment failure rates did not differ by ASP recommendation status (no recommendation 15%; optimize 18%; stop 11%; ID involved 20%; $P = 0.78$).

Conclusion. ASP recommendations for the treatment of pediatric VAT were not associated with an increased likelihood of treatment failure. Further work is needed to standardize the diagnosis and treatment of VAT to avoid unnecessary antibiotic use in these children.

Disclosures. **All authors:** No reported disclosures.

175. Implementation of Clinical Practice Guidelines for Care of Neonates With Necrotizing Enterocolitis Reduces Broad Spectrum Antibiotic Use in the Neonatal Intensive Care Unit

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Background. Exposure to broad spectrum antimicrobial agents (AA) is a known risk factor for colonization and infection with multidrug-resistant organisms (MDROs). Therapy with broad spectrum AAs is commonplace with no published guideline to help minimize their use in the NICU. We aimed to analyze clinical indications for the use of vancomycin and meropenem (V/M) in the NICU and the impact of a necrotizing enterocolitis (NEC) clinical practice guideline (CPG) on the use of V/M in the NICU.

Methods. Patients who received V/M between January 2015 and December 2015 were identified using pharmacy administration data. Medical charts were reviewed retrospectively by two ID physicians to determine whether V/M were clinically indicated for each definitive course. A CPG outlining the optimal use of AAs for NEC was implemented in the NICU in our institution in August 2015 (Figure 1). We analyzed V/M DOT per 1,000 patient-days before and after CPG implementation. There were no parallel changes in antimicrobial stewardship interventions.

Results. At the start of V/M, mean gestation and chronologic age of the study population were 28.8 weeks and 26.9 days, respectively, and the mean weight was 2,676 g. During the study period, 91 patients received 191 courses of vancomycin and 27 patients received 32 courses of meropenem; ~40% of V/M definitive use did not have a clear clinical indication (Table 1). Thirty-three percent of meropenem definitive use was in infants with NEC. During a 7-month baseline period, mean vancomycin and meropenem use was 105 and 56 DOTs per 1,000 patient-days, respectively. Following NEC CPG implementation, mean vancomycin and meropenem use was 101 and 12 DOTs per 1,000 patient-days, respectively (Figures 2 and 3).

Conclusion. Widespread use of V/M was identified in the NICU. Following the implementation of NEC CPG, there was a decrease in the utilization of meropenem in the NICU.

Fig 1. Clinical Practice Guideline for Empiric and Definitive Therapy of Neonates with Necrotizing Enterocolitis

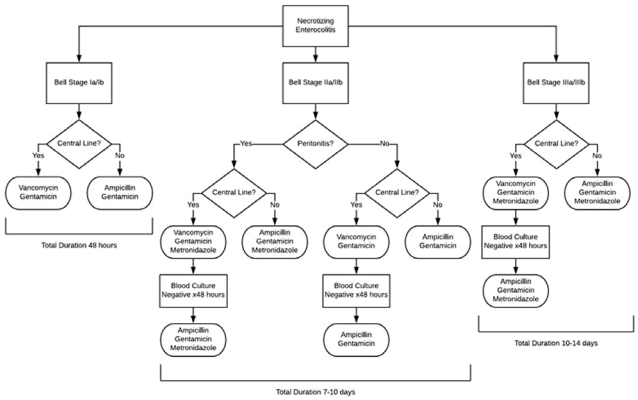


Table 1: Clinical Indication Determination of V/M Definitive Courses (*n*)

	Vancomycin (*n* = 73)	Meropenem (*n* = 15)
Clearly indicated (clinical cultures warrant use)	18 (25%)	4 (27%)
Likely indicated (sepsis in the setting of known MDRO colonization)	5 (7%)	3 (20%)
Clearly not indicated (clinical cultures warrant narrowing)	30 (41%)	6 (40%)
Unclear if indicated (critically ill infant but no known MDRO colonization and negative culture data)	20 (27%)	2 (13%)

Fig 2. Vancomycin Use in the NICU, DOT per 1000 patient days (1/2015-12/2015)

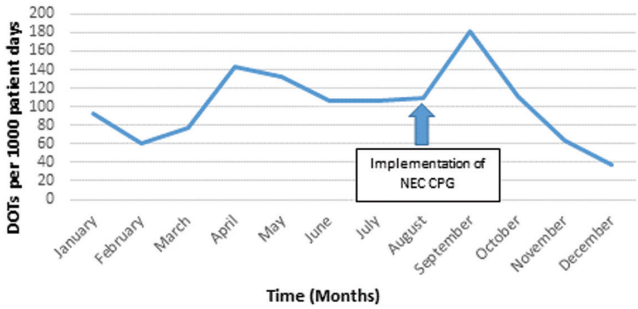
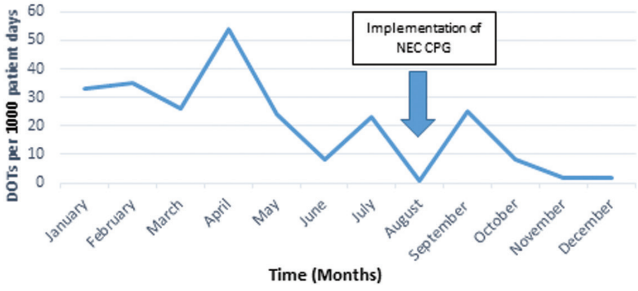


Fig 3. Meropenem Use in the NICU, DOT per 1000 patient days, 01/2015-12/2015



Disclosures. **All authors:** No reported disclosures.

176. Comparison of Prescribing Practices for Community-Acquired Pneumonia (CAP) Among Outpatient Versus Emergency Department Settings

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