The Hematology Care Coordination team addresses the educational and psychosocial needs of transplantation patients in a multidisciplinary fashion. Central to this formal education plan is the unique partnership of the Oncology-Certified RN Hematology Care Coordinator and Social Worker who assess these needs throughout the continuum of care. The process centers around a patient/caregiver educational meeting, at which time a comprehensive participative needs assessment is completed, goals are developed, and interventions are initiated. Due to the complexity of the transplantation process, adequate patient and caregiver education is crucial. The Care Coordination team recognized that our current process lacked multidisciplinary coordination. Our purpose was to develop a coordinated assessment process to identify immediate and future educational and psychosocial needs and to develop an educational plan that fosters patient/caregiver empowerment. It was anticipated by our team that this educational program would result in a better understanding and compliance with team recommendations. It was identified that earlier referrals to the Care Coordination team were necessary. The weekly multidisciplinary bone marrow transplantation meeting now serves as the initial referral to the Care Coordination team. The treatment plan is completed collaboratively by the transplantation team. This plan provides initial insight into the educational and psychosocial needs of the patient/caregiver.

Before the patient/caregiver meeting, an educational binder is individualized based on transplantation type. This binder guides the format and content of the meeting. A needs assessment to investigate knowledge, financial, and psychosocial issues of the patient/caregiver is performed, and an exclusive teaching plan is immediately initiated. After the meeting, referrals are made to ancillary support services for continued assessment and education. We have found that our up-front assessment and screening followed by individual instruction have contributed to a more successful learning experience. Our patients have verbalized a marked decrease in anxiety and increase in knowledge, which has facilitated a better compliance with the treatment plan. The physicians concurred based on assessment of anxiety, knowledge, and understanding on signing the informed consent. This project stresses the importance of the nurse's role in patient education, which can be duplicated in various practice settings.

**COMBINED HOME ENZYME REPLACEMENT THERAPY AND UNRELATED CORD BLOOD TRANSPLANTATION FOR HURLER'S SYNDROME (MPSI) IN A PEDIATRIC HSCT CENTER**

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Hurler's syndrome is caused by mutations in the alpha iduronidase gene and results in progressive deterioration of the central nervous system. Allogeneic bone marrow transplantation before age 2 years halts disease progression and prolongs life. Enzyme replacement therapy (ERT) reduces lysosomal storage of mucopolysaccharides in the liver and ameliorates extracranial manifestations of the disease. In most instances, ERT is done in a day-hospital setting. Because enzyme replacement therapy can mitigate and prevent secondary manifestations, we hypothesized that ERT in the peritransplantation period (pre-HSCT and immediately post-HSCT) would decrease transplantation-related complications.

We performed combined ERT and HSCT in a 12-month-old boy with MPSI. The patient received his first dose of Aldurazyme and 6 infusions shortly after MPSI diagnosis. He had received 6 infusions before referral to our center. Throughout his pretransplantation workup, the patient received ERT at the local Transplantation House by a visiting nurse. There were no infusion-related toxicities. The patient received a 5/6 unrelated cord blood unit and engrafted on day +12. Hyperacute GVHD was treated successfully with high-dose methylprednisolone pulse. After engraftment, the child received 8 additional doses of Aldurazyme. Four initial infusions were performed in the pediatric bone marrow transplantation unit following in-service by pediatric BMT nurse and pediatric BMT pharmacist. The remainder of his 4 infusions were performed at the local Transplantation House.

We conclude that in this first case of combined outpatient ERT infusion with HSCT, pretransplantation and posttransplantation ERT does not interfere with engraftment. Further studies are needed to determine whether progressive neurodegeneration is altered.

**HERPES SIMPLEX VIRUS IN THE PEDIATRIC BONE MARROW AND STEM CELL TRANSPLANTATION PATIENT**

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Herpes simplex is a viral infection that usually produces small, temporary irritating, and sometimes painful fluid-filled blisters on the skin. Primary herpes simplex virus (HSV) infection usually occurs in early childhood, after which time the virus becomes latent. Reactivation is more likely to occur during periods of immunosuppression. Bone marrow and stem cell transplantation recipients' host immune systems are ablated before transplantation, and thus every aspect of the immune system is deficient shortly after transplantation. He had never been vaccinated against HSV infection. HSV infection can be devastating when it occurs in immunocompromised patients. Herpes simplex in patients with compromised immune systems can cause serious, perhaps life-
threatening complications. Prophylactic acyclovir is routinely given to patients, which has lessened the prevalence of HSV. When HSV does not respond to acyclovir, or is found to be resistant to acyclovir, foscarnet has proven to be a powerful antiviral agent; however, foscarnet can be very toxic to renal function. This poster will include general information on this virus and treatments used to control it, along with nursing considerations for the care of the pediatric transplantation patient with a reactivation of HSV infection.

The median score of performance status after HSCT was 80%, but 3 years later it was 90%, indicating that as time went on, performance status improved. Among the 114 patients who had been employed before HSCT, 81 (71.1%) continued to work but 30 (26.3%) became unemployed after HSCT. The average time to return to school and work was 1.27 years (range, 1 to 7 years); within 2 years after HSCT, 80 patients (72.7%) returned.

In conclusion, those findings can suggest that until 3 years following HSCT, there should be steady management of physical symptoms and complications which post-HSCT patients possibly experience.

<table>
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<tr>
<th>Year</th>
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<th>Fatigue</th>
<th>Subjective Symptoms</th>
<th>Performance Status</th>
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<td>18.90</td>
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The Assessing for Nutritional Risk Factors clinical project took place in a bone marrow transplantation (BMT) unit in San Antonio, Texas. The purpose of this project is to develop an assessment tool for identifying individuals in a BMT inpatient unit who are at risk for developing complications secondary to inadequate nutritional intake. A secondary goal of this project is to increase nutritional assessment documentation by the nursing staff in this unit. The Nutritional Risk Assessment Tool (NRAT) preevaluation data were obtained by interviewing the staff regarding their opinions about malnutrition in the oncology patient population and the usefulness of the NRAT on the BMT unit. In addition, the documentation rate of calorie counts and weights was collected for the 3 months before this project’s implementation.

Results showed a significant increase in calorie count documentation and an overall increase in the staff’s awareness about malnutrition in this patient population. The outcomes of this project include (1) increased awareness of nutritional deficits in the BMT population in multidisciplinary team members including RNs, PCAs, and MDs; (2) increased documentation of inadequate dietary assessment; and (3) pilot testing of a nutritional assessment tool.

Aplastic anemia is a rare, potentially lethal disease that occurs when the bone marrow stops making enough blood cells. The condition results in complete bone marrow failure and aplasia. Common life-threatening complications include infection, bleeding, and anemia. The cause of aplastic anemia is unknown but may be linked to injury to the bone marrow from radiation, chemicals, viruses, and other causes. The initial diagnosis of aplastic anemia is often a medical emergency requiring hospitalization and isolation. The diagnosis is typically made via peripheral blood sampling and a bone marrow aspirate. Supportive care during the initial period typically consists of blood component replacement and antimicrobial coverage to reduce and treat life-threatening infections. The gold standard of cure for these patients is bone marrow or stem cell transplantation. The Duke Pediatric Stem Cell Transplant Program has performed 22 transplantsations on children with aplastic anemia. The aims of this abstract are as follows:

1. To define and describe the potential causes of aplastic anemia.
2. To describe the symptoms associated with the onset of the disease, as well as the sequelae seen with the progression of this disease.
3. To review the latest treatment options, including a detailed analysis of bone marrow and stem cell transplantation in this patient population.
4. To provide a detailed description of the Duke Pediatric Stem Cell Transplantation experience regarding this patient population.
5. To provide statistics on the outcomes of transplantation in this group of children.
6. To identify nursing strategies for the care and support of these patients.