Results: The majority of both male and female subjects were >50 years old, white and non-Hispanic/Latino, overweight or obese, living above the 37th percentile, and reported the use of a vitamin D-containing supplement. Age was positively associated with disease (p = .002, t-test), whereas other parameters were not. Mean pre-transplant 25(OH)D concentrations of 29.0 ± 11.0ng/mL (p < .001, t-test) suggested a significant incidence of vitamin D insufficiency in the sample. The reported use of a vitamin D-containing supplement was the only parameter significantly associated with 25(OH)D concentrations (p = .014). Ultimately, pre-transplant vitamin D status (insufficient vs sufficient) had no significant impact on overall survival in subjects post-AHSCT [HR = 0.99 (95% CI 0.45-2.20) Log-rank p = .997].

Conclusion: The majority of lymphoma and MM patients have insufficient pre-AHSCT 25(OH)D concentrations. In contrast to prior studies, no association of 25(OH)D and survival was observed. These findings support a rationale to continue this investigation in a larger prospective sample.

Retrospective Comparison of Day +1 Versus Day +7 Initiation of G-CSF in Patients Undergoing Autologous Hematopoietic Stem Cell Transplantation
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Background: Giving Filgrastim (G-CSF) following high dose chemotherapy and autologous stem cell reinfusion (HSCT) is routinely used to shorten duration of neutropenia and decrease risk of infection. The optimal post-transplant day of initiation of G-CSF is not standardized. We recently studied a change from initiation of G-CSF from day +1 to day +7 in light of recent data showing equivocal results.

Methods: Beginning November 1st, 2012 a control group consisting of 83 patients with multiple myeloma or lymphoma undergoing autologous HSCT received G-CSF subcutaneously daily from Day+1 until absolute neutrophil count (ANC) of 1500 for two consecutive days. Beginning February 1st, 2013 we evaluated 56 patients who received G-CSF starting day +7 and compared time to ANC engraftment between the groups. Both groups received G-CSF to the same ANC endpoint. Patients were matched for diagnosis, comorbidity index, number of prior therapies, and performance status. Additional endpoints included incidence of infection, transfusion support, and length of stay.

Results: 83 patients in the control group received G-CSF beginning day +1, and 56 study group patients received G-CSF beginning day +7. There was a significant difference in ANC recovery both to >500 and >1500 between the groups. On average, patients who received G-CSF starting Day +7 required 1.53 more days for ANC recovery >500 and 1.89 more days for ANC recovery >1500. However, there was no statistical difference in platelet reconstitution or length of stay.

Conclusion: Day +1 administration of G-CSF was associated with earlier neutrophil recovery but there was no improvement in incidence of infection or length of stay when compared to administration beginning day +7.