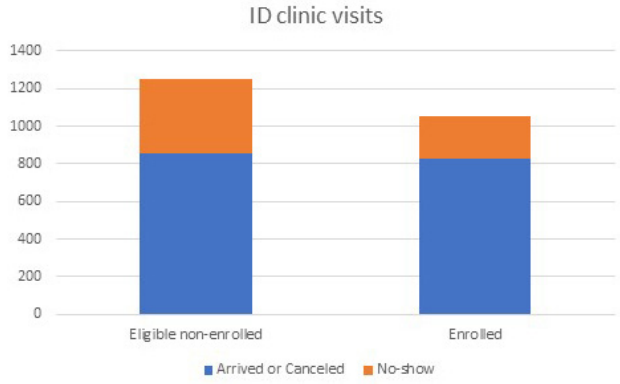
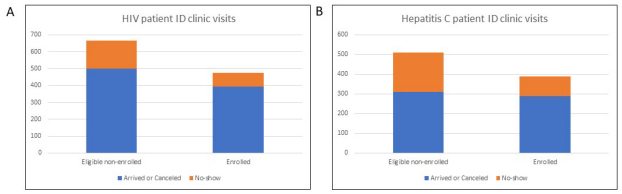
Results. We enrolled 35% of eligible, referred patients. The majority (70%) of patients not enrolled were referred while inpatient and discharged before they could be enrolled. WRAP-enrolled patients missed 21% of visits, whereas WRAP-eligible, non-enrolled patients missed 31% of visits (OR 0.59, 95% CI 0.49 to 0.72, p-value < 0.001), Figure 1. This finding was consistent for WRAP-referred patients with a diagnosis of HIV who were also eligible for Ryan White support services: WRAP-enrolled patients missed 17% of visits and WRAP-eligible, non-enrolled patients missed 25% of visits (OR 0.26, 95% CI 0.20 to 0.35, p-value 0.002). For HCV patients who were mostly referred as outpatients, WRAP-enrolled patients missed 25% of visits while WRAP-eligible, non-enrolled patients missed 39% (OR 0.54, 95% CI 0.41 to 0.72 , p-value 0.0003), Figure 2.

Figure 1. ID clinic visit attendance among WRAP eligible, non-enrolled and WRAP enrolled patients.



WRAP-enrolled patients missed 21% of visits, whereas WRAP-eligible, non-enrolled patients missed 31% of visits (OR 0.59, 95% CI 0.49 to 0.72, p-value < 0.001).

Figure 2. ID clinic attendance among WRAP eligible, non-enrolled and WRAP enrolled patients with HIV and hepatitis C primary diagnoses.



A. WRAP-enrolled patients with a primary diagnosis of HIV missed 17% of visits and WRAP-eligible, non-enrolled patients missed 25% of visits (OR 0.26, 95% CI 0.20 to 0.35, p-value 0.002). B. WRAP-enrolled patients with a primary diagnosis of hepatitis C missed 25% of visits while WRAP-eligible, non-enrolled patients missed 39% (OR 0.54, 95% CI 0.41 to 0.72, p-value 0.0003).

Conclusion. Providing patients with social support services to address barriers to attending clinic visits was associated with fewer missed ID clinic visits. Higher engagement in care is a step towards implementing evidence-based treatment to lessen overdose deaths and injection-related infections. Future projects will include investigating whether WRAP enrollment is associated with fewer hospital admission and ER visits.

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

140. Antibiotic Prophylaxis for Upper Gastrointestinal Bleed in Liver Cirrhosis: Less May Be More

Armaghan-e-Rehman Mansoor, MD[1]; Yousaf B. Hadi, M.D.[2]; Syeda Fatima Z. Naqvi, M.D.[2]; Ali Y. Khan, M.D.[3]; Raja S. Khan, M.D.[2]; Ashwani Singal, M.D.[4]; Justin Kupec, M.D.[2]; [1]Washington University in St. Louis, Brentwood, MO; [2]West Virginia University, Morgantown, West Virginia; [3]St. Joseph Mercy Oakland, Pontiac, Michigan; [4]University of South Dakota, Sioux Falls, South Dakota

Session: O-29. Prescribing and Prophylaxis Predicaments

Background. Antibiotics in patients with cirrhosis and upper gastrointestinal bleeding are shown to improve outcomes. Little is known regarding optimum duration of prophylactic antibiotics, with 7 days of therapy generally recommended. Antibiotic duration has not been compared to outcomes in current scientific literature. The goal of our study was to study the effect of shorter antibiotic duration on outcomes.

Methods. This was a retrospective cohort study of patients with cirrhosis presenting with upper GI bleeding at our institute from 2010-2018. Patients were divided into three cohorts based on duration of antibiotic administration: 1-3 days, 4-6 days, and 7 days or more. Rates of infection within 30 days, time to infection, rebleeding and mortality were compared between the three groups. Multivariable analysis was conducted to evaluate independent risk factors for infection.

Results. Medical charts of 943 patients with cirrhosis and upper GI bleed were reviewed. 303 patients did not have concomitant confirmed or suspected infection on presentation, of these 243 patients received antibiotics for prophylaxis and were included for analysis. Seventy-seven patients received antibiotic therapy for 3 days or less, 69 patients for 4-6 days, and 97 patients >6 days. The groups were well matched in demographic & clinical variables. 27 patients developed infections within 30 days of bleed. High MELD score at presentation and presence of ascites were associated with infection within 30 days. Rates of infection were not statistically different between the antibiotic groups (p= 0.78). In the 30 days following GI bleed, pneumonia was the most diagnosed infection (11 patients) followed by UTI (8 patients). Four patients developed spontaneous bacterial peritonitis and 3 were diagnosed with bacteremia. There was no difference in time to infection (p= 0.75), early re-bleeding (p=0.81), late re-bleeding (p= 0.37) and in-hospital mortality (p= 0.94) in the three groups. Six patients developed C. Difficile infection, none of whom were in the short antibiotic group.

Conclusion. Short course of antibiotics for prophylaxis (3 days) appears safe and adequate for prophylaxis in patients with cirrhosis and upper gastrointestinal bleeding if bleeding has abated and there is no active infection.

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

141. Effectiveness of a Multipronged Approach to Improve Prophylactic Antibiotic Prescribing in Patients Undergoing Trans-Arterial Chemoembolization

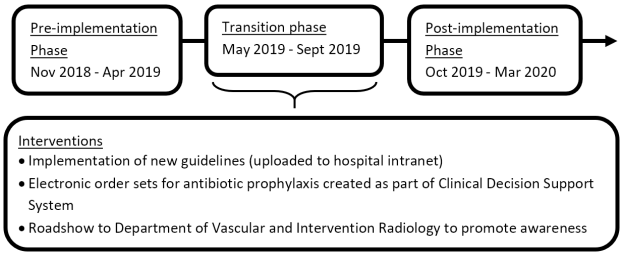
Kai Chee Hung, BSc (Pharmacy)[1]; Nathalie Grace Sy. Chua, PharmD[1]; Winnie Lee, MSc[1]; Lay Hoon Andrea Kwa, PharmD[1]; Shimin Jasmine Chung, M.B.B.S, BSc, MRCP[1]; Leong Sum, MB BCh, MSc Med Ed, IMRCS, FFRRCSI[1]; [1]Singapore General Hospital, Singapore, Not Applicable, Singapore

Session: O-29. Prescribing and Prophylaxis Predicaments

Background. In our institution, the significant use of broad-spectrum antibiotics for antibiotic prophylaxis (AP) in trans-arterial chemoembolization (TACE) was operator dependent and not evidence based. Hence, an AP guideline was developed with the Department of Vascular and Interventional Radiology and launched in May 2019, following department roadshows and creation of user-friendly electronic AP order sets. We analyzed the effectiveness and outcomes of our multipronged approach towards improving the standardization of AP prescribing.

Methods. This was a retrospective study of TACE procedures from November 2018 to March 2020, pre and post guideline implementation (Figure 1). Single IV cefazolin 2g dose (or IV clindamycin 600mg in the setting of β-lactam allergy) before TACE in patients with an uncompromised sphincter of Oddi was recommended. Patients with active infections prior to TACE were excluded. AP was deemed inappropriate if it deviated from guidelines (antibiotic choice and/or duration). Primary outcome was AP appropriateness and 30-day TACE related infections.

Figure 1. Timeline of our multipronged approach



Results. Seventy patients were included. There were no differences in baseline demographics pre and post implementation (Table 1). Following guideline implementation, there was a significant improvement in AP used for TACE. AP appropriateness pre-implementation and post-implementation was 14/31 (45.2%) and 37/39 (94.9%) respectively ($p< 0.001$). Guideline compliant antibiotics were selected more frequently (14 [45.2%] vs 38 [97.4%], $p< 0.001$), and more patients received single dose AP (22 [71.0%] vs 38 [97.4%], p=0.004). Of the 18 patients who did not receive guideline recommended AP, 16 (88.9%) received IV ceftriaxone and metronidazole, 1 (5.6%) IV amoxicillin/clavulanic acid, and 1 (5.6%) IV ciprofloxacin. Ten patients received a prolonged course of AP with a median duration of 6 days (IQR 4.3, 6.5). There were no significant differences in 30-day TACE related infections (1 [3.2%] vs 2 [5.1%], p=1.000) and 30-day mortality (1 [3.2%] vs 1 [2.6%], p=1.000). No patient had surgical site skin infection.

Table 1 Patient demographics and clinical characteristics

	Pre implementation (n=31)	Post implementation (n=39)	p-value
Age – years, median (IQR)	71 (66,78)	71 (62,78)	0.239
Weight – kg, median (IQR)	66.1 (59.3, 71.3)	63.1 (55.1, 72.4)	0.546
Male gender	25 (80.6%)	25 (64.1%)	0.128
Race			0.967
Chinese	26 (83.9%)	31 (79.5%)	
Malay	1 (3.2%)	2 (5.1%)	
Indian	2 (6.5%)	3 (7.7%)	
Others	2 (6.5%)	3 (7.7%)	
ß-lactam allergy	3 (9.7%)	3 (7.7%)	1.000
Diabetes mellitus	16 (51.6%)	22 (56.4%)	0.689
Chronic kidney disease	3 (9.7%)	2 (5.1%)	0.649
Previous hospitalization in past 90 days	8 (25.8%)	10 (25.6%)	0.987
Previous chemotherapy in past 90 days	0 (0%)	1 (2.6%)	1.000
Doxorubicin-lipiodol use during TACE	24 (77.4%)	28 (71.8%)	0.593

Conclusion. Our multipronged approach improved AP prescribing in patients undergoing TACE. Single dose IV cefazolin prophylaxis for TACE did not compromise safety outcomes in the post implementation review.

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

142. Impact of an Antimicrobial Stewardship Intervention on Antibiotic Prescribing in Patients with Obstetric Infection and Penicillin Allergy

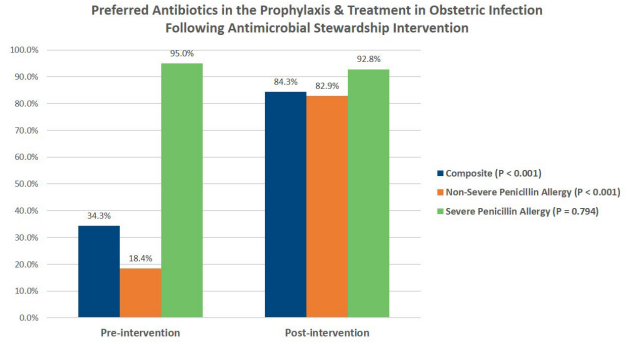
Katelyn Quartuccio, PharmD, BCPS[1]; Kelly Golden, PharmD[2]; Brenda L. Tesini, MD[3]; Eric Heintz, MD[4]; Neil Seligman, MD[5]; Jessica Stern, MD, MS[4]; [1]University of Rochester Medical Center, Highland Hospital, Rochester, NY; [2]Highland Hospital, Rochester, New York; [3]New York Emerging Infections Program University of Rochester, Rochester, NY; [4]University of Rochester Medical Center, Rochester, New York; [5]University of Rochester Medical Center- Strong Memorial Hospital, Rochester, New York

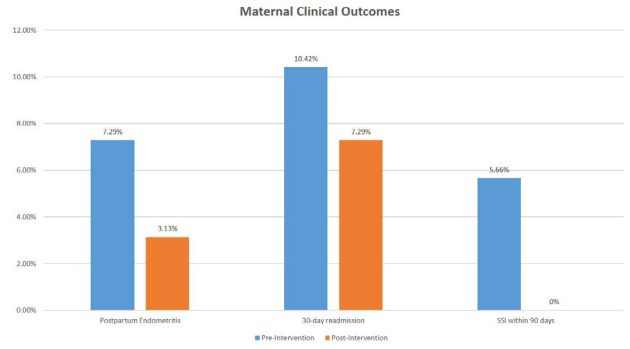
Session: O-29. Prescribing and Prophylaxis Predicaments

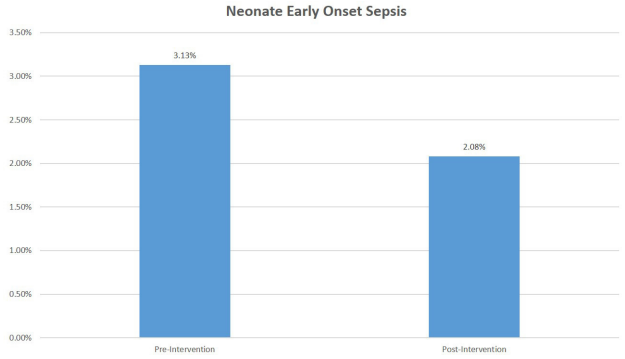
Background. Antibiotics are commonly administered in the peripartum period and most patients with penicillin allergy can tolerate beta lactams, which are preferred for the prophylaxis and treatment of several common obstetric infections. The purpose of this study was to evaluate the impact of a stewardship intervention bundle (including updates to institutional antibiotic guidelines, reclassification of severe penicillin allergy, development of order sets, and a physician champion) on the management of obstetric infections in patients with reported penicillin allergy.

Methods. This was a multicenter, retrospective study of adult patients presenting for labor and delivery who received at least one dose of antibiotics for an infectious indication May 1, 2018 to October 31, 2018 (pre-intervention) and May 1 2020 to October 31, 2020 (post-intervention). The primary outcome was the composite rates of patients with a reported penicillin allergy who received a preferred agent for Group B *Streptococcus* (GBS) prophylaxis, intraamniotic infection, or cesarean surgical site infection (SSI) prophylaxis.

Results. A total of 192 patients with a documented penicillin allergy were evaluated (96 patients each in pre- and post-intervention groups). Hives were the most commonly reported allergy in both groups (40% vs 39%, P=0.883). Following stewardship interventions, there was a significant increase in the rate of preferred antibiotics prescribed to patients with penicillin allergy (34.3% vs 84.3%, P< 0.001), driven mainly by patients with non-severe allergy (18.4% vs 82.9%, P< 0.001). There were non-statistically significant trends toward lower rates of postpartum endometritis, 30-day readmission, 90-day SSI, and neonatal early onset sepsis. Allergic reactions in the post-intervention group were limited to itching and rash in one patient each; both resolved with medical management.







Conclusion. A comprehensive antibiotic stewardship intervention increased preferred antibiotic prescribing for treatment and prophylaxis of obstetric infections. Pregnant patients with non-severe penicillin allergies, even those reporting hives, can tolerate beta-lactam antibiotics. The potential positive impact on clinical outcomes warrants additional investigation.

Disclosures. **Neil Seligman, MD**, **Natera** (Consultant)**UpToDate** (Other Financial or Material Support, Author)

143. Use of First-Generation Cephalosporins in Patients with Serious Penicillin Allergies

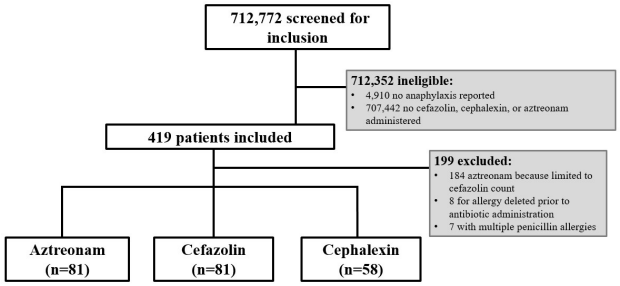
Sydney E. McNeill, PharmD[1]; Shauna Junco, PharmD, BCPS[1]; Janessa Smith, PharmD[2]; Mallory C. Cowart, PharmD, MBA, BCPPS[3]; Alejandro Jordan Villegas, MD, MSc[2]; Edgar Sanchez, MD, MS[2]; [1]Orlando Health - Orlando Regional Medical Center, Orlando, FL; [2]Orlando Health, Orlando, Florida; [3]Orlando Health - Arnold Palmer Hospital for Children, Orlando, Florida

Session: O-29. Prescribing and Prophylaxis Predicaments

Background. Penicillin allergies have a negative impact on patient outcomes due to utilization of second-line agents. Newer data suggests cephalosporins are well tolerated in penicillin allergies; however, none have solely evaluated anaphylactic penicillin allergies with first-generation cephalosporins. The purpose of this study was to evaluate the risk of any allergic reaction to first-generation cephalosporins compared to aztreonam in patients reporting anaphylaxis to an agent in the penicillin class.

Methods. This was a retrospective cohort study with patients who reported "anaphylaxis" to a penicillin agent and received cefazolin, cephalexin, or aztreonam. The final analysis included 220 patients: aztreonam (n=81), cefazolin (n=81), and cephalexin (n=58) (Figure 1). IgE-mediated reactions (within six hours of antibiotic administration) were defined as any one of the following: anaphylaxis, angioedema, urticarial rash, hypotension, immediate airway compromise, or receipt of epinephrine, hydrocortisone, or diphenhydramine. Non-IgE mediated reactions (within thirty days of antibiotic administration) included delayed hypersensitivity reactions and other dermatologic reactions.

Figure 1: Patient Enrollment



Patients admitted between January 1, 2013 to September 1, 2020 with a reported allergy of "anaphylaxis" to an agent in the penicillin class who received at least one dose of cefazolin, cephalexin, or aztreonam were screened for inclusion. Patients were excluded if the allergy was deleted from the electronic health record prior to antibiotic administration. All first-generation cephalosporin patients were included. Aztreonam patients were included in chronological order and limited to the number of included cefazolin patients.

Results. There were less allergic reactions in the first-generation cephalosporin group compared to the aztreonam group, but this was not statistically significant (7% vs. 14%, p=0.077). There were fewer IgE-mediated reactions in the cephalosporin group (6% vs. 14%, p=0.046). No difference in allergic reactions was observed when comparing those who received a single antibiotic dose versus multiple doses within