Management of Chronic Graft-Versus-Host Disease

Chronic graft-versus-host disease (GVHD) is an immune-mediated disorder that adversely affects quality of life and clinical outcomes in patients following hematopoietic stem cell transplantation. Conventional treatment of GVHD includes prolonged and high-dose corticosteroids; however, those drugs are associated with multiple side effects. This article describes the ability of extracorporeal photopheresis therapy to exhibit a steroid-sparing effect, which can reduce long-term complications as a consequence of steroid treatment.

Graft-Versus-Host Disease

Graft-versus-host disease (GVHD), a complex complication following allogeneic HSCT, adversely affects the quality of life and clinical outcomes for HSCT survivors (Barton-Burke et al., 2008). The incidence of acute and chronic GVHD is about 30%–60% and carries a mortality rate of 50% (Anders & Barton-Burke, 2007). Acute GVHD occurs within the first 100 days after transplantation, whereas chronic GVHD is diagnosed beyond five years (Lee & Flowers, 2008).

Corticosteroids are the mainstay of treatment in acute and chronic GVHD (Mattson, 2007). In chronic GVHD, prolonged immunosuppressive therapy is required, averaging two to three years, with 10% of patients continuing treatment longer than five years (Lee & Flowers, 2008). Potential adverse effects of prolonged steroid treatment include hypertension, body habitus changes, osteoporosis, insomnia, emotional lability, cataracts, diabetes mellitus, and life-threatening infections (Knobler et al., 2009) (see Figure 1). Complications of steroid treatment have led to the development of steroid-sparing regimens and use of alternative immunosuppressive agents (Greinix & Antin, 2009; Knobler et al., 2009). Treatment

Digital Object Identifier: 10.1188/11.CJON.429-432