1602. Clostridium difficile Infection as a Predictor of Acute Graft vs. Host Disease Among Allogeneic Stem Cell Transplant Recipients

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Background. Clostridium difficile infection (CDI) is a major cause of infectious diarrhea especially among allogeneic stem cell transplant (SCT) recipients. The relationship between CDI and acute Graft vs. Host Disease (aGvHD) has been a topic of great interest for some time, as either of the two conditions may affect the other. We studied the temporal relation of CDI on aGvHD in the first 100 days posttransplant in a large cohort of allogeneic SCT recipients.

Methods. We conducted an analysis of retrospective data extracted from the medical records of adult patients (more than 18 years of age) who underwent their first allogeneic SCT between January 1, 2010 and December 30, 2016 at the University of Kansas Health System. Patients were followed for CDI events between day −10 to day + 100 after SCT. We used Cox proportional hazards model for survival analysis to examine the association of having CDI, prior aGvHD, and the current aGvHD grade with the risk of developing CDI.

Results. A total of 565 allogeneic SCT recipients were included in the analysis. Of the total sample, 419 (64%) developed aGvHD within the first 100 days. CDI was observed in 112 (17%) of all allogeneic SCT recipients, 72 (64%) of CDI cases developed prior to the onset of aGvHD. Fistuloxim was used in the treatment of 57 of 62 cases whereas, vancomycin was used in 53 (47%) of CDI cases. On unadjusted analysis, CDI was associated with aGvHD (P = 0.0036), grade aGvHD (P = 0.0132), and GI aGvHD (P = 0.0003). On multivariate survival analysis, the following predictors were associated with aGvHD: CDI (adjusted Hazard Ratio (aHR) = 1.44, P = 0.0047), matched unrelated donor vs. matched related donor transplant type (aHR = 1.40, P = 0.0023), myeloablative vs. reduced intensity conditioning (aHR = 1.87, P < 0.0001). This was consistent with the stepwise logistic regression model.

Conclusion. Allogeneic SCT recipients with CDI have a higher risk of aGvHD compared with those without CDI.

Disclosures. All authors: No reported disclosures.

1603. Our Experience With M. marinum Cutaneous Infections in Three Patients Receiving Anti-TNFa

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Background. TNFa inhibitors are a well-known risk factor for active tuberculosis but less is known about the link between TNFa inhibitors and other mycobacterial diseases, particularly M. marinum. With the increase in use of these medications, and the trend toward more outdoors activities that include aquatic environment exposure, focus should be on better understanding of the link between use of TNFa inhibitors and the development of a severe M. marinum infection that might require earlier diagnosis and more aggressive antibiotic therapy.

Methods. We describe our experience with three cases of aggressive cutaneous M. marinum infection in patients taking anti-TNFa that presented to Abington Memorial Hospital in Pennsylvania between 2014 and 2017.

Results. Age, gender, diagnosis

| Age, gender, diagnosis | Anti-TNFa, duration and indication | Delay in diagnosis | Treatment | Progression |
|------------------------|---------------------------------|-------------------|-----------|-------------|
| 47 y/o F Cellulitis/lymphangitis | Etanercept, 5 years, for RA | 2 weeks | Clarithromycin + etambutol | Cleared in 2 months |
| 34 y/o M cellulitis | Infliximab, 7 years, for UC | 10 weeks | Clarithromycin + etambutol | Cleared in 3 weeks |
| 62 y/o F cellulitis/lymphangitis | Adalimumab, 8 months, for RA | 4 weeks | Clarithromycin + Rifampin | Cleared in 1 month |

Disclosures. All authors: No reported disclosures.