Program Notes

We’ve reached another year and another milestone for the UAB Bone Marrow Transplantation Program. Last month we celebrated our 10th Anniversary. The occasion proved to be very

Continued on page 3

INSIDE THIS ISSUE

1 Dr. Vaughan’s Program Notes
1 Getting To Know Us
1 Pediatric Bone Marrow Transplantation
3 10th Anniversary Reunion UAB BMT Program
4 Referring Physicians Information

Getting to Know Us

Richard D. Lopez, MD
Director, Translational Research

Specialty: Hematology & Oncology
Undergraduate: Stanford University, B.S., Biological Sciences, 1983
Medical School: Stanford University, 1989
Residency: Internal Medicine, Stanford University Hospital, 1989-1991

Pediatric Bone Marrow Transplantation

Dr. Kenneth G. Lucas & Patient

Pediatric bone marrow transplants have been done at UAB since the program began in 1991, but in 1992 Dr. Ken Lucas was recruited to expand and enhance the previously limited effort.

The Lowder Stem Cell Transplant Unit opened September 14th, 2000 at Children’s Hospital as the new home to the pediatric component of the UAB Bone Marrow Transplant

Continued on page 2
quality of care possible to pediatric patients needing a bone marrow transplant. The UAB Bone Marrow Transplant Program has been treating children for years in a shared adult and pediatric facility. However, the relocation of the program over a year ago has provided many advantages for the pediatric patients. Moving the unit to 6th Tower of Children’s Hospital places the patients in close proximity to pediatric subspecialties and intensive care services located in the hospital. Also, the new unit, a 11,500 square foot, eight-bed inpatient and eight-bed outpatient facility, allows for growth and expansion of the program in the future.

The unit functions on a “single staff model” where the same team of doctors and nurses provides both the inpatient and the outpatient care. The staff is composed of a team of specialists all dedicated to the overall health and well being of the patients. The patients are treated by three Pediatric Hematologists/Oncologists, who are experts in bone marrow transplantation. In addition, there are two nurse practitioners and ICU level nursing staff. Patients receive excellent and comprehensive care supported by the UAB Division of Pediatric Hematology/Oncology and all other specialty services available in the hospital.

There are approximately 35-40 stem cell transplants performed annually by this team. Currently, all types of bone marrow transplant are performed, including autologous and allogeneic (matched related donor, matched unrelated donor, umbilical cord blood and haplo-identical). Children suffering from a wide variety of diseases are eligible for transplant, including Leukemia (AML, CML and ALL), Hodgkin's, Ewing's Sarcoma, Medulloblastoma, Fanconi's Anemia, Severe Aplastic Anemia, Sickle Cell Disease, Thalassemia, Adrenoleukodystrophy, Schwachman Diamond Syndrome, SCIDS, Wiskott-Aldrich, Storage Diseases, Brain Tumors, Neuroblastoma, Recurrent or resistant Solid Tumors, Systemic Lupus and Autoimmune Disorders.

The Pediatric Stem Cell Transplant Program is extensively involved with the national groups studying transplant and is a member of the prestigious Children’s Oncology Group and the Pediatric Blood and Marrow Transplantation Consortium. The team also conducts UAB-originated research on unrelated donors, umbilical cord blood, partially matched related donor transplants as well as post-transplant immunotherapy. By participating and conducting such research, the transplant team is able to provide current and appropriate treatment that makes transplantation more successful and more available to children who would not otherwise be eligible. Two examples include haplo-identical transplantation and a sickle cell protocol.

Haplo-identical, or partially matched, transplantation is an option for patients without a suitable donor option. Kenneth G. Lucas, M.D., Director of the Pediatric Stem Cell Transplant Program, explains the importance and risks of haplo-identical transplantation:

“Haplo-identical transplantation offers patients who lack an adequately matched bone marrow donor the opportunity to undergo a potentially life-saving allogeneic stem cell transplant. However, the use of partially matched related donor transplantation continues to be complicated by high morbidity and mortality related to infectious complications (due to the patient’s immune suppression) as well as graft versus host disease (GVHD). A new study at UAB is examining ways at reducing these complications by tolerizing a haplo-identical donor’s peripheral blood stem cells to the patient’s white blood cells in culture prior to the stem cell infusion, using a drug known as CTLA4Ig. The purpose of the tolerization process is to reduce the incidence of GVHD and permit earlier reductions of immunosuppressive medications, thereby decreasing the risk for infection.”

Alan M. Ship, M.D., C.M., Director of Clinical Research for the Pediatric Stem Cell Transplant Unit, has a particular interest in sickle cell disease and the benefit of stem cell transplantation in its treatment. Sickle cell disease is a devastating, life-threatening disease that affects many of Alabama’s African American and Hispanic youth. There was no cure for this disease until bone marrow transplantation of these patients began in the early 80’s. Traditionally, patients with genetically matched siblings who do not carry the disease are the only patients who have benefited from this therapy.

However, Dr. Ship has written a new protocol that will allow more sickle cell patients to be eligible for transplant. According to Dr. Ship, the new protocol uses the standard medications and compares them to some newer medications that have proven to have less toxicity over time. In addition, it will allow the use of “alternative” donor sources for bone marrow, such as donated umbilical cord blood and marrow donated to the national donor registries.

Dr. Ship adds, “There are approximately 25 children under the care of UAB Pediatric Hematologists at Children’s Hospital who can benefit from a transplant at this time. However, transplant is not the answer for every patient, but only those who suffer from the most severe forms of the disease.”

If you have questions about the program or need to refer a patient, please contact the UAB Division of Pediatric Hematology/Oncology at (205) 939-8925.
Marrow donor, recipient embrace

By GREG GARRISON  
News staff writer

The University of Alabama at Birmingham celebrated 10 years of bone marrow transplants on Saturday by bringing together a donor and a recipient.

"This is a rare event," said Dr. Bill Vaughn, director of UAB’s bone marrow transplant program, which has completed more than 750 bone marrow transplants. "It’s a very emotional situation."

Clarence Martin, 31, from the small town of Smiths Station near Phenix City, has recovered well from his transplant last year. None of his relatives matched his tissue, so he had to rely on the kindness of a stranger.

That was Air Force Lt. Todd Carlson, also 31, now stationed at Eglin Air Force Base near Fort Walton, Fla. The crowd at the reunion applauded when Carlson strode out wearing his Air Force uniform.

"I don’t know what to say," Martin told Carlson after they embraced. "I can’t begin to express the gratitude that my family and I feel."

"It was never a difficult decision for me to make," Carlson said. "I understand. I have a wife and children."

Carlson had signed up for the National Marrow Donor Program while taking part in a donor registry drive in Colorado Springs, Colo. The program’s rules do not allow the anonymous donor and recipient to meet for at least a year and then only if both agree.

Both admitted they were nervous.

"I’m not sure you can really prepare for this," Carlson said.

Martin and his wife, Mindy, showed pictures of their two daughters, Brittany, 10, and Becka, 5, who were unable to attend because they had tickets to a Britney Spears concert in Atlanta. Carlson and his wife, Jodi, brought their four sons — Joseph, 12; Isaiah, 9; Caleb, 7; and Isaac, 3.

Martin suffered from advanced chronic myelogenous leukemia. Carlson said he is grateful he learned about the donor program and signed up for it, allowing him to help a cancer patient. Those interested should call the donor program’s toll-free phone number, 1-800-227-7602.

"I really encourage people to sign up," Carlson said. "Maybe people will read about Clarence Martin and decide they want to help somebody too."

Finally, our work is ever changing. I’m sure it is challenging for you to remain always aware of all of the BMT indications. Attached is a copy of a listing of the high level of consensus Bone Marrow Transplantation indications according to the just released NCCN 2002 Guidelines. We use this as a practice guide, but of course no guideline can anticipate every indication. It certainly has proven advantageous for patients to have an opportunity to see us even earlier in their course even if they may never need a transplant. Patients with more advanced disease are always especially challenging. For any patient seen in consultation we can arrange a complete review for eligibility for any of the wide spectrum of clinical research options available to them though the Comprehensive Cancer Center here at UAB. As always, the faculty of the UAB Transplantation Program would be happy to discuss individual patients with you on the phone at any time.
Fellowships: Oncology and Bone Marrow Transplantation, Stanford University Medical Center, 1991-1996

Interests: Allogeneic bone marrow transplantation.

Special Interests: Experimental immunotherapy of malignant diseases particularly leukemias, lymphomas and selected solid tumors such as melanoma.

Dr. Lopez is the director of an active, federally funded basic science research laboratory at UAB. His primary laboratory efforts are directed at understanding both the in vitro and in vivo antitumor activity of human $\gamma\delta\text{-T}$ cells, as described in two recent publications from his laboratory (Blood, 96:3827, 2000 and Cancer Immunology and Immunotherapy, 50:625, 2002).

His current pre-clinical and early clinical studies are intended to develop the next generation of therapies in which allogeneic BMT will be utilized to deliver tumor-reactive human $\gamma\delta\text{-T}$ cells for the treatment of advanced-stage or refractory AML, ALL, CML, CLL, non-Hodgkin’s lymphomas, multiple myeloma and melanoma. Phase I and Phase II clinical trials to be conducted at UAB will be key in the development of future Phase II and III trials to be offered by the UAB BMT program.

Top speed achieved at Talladega Superspeedway: 160 MPH on December 2, 2000.

Referring Physicians

We are very grateful to all of our referring physicians. We appreciate their trust and confidence and pledge to always provide the highest quality of care to their patients. In addition, we are ready to provide information on new medical procedures, research protocols, and CME opportunities. Also, referring physicians and health professionals can call the medical information service 24-hours a day, 7-days a week for consultations, and information.

Nationwide
1-800-UAB-MIST
(1-800-822-6478)

Birmingham Metropolitan Area
934-6478

A trained health-services representative will route your call to the appropriate UAB physician or other health-care specialist.

Future Issues

April 2002
Meet Dr. Arabella Tilden
UAB BMT Research Efforts

Questions or Comments?
Please send your questions or comments regarding this newsletter to Rick Carroll email: rcarroll@uabmc.edu