

## Commentary: Ocular graft versus host disease: Need for multidisciplinary care

Allogeneic hematopoietic stem cell transplantation (allo-HSCT) is a life-saving procedure performed to treat various malignant and nonmalignant conditions.<sup>[1]</sup> However, the occurrence of graft-versus-host disease (GVHD) post allo-HSCT often mars the success of this procedure. Other than affecting various parts of the body such as the skin, liver, and the gastrointestinal tract, GVHD often involves the eyes causing long-term ocular morbidity and affecting the quality of life of these patients.

The cost of this procedure is a major barrier that limits the accessibility of the procedure in developing countries. However, with advances in the technique and supportive care strategies, it is possible that allo-HSCT may become more accessible, thus increasing the incidence of GVHD.<sup>[2]</sup>

Acute systemic GVHD occurs within 100 days of allo-HSCT, and ocular findings are noted in the acute phase in the form of conjunctival hyperemia, serosanguinous exudates, pseudomembranous conjunctivitis, and corneal epithelial sloughing. Topical steroids, artificial tears, bandage contact lenses, and amniotic membrane have shown to be effective in the treatment of acute ocular GVHD. Hence, an ophthalmologist consult should be sought in cases of acute GVHD with conjunctival hyperemia as epithelial defects may not be evident without a detailed ocular examination.

Chronic systemic GVHD affects 30–70% of patients who undergo allo-HSCT and occurs after 100 days of allo-HSCT. Ocular symptoms may be the first sign of chronic systemic GVHD. In the chronic phase, ocular involvement may be in the form of keratoconjunctivitis sicca or cicatrizing conjunctivitis. To diagnose ocular GVHD, baseline ocular surface evaluation prior to allo-HSCT is warranted.<sup>[3]</sup> Dry eye disease (DED) may be present before HSCT, and an ophthalmological evaluation prior to HSCT may enable early treatment for these patients post HSCT and reduce the chronic ocular surface damage that may occur.<sup>[3,4]</sup> This measure will also ensure that preexisting DED cases are not diagnosed as ocular GVHD post allo-HSCT. Hence, for all patients scheduled for allo-HSCT, an ophthalmic examination should form a mandatory part of clinical examination.<sup>[5]</sup>

The current review article in this issue throws light on the different diagnostic criteria of ocular GVHD, the classification systems, the clinical severity scales, the recent advances in ocular surface imaging in ocular GVHD, and also all treatment modalities available.<sup>[6]</sup> With further medical advances and the indications of allogeneic HSCT expanding exponentially, every ophthalmologist should be aware of this entity and should

be able to provide care to these patients when consulted by colleagues in the field of hematology and oncology.

*Swapna S Shanbhag<sup>1</sup>, Sayan Basu<sup>1,2</sup>*

<sup>1</sup>The Cornea Institute, <sup>2</sup>Brien Holden Eye Research Centre (BHERC), L V Prasad Eye Institute, Hyderabad, Telangana, India

**Correspondence to:** Dr. Swapna S Shanbhag, L V Prasad Eye Institute, Kallam Anji Reddy Campus, L V Prasad Marg, Road No: 2, Banjara Hills, Hyderabad - 500 034, Telangana, India.

E-mail: swapnashanbhag@lvpei.org

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