Durable response was variable after completion of ertapenem (median 4 weeks; range 2–12); all subjects relapsed with varying degree of severity. In three patients diarrhea (four patients), and improvement of pain score was observed in all patients at the end of treatment. A 100% response rate was observed within 2 weeks of initiation and near complete resolution of active inflammation/drainage in all patients. Median treatment duration was 8 weeks (range 6–12). A successful response. Adverse events include diarrhea (four patients), and improvement of pain score was observed in all patients at the end of treatment.

More than just an Anti-Infective Agent: A Prospective Pilot Clinical Trial to Determine the Effectiveness of IV Ertapenem in Severe Hidradenitis Suppurativa

Kulothungan Gunasekaran, MD; Tricia Stein, MD and Odaliz Abreu-Lanfranco, MD; Rachna Jayaprakash, MD; Zachary Hanna, (DO); Mayur Ramesh, MD, MPH; J. S. McGregor, MD; and Aaron B. Mendelsohn, MPH, PhD

Determine the Effectiveness of IV Ertapenem in Severe Hidradenitis Suppurativa

Thursday, October 5, 2017: 12:30 PM

Background. Hidradenitis suppurativa (HS) is a chronic debilitating cutaneous inflammatory condition caused by follicular occlusion/rupture with resultant inflammatory response. No durable control of HS is seen with current management strategies including topical and/or oral antibiotics, immunomodulatory drugs and local surgery. A recent French study using IV ertapenem for ≥4 weeks showed significant control of inflammatory response. No durable control of HS is seen with current management strategies including topical and/or oral antibiotics, immunomodulatory drugs and local surgery. A recent French study using IV ertapenem for ≥4 weeks showed significant control of inflammatory response. No durable control of HS is seen with current management strategies including topical and/or oral antibiotics, immunomodulatory drugs and local surgery.

Methods. An open-label, prospective pilot clinical study was conducted at Henry Ford Hospital, Detroit from May 2013 to December 2015. All patients with severe HS (Hurley Stage III) and who failed medical management by Dermatology were referred to Infectious Diseases for daily IV ertapenem through a PICC line. Patients were followed up for at least 6 months after completion of therapy with weekly monitoring. Data including demographics, clinical response/adverse events to ertapenem and any PICC line-related complications were recorded. Response to the treatment was based on clinical improvement in pain score/drainage and Hurley Staging of HS.

Results. Twenty-three patients with severe HS consented to participate with a median age of 40 years (range 23–78 years) and 56% were female. Median treatment duration was 8 weeks (range 6–12). A 100% response rate was observed within 2 weeks of initiation and near complete resolution of active inflammation/drainage/impairment of pain score was observed in all patients at the end of treatment. Durable response was variable after completion of ertapenem (median 4 weeks; range 2–12); all subjects relapsed with varying degree of severity. In three patients who relapsed back to Hurley Stage III, ertapenem was restarted after 3 months with successful response. Adverse events included diarrhea (four patients), Cloustridium difficile infection (one patient), and PICC line-related DVT (three patients). Clinical benefit despite ertapenem non-responsive bacteria in pretreatment culture of cutaneous drainage suggests an unproven immune-modulatory activity. Role of gut skin microbial alteration needs further study.

Conclusion. In selected patients with severe HS, IV ertapenem is highly effective in the control of inflammation and can be used in combination with local surgery.

Disclosures. All authors: No reported disclosures.

258. High Rates of Multidrug Resistance in Diabetic Foot Infection in Detroit Area: Does It Matter

Oryan Henig, MD; Jason M. Pogue, PharmD, PhD; Raymond Cha, PharmD; Sorabh Dhar, MD; Umar Hayat, MD; Mahmoud Ja’ara, Student; Paul E Kilgore, MPH, MD, MPH; Division of Infectious Diseases, University of Michigan Medical School, Ann Arbor, Michigan, 1Department of Pharmacy Services, Sinai-Grace Hospital; Detroit Medical Center, Detroit, Michigan, 2Wayne State University School of Medicine, Detroit, Michigan, 3Pharmacy, Eugene Applebaum College of Pharmacy, Wayne State University, Detroit, Michigan, 4John D Dingell VA Medical Center, Detroit, Michigan, 5Division of Infectious Diseases, Wayne State University, Detroit Medical Center, Detroit, Michigan, 6Detroit Medical Center, Detroit, Michigan, 7Eugene Applebaum College of Pharmacy & Health Sciences, Wayne State University, Detroit, Michigan, 8Department of Internal Medicine, Division of Infectious Diseases, University of Michigan Medical School, Ann Arbor, Michigan

Session: 47: Clinical: Skin and Soft Tissue Thursday, October 5, 2017: 12:30 PM

Background. Multidrug-resistant organisms (MDROs) are important diabetic foot infection (DFI) pathogens. This study evaluated the impact of DFI due to MDROs (MDRO-DFI) on clinical outcomes.

Methods. Adults admitted to Detroit Medical Center from 1/2012 to 12/2015 with culture-positive DFI were included. Associations between outcomes and MDRO-DFI (evaluated as a single group that included methicillin-resistant Staphylococcus aureus (MRSA), vancomycin-resistant Enterococci, Enterobacteriaceae-resistant to third-generation cephalosporins and/or carbapenems (Enterobacteriaceae R), Acinetobacter baumannii, and Pseudomonas aeruginosa) were analyzed. Outcomes included above and below knee lower extremity amputation (LEA) and readmissions and mortality within a year following DFI. A propensity score predicting the likelihood of having MDRO-DFI was computed by comparing patients with MDRO-DFI to patients with DFI not due to MDROs (non-MDRO-DFI). A conditional logistic model was constructed for each outcome, and MDRO-DFI was analyzed as an independent variable after patients in the MDRO and non-MDRO groups were matched by propensity score.

Results. 674 patients were included, with a mean age of 58.6 ± 13.8. Sixty-four percent were male and 73% African American. Median Charlson score was 7 (IQR 5–9). Most patients (n = 394, 59%) had MDRO-DFI and MRSA was the most common (235, 60% of MDRO-DFI patients), followed by P. aeruginosa (25%) and Enterobacteriaceae-R (15%). In bivariate analyses LEA and 1 year readmission were more common in the MDRO-DFI group (Table). However, in propensity-adjusted analyses, MDRO-DFI was no longer associated with LEA or hospital readmission.

Conclusion. LEA occurred in >20% of DFI-MDRO patients, and >60% of patients were readmitted to the hospital within a year following a DFI-MDRO episode. In propensity-adjusted analyses, DFI-MDRO was not significantly associated with these clinical outcomes. Table: Impact of DFI-MDRO on outcomes

Disclosures. All authors: No reported disclosures.

259. Risk Factors and Outcomes for Bloodstream Infections (BSI) Among Patients with Acute Bacterial Skin and Skin Structure Infections (ABSSSI)

Michael J. Rebak, PharmD, MPH, PhD; Evan J. Zaworski, PharmD, BCPS; Trang D. Trinh, PharmD; Abdalla Alkhalaf, MD, MPH; Vanessa Margaritis, DDS, MSc, PhD and Aaron B. Mendelsohn, MPh, PhD; 1Anti-Infective Research Laboratory, Department of Pharmacy Practice, Wayne State University, Eugene Applebaum College of Pharmacy & Health Sciences, Detroit, Michigan, 2Public Health, Walden University, Minneapolis, Minnesota, 3Walden University, Minneapolis, Minnesota

Session: 47: Clinical: Skin and Soft Tissue Thursday, October 5, 2017: 12:30 PM

Background. ABSSSI are common infections in the community and can result in high morbidity and healthcare costs. While risk factors for ABSSSI have been previously evaluated, risk factors associated with secondary BSI have not, especially in an urban population with limited access to healthcare.

Methods. This case–control study evaluated risk factors and outcomes associated with secondary S. aureus BSI among adult ABSSSI patients. Patients age ≥ 18 years with BSI among adults admitted to a large urban academic medical center in Detroit, Michigan were included. Cases were defined as patients with a secondary S. aureus BSI and controls were matched by propensity score. Cases and controls were matched by propensity score. Outcomes included above and below knee lower extremity amputation (LEA) and readmissions and mortality within a year following DFI. A propensity score predicting the likelihood of having MDRO-DFI was computed by comparing patients with MDRO-DFI to patients with DFI not due to MDROs (non-MDRO-DFI). A conditional logistic model was constructed for each outcome, and MDRO-DFI was analyzed as an independent variable after patients in the MDRO and non-MDRO groups were matched by propensity score.

Results. 674 patients were included, with a mean age of 58.6 ± 13.8. Sixty-four percent were male and 73% African American. Median Charlson score was 7 (IQR 5–9). Most patients (n = 394, 59%) had MDRO-DFI and MRSA was the most common (235, 60% of MDRO-DFI patients), followed by P. aeruginosa (25%) and Enterobacteriaceae-R (15%). In bivariate analyses LEA and 1 year readmission were more common in the MDRO-DFI group (Table). However, in propensity-adjusted analyses, MDRO-DFI was no longer associated with LEA or hospital readmission.

Conclusion. LEA occurred in >20% of DFI-MDRO patients, and >60% of patients were readmitted to the hospital within a year following a DFI-MDRO episode. In propensity-adjusted analyses, DFI-MDRO was not significantly associated with these clinical outcomes. Table: Impact of DFI-MDRO on outcomes

Disclosures. All authors: No reported disclosures.