

Late effects of blood and marrow transplantation

We appreciated Inamoto and Lee's thoughtful review summarizing the late effects of hematopoietic stem cell transplantation (HCT),¹ particularly their dual emphasis on both the prevention and treatment of potential complications. In the interest of broadening the scope of their review, we wish to draw attention to two additional and frequently overlooked complications of HCT: female sexuality and financial toxicity.

Inamoto and Lee mention testosterone replacement as a potential treatment for sexual dysfunction in male HCT recipients, but do not address these symptoms in female patients. Psychosexual dysfunction is common in female HCT recipients, an effect mediated both by chemotherapy-related neurohormonal toxicities and also by unique considerations such as vulvovaginal graft-versus-host disease (GvHD) and therapy-related negative body image (e.g., related to chronic corticosteroid use).² Specific preventative steps in female HCT recipients, in addition to consideration of hormone replacement therapy for premature ovarian failure as discussed by Inamoto and Lee, should include annual gynecologic exams³ as well as prompt gynecological consultation should symptoms develop.⁴ Non-medical interventions to reduce sexual dysfunction in female HCT recipients include communication training, behavioral strategies, and use of vaginal lubrication.² Treatment modalities for patients with vulvovaginal GvHD include topical estrogen, topical glucocorticoids, topical cyclosporine, and insertion of vaginal dilators.⁵

Inamoto and Lee's review also does not mention non-medical toxicities of HCT; for example, caregiver burnout and financial distress. The financial toxicities of transplant vary widely among patients based on transplant type and conditioning, transplant center and country, insurance status if applicable, and post-transplant clinical course.⁶ Even among patients with health insurance, around half of HCT survivors suffer from post-transplant financial hardships.^{7,8} While no easy solutions are available, increased cost transparency and advance financial planning for patients may be helpful to prevent catastrophic events such as bankruptcy or loss of domicile.^{9,10}

These toxicities may be uncomfortable for providers or patients to discuss but, for HCT recipients and their loved ones, they can have persistent and significant effects. In addition to adopting the excellent guidance for

post-HCT complications compiled by Inamoto and Lee, we encourage providers to remain vigilant for these and other survivorship challenges that may go under-recognized.

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