

MDS/Bone Marrow Failure Team



H. Jean Khoury, MD, FACP
Division Director, Hematology; Professor, Hematology & Medical Oncology; Member, Winship Cancer Institute of Emory University
Clinical focus: CML, AML and Allogeneic Hematopoietic Stem Cell Transplant



Edmund K. Waller, MD, PhD, FACP
Director, Bone Marrow & Stem Cell Transplant Center; Professor, Hematology & Medical Oncology; Member, Winship Cancer Institute of Emory University
Clinical focus: Bone Marrow Failure, Sickle Cell Anemia and Allogeneic Hematopoietic Stem Cell Transplant



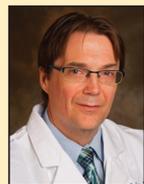
Amelia A. Langston, MD
Medical Director and Section Chief, Bone Marrow & Stem Cell Transplant Center; Professor, Hematology & Medical Oncology; Member, Winship Cancer Institute of Emory University
Clinical focus: AML, MDS, Fanconi's Anemia and Allogeneic Hematopoietic Stem Cell Transplant



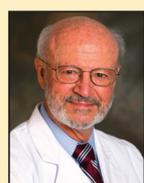
Martha Arellano, MD
Associate Professor, Hematology & Medical Oncology; Member, Winship Cancer Institute of Emory University
Clinical focus: MDS and AML in the elderly



Leonard T. Heffner, Jr., MD
Associate Professor, Hematology & Medical Oncology; Member, Winship Cancer Institute of Emory University
Clinical focus: MDS, AML, and ALL



Morgan McLemore, MD
Assistant Professor of Hematology and Oncology; Member, Winship Cancer Institute of Emory University
Clinical focus: Bone marrow failure and Aplastic anemia



Elliott Winton, MD
Professor, Hematology & Medical Oncology; Member, Winship Cancer Institute of Emory University
Clinical focus: MPN, MDS and AML

1365 Clifton Road, NE
Atlanta, Georgia 30322

Emory Bone Marrow & Stem Cell Transplant Center

As part of the Winship Cancer Institute of Emory University, Georgia's first and only cancer center designated by the National Cancer Institute (NCI), the Emory Bone Marrow & Stem Cell Transplant Center is committed to providing the latest, most innovative techniques and treatments, as well as top-notch supportive services and compassionate patient care. Our mission is to provide curative therapy using combinations of high-dose chemotherapy and bone marrow or blood stem cell transplants.

1-800-889-9616
emoryhealthcare.org/bmt

Emory Rounds
Innovations at Emory Healthcare

November 2013

EMORY
HEALTHCARE

Emory: A Destination for MDS Treatment and Research

by Amelia A. Langston, MD

An otherwise healthy 52-year-old woman presented to her primary physician with complaints of fatigue and easy bruisability. Laboratory studies revealed anemia and thrombocytopenia. Vitamin B12, folate and copper levels were normal. A bone marrow exam revealed hypercellular marrow with trilineage dysplasia and approximately 10% myeloblasts, consistent with a diagnosis of refractory anemia with excess blasts (RAEB-2), a myelodysplastic syndrome (MDS). The patient was started on therapy with 5-azacytidine and referred to the Winship Cancer Institute of Emory University to be considered for allogeneic stem cell transplantation (ASCT).

The myelodysplastic syndromes are a group of disorders characterized by damage to the bone marrow that results in abnormal production of blood cells, as well as a variable risk of evolution to leukemia. Patients can present with anemia, leukopenia and thrombocytopenia. The disorders are usually progressive and eventually become life-threatening. The average survival of a patient with untreated RAEB-2 is about a year. Medications as well as blood transfusions can be used to treat MDS. However, ASCT from a suitable donor is the only therapy that offers the possibility of producing a long-term cure.

continued inside



MDS Treatment and Research continued

Medical evaluation at Winship's Bone Marrow & Stem Cell Transplant Center demonstrated that the patient was an excellent candidate for transplantation, and human leukocyte antigen (HLA) typing was initiated. She did not have a suitably matched family member, but a fully matched unrelated donor was identified through the National Marrow Donor Program.

At this point, the patient opted to participate in a multicenter trial sponsored by the Bone and Marrow Transplant Clinical Trials Network (BMT CTN) comparing bone marrow and peripheral blood as the stem cell source for unrelated-donor transplantation. She was randomized to the blood stem cell arm and, following a conditioning regimen of fludarabine and melphalan, received a matched, unrelated-donor stem cell transplant.

In the first year following the maneuver, the patient experienced mild, chronic graft-versus-host disease (GVHD) involving the skin and liver, which responded to steroid therapy. Now at seven years post-transplant, she is in continuous remission, with full donor engraftment, and is off all immunosuppressive drugs.

The study in which she participated, published in a recent issue of *The New England Journal of Medicine*, found no significant difference between the two arms in overall survival rates at two years, and no difference in relapse rates or the incidence of acute GVHD. However, the study did demonstrate a significantly higher rate of chronic GVHD with the use of blood stem cells. Because GVHD can be a difficult and sometimes life-threatening complication, this finding has generated serious discussion

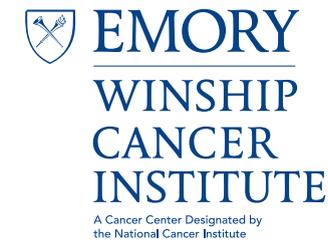
among leaders in the transplant field and will likely result in a shift toward the preferential use of marrow as the source of stem cells for transplantation from unrelated donors. Edmund K. Waller, MD, PhD, director of the Emory Bone Marrow & Stem Cell Transplant Center at Winship, was a key author of and researcher for the study.

If you have a patient you believe would benefit from the treatments and services available at the Emory Bone Marrow & Stem Cell Transplant Center, please call **1-800-889-9616**.

Winship: On the Forefront of Cancer Research

As a National Cancer Institute (NCI)-designated cancer center, the Winship Cancer Institute of Emory University is part of an select group of 67 centers nationwide that are on the forefront of the battle against cancer. Our participation in national, international and institutional clinical trials ensures that our patients have access to the latest advances in stem cell biology, immunology and cancer medicine.

For information about clinical trials available through the Emory Bone Marrow & Stem Cell Transplant Center, please call **404-778-3708**.



Jonathon B. Cohen, MD, MS, Joins the Emory Bone Marrow & Stem Cell Transplant Team



Dr. Cohen recently joined Emory as an assistant professor of hematology and medical oncology after completing his clinical fellowship in hematology and oncology at the Ohio State University-James Cancer Center. During his fellowship, he also completed a master's degree in medical science, gathering additional training in the conduct of clinical and translational research.

Dr. Cohen's research focuses include the clinical investigation of lymphoma, where he aims to identify prognostic markers and designs clinical trials with novel agents for patients with relapsed disease. He has been recognized as a promising young investigator as evidenced by his selection to participate in the American Society of Clinical Oncology/American Association for Cancer Research Methods in Clinical Cancer Research Workshop and the American Society of Hematology Clinical Research Training Institute.

His clinical focus is on the treatment of Hodgkin's and non-Hodgkin's lymphoma, where he manages both newly diagnosed patients as well as those requiring stem cell transplantation and treatment for relapsed disease.

EMORY
BONE MARROW & STEM CELL
TRANSPLANT CENTER