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Letters

TO THE EDITOR

Addressing the Overlooked

Orthostatic Intolerance Syndromes in Hematopoietic Stem Cell Transplant Recipients

We read with great interest the paper by Vasbinder et al[1] on cardiovascular events after hematopoietic stem cell transplant (HSCT). While advances in HSCT have improved the survival of patients with hematologic malignancies, long-term survivors are at risk for treatment-related cardiovascular complications.

Vasbinder et al[1] examined the incidence and risk factors for short (<100 days) and long-term (>100 days) cardiovascular complications in over 3,300 adult HSCT recipients, between 2008 and 2019. The study revealed that the cumulative incidence of cardiovascular events was 4.1% at 100 days and 13.9% at 5 years following HSCT. Notably, allogenic recipients exhibited higher incidences of atrial fibrillation/flutter and heart failure long term.

Despite the exhaustive nature of the analysis, the investigators have not reported any data on orthostatic intolerance syndromes (OIS), including orthostatic hypotension (OH) and postural tachycardia syndrome (POTS). OIS are characterized by the inability to tolerate the upright position, and can negatively impact quality of life and increase the risk of cardiovascular disease, falls, dementia, depression, and death.[2] OIS is an under-recognized clinical condition affecting cancer survivors.[3] Our retrospective study[4] published in 2021 revealed that the prevalence of OH and POTS among 132 patients referred to a cardiologist post-HSCT was substantial, at 23% and 9%, respectively. The median time from HSCT to diagnosis of either OH or POTS was 82 (24-248) days. The development of OIS in this population appears to be linked to the transplantation procedure itself, as these conditions were not detailed as pre-existing to HSCT, and the identified risk factors did not significantly contribute according to a detailed analysis.[4] Interestingly, 91% of the patients in our study required pharmacologic intervention, underscoring the importance of screening for OIS as part of routine post-transplant care.

The substantial prevalence of OIS and large pharmacologic need advocate strongly for inclusion as part of the cardiovascular outcomes considered in studies on cancer survivors and highlights a critical gap in our understanding of HSCT-related cardiovascular complications. OIS are an important and often overlooked consequence of HSCT. Patients should be actively screened for these conditions, as these play a large role in post-HSCT quality of life, morbidity, and mortality.[5]

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The authors attest they are in compliance with human studies committees and animal welfare regulations of the authors' institutions and Food and Drug Administration guidelines, including patient consent where appropriate. For more information, visit the Author Center.

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