

**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**

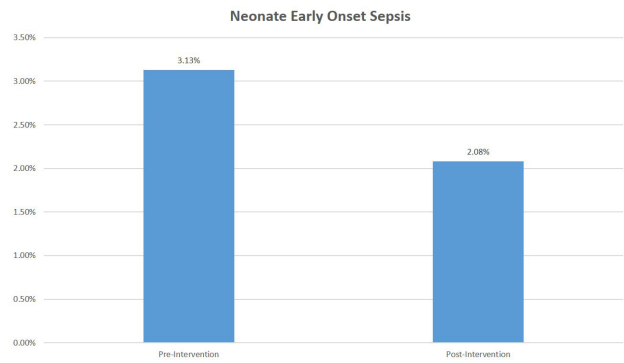
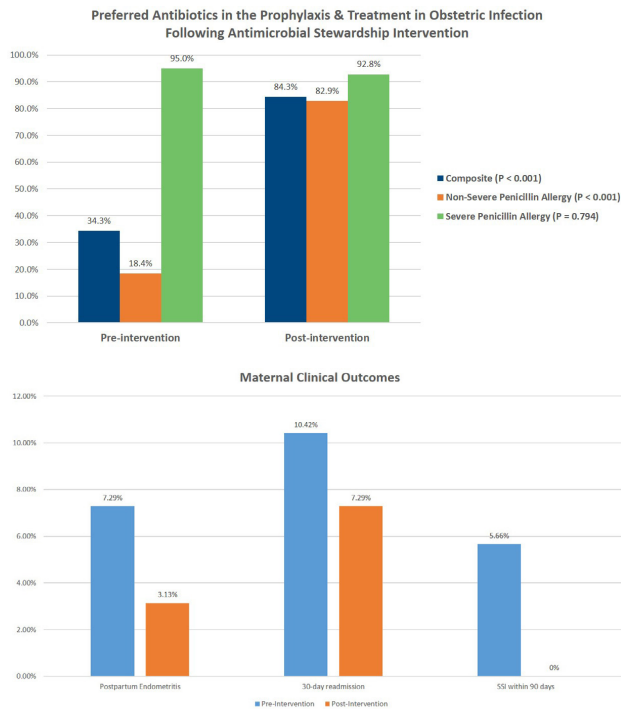
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**Session:** O-29. Prescribing and Prophylaxis Predicaments

**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**

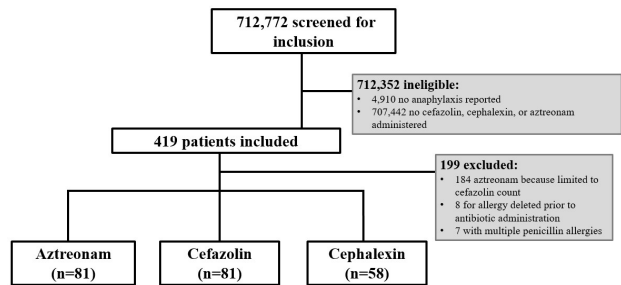
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**Session:** O-29. Prescribing and Prophylaxis Predicaments

**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, cephalixin, or aztreonam. The final analysis included 220 patients: aztreonam (n=81), cefazolin (n=81), and cephalixin (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, cephalixin, 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