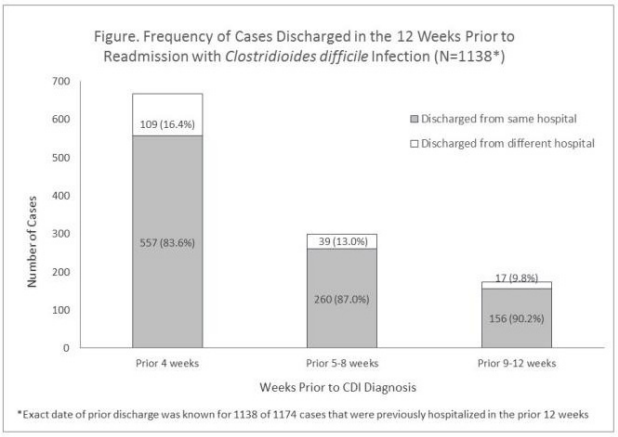
Figure. Frequency of Cases Discharged in the 12 Weeks Prior to Readmission with Clostridioides difficile Infection (N=1138*)



Conclusion: A third of hospitalized CO CDI had been recently discharged from the same hospital, and most had received antibiotics during or soon after the last admission. Hospital-based and post-discharge antibiotic stewardship interventions could help reduce subsequent CDI hospitalizations.

Disclosures: Ghinwa Dumyati, MD, Roche Diagnostics (Consultant)

781. *C.difficile* PCR+/ Toxin EIA- treat or not treat? A clinician survey

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Background: *C.difficile* Toxin Polymerase Chain Reaction (*C.diff* PCR) and *C.difficile* Toxin Enzyme Immunoassays (toxin EIA) are commonly used tests to diagnose *Clostridoides difficile* infection (CDI). *C.diff* PCR cannot differentiate between colonization and infection, leading to a higher false-positive diagnosis of CDI. Toxin EIA has low sensitivity leading to a missed diagnosis of CDI. In patients with *C.diff* PCR positive(+) and Toxin EIA negative(-), clinical judgment is often needed regarding the decision to treat or not to treat. C.diff cytotoxic assay (CCA), is a more sensitive method to detect the toxin but is time-consuming and not readily available.

Methods: Between 6/2019 and 12/2019, 83 patients who were admitted to the hospital, met our inclusion criteria (*C.diff* PCR+/EIA-). Clinicians who cared for these patients were contacted and surveyed with a predesigned questionnaire evaluating the rationale of treatment. Also, a simultaneous medical records review was done to ensure consistency. Along with this *C.diff* PCR+/EIA- stool samples were sent to ARUP laboratories for CCA. The CCA results were not available for clinicians and did not impact clinical care. Average cost for a CCA assay was $29

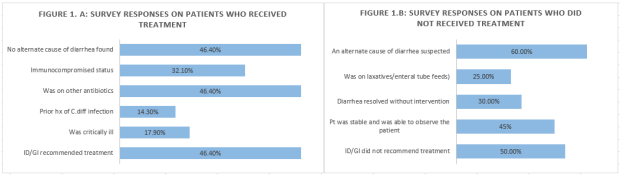
Results: Demographics of the clinicians were variable (Table 1). Several parameters were considered when making decisions regarding treatment and GI/ID were frequently involved (figure 1). Among the 83 patients, 41(49%) were CCA (+) and 42(51%) were CCA (-). 48 of 83 (58%) patients received treatment for CDI. 25 of 48 (52%) patients who were treated were CCA positive while 23 of 48 (48%) patients were CCA negative. Among the untreated patients, 16/35 (46%) were CCA+ while 19/35(54%) were CCA-. There was no statistically significant correlation between clinical judgment and CCA assay results (p: 0.56 on the Chi test).

Demographics of the clinicians

Table 1: Demographics of the clinicians

Variables		Total participants (n=55)
Gender	Male	29 (52%)
	Female	26 (48%)
Age (years)	<35	35 (63%)
	35-45	7 (12%)
	45-55	9 (16%)
	55>	4 (7%)
Specialty	Internal Medicine	44 (80%)
	Surgery	5 (9%)
	Intensive care	3 (6%)
	Neurology	2 (2%)
	PMR	1 (2%)
Provider Ethnicity	African American	6 (11%)
	Asian	18 (32%)
	Caucasian	23 (42%)
	Hispanic	7 (12%)
	Other	1 (2%)
Title	Resident/Fellow	27 (49%)
	Physician Assistant/Nurse practitioner	9 (16%)
	Attending	19 (35%)

Clinician survey responses



CDI Treatment and by CCA positivity

Table 2: CDI Treatment and by CCA positivity.

	CCA+	CCA-	Total	p value (Chi test)
CDI treatment	25	23	48	0.56
No CDI treatment	16	19	35	
Total	41	42	83	

CDI, Clostridium Difficile Infection; CCA, Cell Cytotoxic Assay;

Conclusion: Clinicians regardless of their background and training face challenges with the treatment of *C.diff* PCR+/EIA- patients. Patient outcomes based on the incorporation of CCA assay into an algorithm for C.diff PCR+/EIA- patients, need to be evaluated. But it has a potential role in stopping unnecessary CDI treatment as well as avoidance of missed treatment opportunities while possibly also being cost-effective.

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