effectiveness in patients at high risk for recurrence outside of controlled trials. This study aimed to compare BEZ to a historical standard of care (SoC) cohort for the prevention of rCDI in patients at high risk for recurrence.

Methods: A multi-center retrospective cohort study of patients within an academic health-system with one or more risk factors for CDI. Patients received SoC with oral vancomycin (VAN) or fidaxomicin (FDX) from January 2015 to December 2017 or BEZ, in addition to oral SoC, from September 2017 to September 2019. The primary outcome was rCDI within 90 days of completion of oral VAN or FDX. Secondary outcomes included all-cause readmission, all-cause mortality, and safety events at 90 days.

Results: One-hundred twenty patients received BEZ in addition to SoC (n=47) or SoC alone (n=73). Mean (SD) age was 55 (16) years, mean (SD) number of lifetime episodes was 3 (2) episodes, and 30.8% of patients had severe CDI. Six (12.8%) patients in the BEZ cohort and thirty-one (42.3%) in the SoC cohort experienced rCDI at 90 days [OR (95% CI) = 2.0 (0.07-53), p = 0.01]. Incidence of all-cause mortality (2.1% vs 5.5%, p=0.67) and all-cause readmission (42.6% vs 56.2%, p=0.20) within 90 days were not statistically different between groups. Patient body weight, timing of BEZ administration, CDI severity, or prior receipt of fecal microbiota transplantation significantly affected BEZ effectiveness. BEZ was well tolerated with one infusion-related reaction. There were no heart failure exacerbations among BEZ recipients and two exacerbations identified from control group.

Conclusion: In patients with at least one risk factor for rCDI, BEZ in addition to SoC was associated with lower rates of recurrent infection than SoC alone and may be a reasonable adjunct therapy in high risk patient populations.

Disclosures: Matthew Miller, PharmD. Allergan (Speaker's Bureau) Tetraphase (Speaker's Bureau)

970. Evaluation of Connecticut Medical Providers Concordance with 2017 IDSA/SHEA Clostridioides difficile Treatment Guidelines in New Haven County, 2017-2019

Mark Z. Tolar; incent Formation Group, Merck and Co., Inc. (Research Grant or Support) Roche Molecular Systems, Inc.

Background: Treatment guidelines for Clostridioides difficile infection (CDI) were updated by the Infectious Disease Society of America (IDSA) and the Society for Healthcare Epidemiology of America (SHEA) in 2017, notably for disease severity and antibiotic recommendations. Our objectives were to assess Connecticut medical providers’ concordance (2017-2019) with the 2017 update. The effect of guideline concordance on the risk of CDI recurrence was also assessed.

Methods: Using data from the Connecticut Emerging Infections Program’s CDI surveillance in New Haven County, severity and concordance were defined. For severity, according to the guidelines, patients were categorized as having CDI in the absence of another causative pathogen. Concordance on the risk of CDI recurrence was also assessed. For severity, concordance was defined as receiving the recommended first-line antibiotic (vancomycin for adults and pediatric patients, vancomycin or metronidazole for pediatric patients) for exactly 10 days. In the primary analysis, concordance was defined as receiving the recommendation of the 2017 guidelines but not the 2017 update.

Results: Of 1,216 cases, concordance increased from 10.0% in 2017 to 36.9% in 2019. Although concordance with treatment did not affect recurrence risk, increasing was concordant with the updated 2017 IDSA/SHEA guidelines, but still low overall in 2019. Although concordance with treatment did not affect recurrence risk, close attention should be paid by medical providers to non-severe cases and older cases as they are at an increased risk for recurrence.

Disclosures: All Authors: No reported disclosures

971. Evaluation of NSAID Exposure as a Risk Factor for Clostridium difficile Infection: A Propensity-Score-Matched Case-Control Study

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Methods: The population included 1338 patients tested for CDI from February–December 2016 at the University of Michigan. NSAID use within 30 days of CDI testing was determined by chart review. Both scheduled and as-needed NSAID use met the definition for exposure, but aspirin use also met the definition as it is not a reasonable adjunct therapy. Additional clinical data such as comorbid disease and baseline laboratory parameters were extracted through electronic query. A random forest model imputed missing data. A propensity score for NSAID use was developed via logistic regression and included gender, back pain, baseline serum creatinine, osteoarthritis, rheumatoid arthritis, serum albumin, and use of concomitant antibiotic or antifungal treatment. Cases were matched 1:1 with C. difficile negative controls by propensity score, with a matching caliper of 0.2 standard deviation of the logit of the score. The final study population consisted of 1256 cases and their matched controls, however 6 cases could not be matched to controls as none had scores within the matching caliper. Conditional logistic regression was used to compare cases to controls.

Results: NSAID use was similar between the two groups on unadjusted analyses. The adjusted, multivariable model demonstrates that non-aspirin NSAID use is not a significant risk factor for CDI (P = .816), after adjustment for comorbid disease burden, age, and history of prior CDI (Table). Older age and prior CDI were independent risk factors for CDI (Table).

Table: Study population and modeling results

Conclusions: In this retrospective case-control study, non-aspirin NSAID use was not associated with an increased risk of CDI to our knowledge, this is the first study of NSAID use as a risk factor for CDI that accounted for bias due to treatment assignment using a propensity score. Future studies should account for frequency or chronicity of NSAID use, which may affect the results.

Disclosures: Krishna Rao, MD, MS, Bio-K+ International, Inc. (Consultant) Merck & Co., Inc. (Research Grant or Support) Roche Molecular Systems, Inc. (Consultant)

972. Evaluation of Persistent Diarrhea and Recurrence Following Fecal Microbiota Transplantation for Recurrent Clostridium difficile Infection

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Methods: At a large academic medical center, we conducted a retrospective cohort study of patients receiving their first FMT for recurrent CDI using product from the BEZ cohort and thirty-one (42.5%) in the SoC cohort experienced rCDI at 90 days. One-hundred twenty patients received BEZ in addition to SoC (n=47) and SoC alone (n=73). Mean (SD) age was 55 (16) years, mean (SD) number of lifetime episodes was 3 (2) episodes, and 30.8% of patients had severe CDI. Six (12.8%) patients in the BEZ cohort and thirty-one (42.3%) in the SoC cohort experienced rCDI at 90 days [OR (95% CI) = 2.0 (0.07-53), p = 0.01]. Incidence of all-cause mortality (2.1% vs 5.5%, p=0.67) and all-cause readmission (42.6% vs 56.2%, p=0.20) within 90 days were not statistically different between groups. Patient body weight, timing of BEZ administration, CDI severity, or prior receipt of fecal microbiota transplantation significantly affected BEZ effectiveness. BEZ was well tolerated with one infusion-related reaction. There were no heart failure exacerbations among BEZ recipients and two exacerbations identified from control group.

Conclusion: From 2017 through 2019, CDI treatment in New Haven County increasingly was concordant with the updated 2017 IDSA/SHEA guidelines, but still low overall in 2019. Although concordance with treatment did not affect recurrence risk, close attention should be paid by medical providers to non-severe cases and older cases as they are at an increased risk for recurrence.

Disclosures: All Authors: No reported disclosures

973. Evaluation of NSAID Exposure as a Risk Factor for Clostridium difficile Infection: A Propensity-Score-Matched Case-Control Study

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Session: P-32. HAI: C. difficile

Methods: The population included 1338 patients tested for CDI from February–December 2016 at the University of Michigan. NSAID use within 30 days of CDI testing was determined by chart review. Both scheduled and as-needed NSAID use met the definition for exposure, but aspirin use also met the definition as it is not a reasonable adjunct therapy. Additional clinical data such as comorbid disease and baseline laboratory parameters were extracted through electronic query. A random forest model imputed missing data. A propensity score for NSAID use was developed via logistic regression and included gender, back pain, baseline serum creatinine, osteoarthritis, rheumatoid arthritis, serum albumin, and use of concomitant antibiotic or antifungal treatment. Cases were matched 1:1 with C. difficile negative controls by propensity score, with a matching caliper of 0.2 standard deviation of the logit of the score. The final study population consisted of 1256 cases and their matched controls, however 6 cases could not be matched to controls as none had scores within the matching caliper. Conditional logistic regression was used to compare cases to controls.

Results: NSAID use was similar between the two groups on unadjusted analyses. The adjusted, multivariable model demonstrates that non-aspirin NSAID use is not a significant risk factor for CDI (P = .816), after adjustment for comorbid disease burden, age, and history of prior CDI (Table). Older age and prior CDI were independent risk factors for CDI (Table).

Table: Study population and modeling results

Conclusions: In this retrospective case-control study, non-aspirin NSAID use was not associated with an increased risk of CDI to our knowledge, this is the first study of NSAID use as a risk factor for CDI that accounted for bias due to treatment assignment using a propensity score. Future studies should account for frequency or chronicity of NSAID use, which may affect the results.

Disclosures: Krishna Rao, MD, MS, Bio-K+ International, Inc. (Consultant) Merck & Co., Inc. (Research Grant or Support) Roche Molecular Systems, Inc. (Consultant)