Evidence-Based Approaches to Recognize and Manage Graft-Versus-Host Disease After Stem Cell Transplantation

New guidelines offer clarity and consensus on how best to address and treat a common side-effect from stem cell transplants.

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The National Comprehensive Cancer Network (NCCN®) today announced the publication of new NCCN Guidelines for Patients®: Graft-Versus-Host Disease (GVHD). GVHD is a complication that occurs after a donor stem cell or bone marrow (a.k.a. hematopoietic) transplant—which is used to cure some types of blood cancers. One goal of donor hematopoietic cell transplants is for the donor's immune cells to attack the cancerous cells, an important contributor to achieving a cure. When GVHD occurs, the transplanted donor cells attack the patient's healthy body tissues, causing mild or severe symptoms. Incidences of acute and chronic GVHD continue to be significant in the United States, in particular with the increasing use of incompletely-matched donors—meaning the healthy cells are donated from a someone who is not a perfect tissue-type (also known as HLA) match.

“GVHD is a transplant complication that comes as a surprise for many patients,” said Susan Stewart, Executive Director, BMT InfoNet and 32-year bone marrow transplant survivor. “It can significantly impact a patient's quality of life, particularly if it persists long-term. Knowing the symptoms, so that it can be caught early—as well as potential treatment options—is crucial for GVHD patients.”

“Anyone who undergoes stem cell transplantation from a donor should be aware of the possibility of acute or chronic GVHD, which arises when the donor immune cells see host tissues as foreign, and attack them,” said Ayman A. Saad, MD, Professor of Internal Medicine, The Ohio State University Comprehensive Cancer Center - Arthur G. James Cancer Hospital and Richard J. Solove Research Institute, Chair of the NCCN Guidelines Panel for Hematopoietic Cell Transplantation. “The symptoms can be very tricky and manifest suddenly, in unusual ways, sometimes years after the transplant. The NCCN Guidelines for Patients: GVHD clearly explains this complicated process and hopefully helps people understand the variety of therapies that can be used to treat it.”

“The most important piece of advice is to take GVHD seriously, but not panic,” said Alison W. Loren, MD, MSCE, Director, Blood & Marrow Transplant, Cell Therapy & Transplant Program, Abramson Cancer Center of the University of Pennsylvania, Vice-Chair of the NCCN Guidelines Panel for Hematopoietic Cell Transplantation. “GVHD is very common yet poorly understood, even by physicians. Hopefully, this book brings some order to the chaos by sharing evidence and uniformity. Treatment guidelines, if used effectively, will limit the severity and duration of people suffering from GVHD.”

Drs. Saad and Loren stressed the importance of transplant recipients talking to their doctor about anything that feels different after the procedure, even years later, especially issues including:

- Rash
- Diarrhea
- Nausea
- Vomiting
- Poor appetite
- Fatigue
- Jaundice (yellow coloring of the skin and eyes)
- Joint stiffness
- Mouth sores
- Dry eyes or mouth

GVHD can be life-threatening in rare situations, but certainly can impact quality of life. GVHD may be reversible when addressed early. For years, the main treatment was steroids but recent clinical trials have led to new standards of care. Ongoing research will hopefully further improve techniques for both prevention and cure.

“NCCN believes that the best management of any patient with cancer is a clinical trial,” said Dr. Loren. “Some trials require that patients haven’t received any previous treatment, so it’s important to bring it up right away and not miss the opportunity for the best possible care while also adding to our knowledge about how the immune system works.”

NCCN Guidelines for Patients: GVHD are available for free online at NCCN.org/patientguidelines and via the NCCN Patient Guides for Cancer App, thanks to funding from the NCCN Foundation®.

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