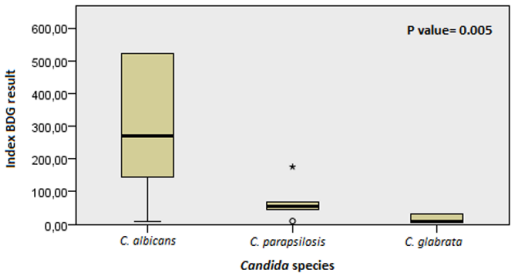
Figure 2: index BDG result differences between *Candida* species



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

2258. Correlation of Electroencephalogram Findings and Dose Relative to Renal Function among Patients with Possible Cefepime-Induced Encephalopathy

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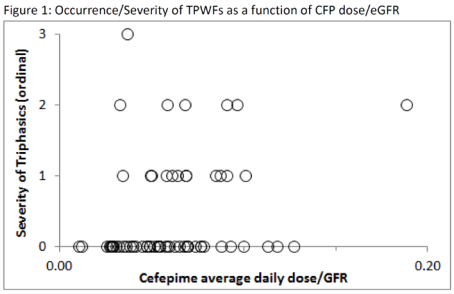
Background. Cefepime-induced encephalopathy (CIE) is thought to be a rare toxicity, with an overall incidence of <1%. However, the low incidence may be a result of under-recognition and difficulty in identifying the exact etiology of encephalopathy in hospitalized patients. Among patients with suspected CIE, electroencephalograms (EEGs) sometimes show abnormal activity like triphasic waveforms (TPWs). We asked whether the incidence of EEG findings consistent with CIE varies with cefepime (CFP) dose relative to eGFR (dose/eGFR). We also compared the incidence of these EEG findings in patients receiving CFP to the incidence in patients receiving piperacillin–tazobactam (PT).

Methods. In a retrospective analysis, data between 8/1/2016 and 5/24/2018 were extracted from the University of Chicago Clinical Data Warehouse. Patients 20–79 years old who received PT or CFP were included; those requiring renal replacement therapy or who had eGFR <10 mL/minute/BSA at baseline were excluded. The average daily dose of PT or CFP was calculated to determine dose/eGFR. Linear or logistic regressions were performed in STATA.

Results. EEGs were obtained in 66 (4.3%) of 1525 patients receiving CFP and in 28 (3.3%) of 842 receiving PT. TPWs were present in 19 (28%) of EEGs from the CFP group, and in none of the EEGs from the PT group. Figure 1 shows the correlation between CFP dose/eGFR ratio and occurrence/severity of TPWs. Ordered logistic regression analysis identified a coefficient of 20.9 (95% CI; 3.7–38.2). Figure 2 shows only a weak association between CFP dose/eGFR and background frequency (BFS; R2 = 0.05). In the PT group, BFS was not correlated with PT dose/eGFR (R2 = 0.01).

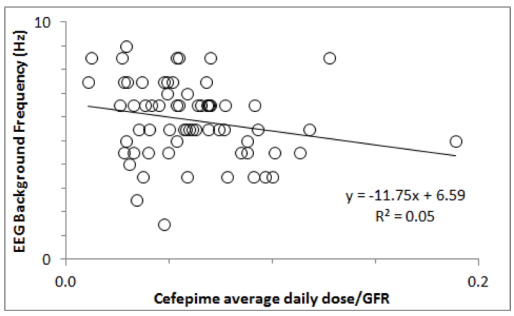
Conclusion. TPWs were more likely to be found in patients receiving CFP than PT, suggesting that in the absence of other metabolic abnormalities, TPWs might be specific for CFP. Higher CFP dose-to-eGFR ratios predispose to and potentially worsen the severity of TPWs. Unlike TPWs, BFS was only weakly associated with CFP dose/eGFR and even less associated with PT dose/eGFR ratio.

Figure 1: Occurrence/Severity of TPWFs as a function of CFP dose/eGFR



Grading of triphasic waves from EEG report: 0=none, 1=infrequent, 2=frequent, 3=abundan

Figure 2: BFS as a function of CFP dose/eGFR



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

2259. Predictors of Empiric Carbapenem Therapy in Complicated Intra-Abdominal Infections in the United States, 2013–2017: A Retrospective Cohort Study

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Background. Complicated intra-abdominal infections (cIAI) remain an important cause for hospitalization. Evidence-based guidelines recommend reserving broad-spectrum antibiotic coverage for high-risk cases in order to reduce overuse of certain antibiotic classes, particularly in the face of emerging carbapanem resistance. We examined the factors associated with use of empiric carbapenem treatment (ECT) among hospitalized patients with cIAI.

Methods. We performed a multicenter retrospective cohort study in the Premier database of approximately 180 hospitals, 2013–2017. Using an ICD-9/10 based algorithm including a requirement for a laparotomy/laparoscopy, we identified all adult patients hospitalized with cIAI and included those with a positive blood or abdominal culture. We derived and tested a multivariable logistic regression model to examine predictors of ECT.

Results. Among 321,317 hospitalized patients with cIAI, 4,453 (1.4%) were culture-positive, 1,185 (26.6%) of whom received ECT. Among those given ECT, >50% (682) had no risk factors for resistance, and in only 120 (10.1%) was an organism resistant to a third-generation cephalosporin (C3R extended spectrum β-lactamase [ESBL] phenotype) isolated. The top 5 variables associated with ECT use were: pre-cIAI anti-fungal therapy (OR 2.57, 95% CI 1.91, 3.45) urgent (vs. emergent) admission (OR 1.56, 95% CI 1.21, 2.01), corticosteroids (OR 1.50, 95% CI 1.13, 1.99), ICU admission (OR 1.46, 95% CI 1.17, 1.82), and presence of sepsis/septic shock (OR 1.43, 95% CI 1.18, 1.74). The model had a moderately good fit (c-statistic = 0.683; 95% CI (0.665, 0.700), Hosmer-Lemeshow *P* value = 0.411).

Conclusion. Among patients hospitalized with a cIAI, 26.6% received ECT despite >50% lacking risk factors for resistance, and an only 10% prevalence of C3R in this cohort. This suggests that there remains an opportunity for carbapanem-sparing strategies. Further stratification of the risk for resistance is needed among patients with markers of high illness severity, such as those identified in our model.

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

2260. Clofazimine Safety and Efficacy for Treatment of Multidrug-Resistant Non-Tuberculous Mycobacteria (NTM)

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Background. Nontuberculous mycobacteria (NTM) are increasingly detected and challenging to cure given complex drug-resistance patterns and need to use often intolerable drug multidrug regimens over months to years of duration. As such, NTM infection can be associated with significant mortality and morbidity. Clofazimine is a repurposed drug used in the treatment of leprosy worldwide and increasingly in multidrug-resistant (MDR) tuberculosis. Some centers in the United States have incorporated clofazimine in the treatment of NTM but experience is limited and procurement restrictions have hampered its more widespread use

Methods. A prospective cohort study was performed in patients diagnosed with pulmonary or extrapulmonary NTM infection among those treated with clofazimine from a single center serving referrals from across the state of Virginia under an investigational new drug protocol. Data were collected through the center's electronic medical record and included both pretreatment and follow-up host characteristics, radiological, microbiological and pathology data. Outcomes were assessed, radiological resolution, symptom improvement, and change in pulmonary function test (among patients with cystic fibrosis).

Results. Thirty-seven patients received clofazimine. NTM species for which the treatment was indicated were *M. abscessus* in 21 (58%), *M. avium* complex in 17 (45%) and 3 with *M. chelonae*. The most common companion drugs for *M. abscessus* included imipenem, tigecycline, linezolid or tedizolid, amikacin (IV induction followed by inhaled continuation phase) and azithromycin. For other basic patient characteristics refer to Table 1. Survival rate was 97%, while 73.5% had documented improvement in symptoms and only 2.9% had worsening of symptoms. Radiological resolution or partially improving were documented in 38% of the patients. there were no severe adverse events from clofazimine.

Conclusion. Adding clofazimine to multi-class antibiotic regimens for drug-resistant NTM treatment, including pulmonary *M. abscessus* disease, was well tolerated and led to clinical improvement in the majority of those treated. Randomized controlled studies are needed to determine the individual impact of clofazimine within and otherwise optimized regimen.