Prevalence of and Factors Associated with Clostridium difficile Co-infection Among Patients with Candidemia, United States, 2014–2016

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Table 3. Multivariate analysis of 30-day infection-related mortality

<table>
<thead>
<tr>
<th>OR</th>
<th>p value</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>5.908</td>
<td>0.031</td>
<td>1.176</td>
</tr>
<tr>
<td>3.038</td>
<td>0.281</td>
<td>0.403</td>
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</tbody>
</table>

Disclosures. All authors: No reported disclosures.

1779. Prevalence of and Factors Associated With Cladophoridium difficile Co-infection Among Patients with Candidemia, United States, 2014–2016
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Methods. Population-based surveillance for candidemia was conducted through CDC’s Emerging Infections Program during 2014–2016. A case of candidemia was defined as a blood culture positive for Candida species collected from a surveillance area resident. Demographic and medical information, including occurrence of CDI, was collected. We defined co-infection as CDI within 90 days of candidemia and performed bivariable analysis to assess factors associated with co-infection.

Results. Among 2,129 cases of candidemia, 190 (9%) had CDI co-infection; 116 (5%) had CDI in the 90 days before candidemia (median 10 days) and 60 (3%) had CDI following candidemia (median 8 days). The median age of those with CDI-candidemia co-infection was 61 years and 100 (53%) were male. Compared with candidemia alone, the odds of CDI co-infection was 2.5 times greater (OR 2.56, 95% CI 1.56–4.18). There were no significant differences in 30-day mortality (OR 1.71, 1.19–2.46). There were no significant differences in 30-day mortality (OR 1.71, 1.19–2.46).

Conclusion. Nearly one in ten patients with candidemia also had CDI co-infection. Black race, certain underlying conditions, hemodialysis, previous hospitalization, ICU stay, and the presence of a CVC were associated with co-infection. Clinicians should be vigilant for co-infection of CDI and candidemia, particularly in situations with associated risk factors.

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1780. Routine Cryptococcal Antigen Screening in Solid Organ Transplant Recipients: Is it Time to Save Lives and Money?
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Methods. Cryptococcosis affects 1 in 270 solid organ transplant patient (SOT) recipients with high mortality. In HIV-infected patients, cryptococcal antigen (CRAG) is detectable in blood weeks to months before symptomatic infection and screening is recommended. No screening guidelines exist for SOT recipients.

Methods. We performed a cost-effectiveness analysis of CRAG screening amongst SOT recipients. We estimated costs of screening from Medicare reimbursement of $16.49 for CPT 87899 (Infectious agent antigen detection by immunoassay). We determined the number at risk from a large cohort of 42,634 adult SOT recipients from ICD-9 CM billing data from HCUP State Inpatient Databases of Florida (2006–2012), New York (2006–2011), and California (2004–2010). Cost of screening was compared with the cost of inpatient hospitalization.

Results. Among 42,634 adult SOT recipients, 158 (0.37%) developed cryptococcosis at a median time of 15.5 months (range 0.1–80) after transplant. During the 43 month follow-up, there was approximately 2.5% annual mortality. The estimated costs of routine CRAG screening could detect 75% of asymptomatic cryptococcosis with CDI co-infection prior to symptomatic disease requiring prolonged hospitalization, it would be approximately cost neutral (11.5 million), and even cost saving if above 80% of hospitalizations are averted. Alternatively stated, for every one hospitalization avoided, 42,455 additional hospitalizations are averted. Alternatively stated, for every one hospitalization avoided, 8.8 million would be saved if CRAG screening could detect 75% of asymptomatic cryptococcosis prior to symptomatic disease requiring prolonged hospitalization, it would be approximately cost neutral (11.5 million), and even cost saving if above 80% of hospitalizations are averted. Alternatively stated, for every one hospitalization avoided, 42,455 additional hospitalizations are averted.

Conclusion. Assuming the ability of routine screening to identify 50% of patients who would develop invasive cryptococcosis; CRAG screening every 3 months among SOT recipients likely would be at least cost neutral to the healthcare system. Antecedent during cryptococcal antigenemia prior to symptomatic disease in Non-HIV/SOT cohorts to inform optimal screening intervals should be further studied. Prospective SOT cohorts should validate this approach to save lives in a cost-effective manner.

Disclosures. All authors: No reported disclosures.

1781. Galidesivir, a Direct-Acting Antiviral Drug, Abrogates Viremia in Rhesus Macaques Challenged with Zika Virus
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Methods. Galidesivir was well-tolerated in all studies. All untreated controls developed high-level plasma viremia, and had readily detectable ZIKV RNA in CSF, saliva and urine. Animals infected with lower doses of ZIKV or with serum from SCZIKV-challenged animals did not develop plasma viremia and were either negative or had significantly reduced ZIKV RNA in bodily fluids. Animals treated with galidesivir later (up to 72 hours) were partially protected; they had detectable plasma ZIKV RNA, but the onset was delayed and the magnitude significantly reduced compared with controls. Animals infected with ZIKV were protected by galidesivir treatment up until day 5 after infection, with no blood viremia and significant reductions in ZIKV RNA in the CSF as compared with controls.

Conclusion. Galidesivir dosing in rhesus macaques was well-tolerated and offered significant protection against ZIKV infection. These results warrant continued study and clinical evaluation.


1782. Outcomes of women with laboratory evidence of Zika infection in pregnancy
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Methods. Zika virus (ZIKV) infection in pregnancy is a global health concern. With onset of local transmission, obstetricians in Miami-Dade County, FL,