the development and implementation of successful strategies to guide the care of patients with steroid-induced psychosis.

Successful nursing care plans for inpatients with acute psychosis must be multi-disciplinary, prioritized to both provide for the patient’s safety and designed to ensure compliance with prescribed medications to avoid GVHD exacerbation and infection. When possible, the team should enlist the support of family members, who can provide invaluable insight into the patient’s history and a more thorough assessment of home resources. Timely recognition of the signs and symptoms of psychosis, coupled with early intervention, is vital to ensuring successful management and resolution.

Maintaining a consistent caregiver team, employing a 24 hour sitter, tracking sleep/wake patterns, and encouraging short term/goal directed activities have proven successful. Nurses play a key role in implementing each of these measures. A case study will be presented to illustrate nursing interventions used to manage a patient with steroid-induced psychosis at our comprehensive cancer center.

**410 TOTAL GLUCOSE CONTROL (TGC): A GLUCOSE CONTROL PROJECT FOR STAFF NURSES**

**Latchford, T.M., Kneefel, R. Stanford Hospital and Clinics, Stanford, CA.**

**Problem:** Both the American Diabetes Association and the American College of Endocrinology have released position statements and standards of medical care regarding glucose control. The goal is to maintain blood glucose levels of less than 180 mg/dL in the non-intensive care unit (ICU) patient and less than 110 mg/dL at all times in the ICU patient. On the Blood and Marrow Transplant inpatient unit in 2005 and 2006 the average fingerstick blood glucose was 209 mg/dL and 200 mg/dL, respectively, well above the averages of 154 mg/dL and 148 mg/dL of all other inpatients. These high glucose levels reflected a lack of compliance with best practices. The combination of challenges unique to the BMT population include; pain, medical stress, total parental nutrition, and regular use of glucocorticoids and other immunosuppressants. Despite these unique challenges our inpatient unit implemented a total glucose control (TGC) project in an effort to improve blood glucose management.

**Goals:** The primary goal of our project was to lower the inpatient unit’s blood glucose levels by 20%, to an average of <180 mg/dL. In order to accomplish this, we increased the use of intravenous insulin infusions and basal-bolus insulin regimens. To prevent episodes of hypoglycemia intensive staff education was provided. Patient education regarding hypoglycemia and blood glucose management was instituted. **Implementation:** A series of initiatives were developed for BMT physicians and nursing staff. Pre-project and post-project audits were performed to evaluate blood glucose levels, length of time until initiation of insulin therapy, number of hypoglycemic episodes, and documentation of patient education. **Results:** The TGC project was successful as the blood glucose average remains less than 180 mg/dL. **Conclusion:** To better manage our patients, more education and experience is needed with the use of the insulin infusion and basal bolus management. The insulin infusion is complicated and requires vigilant management. The development of guidelines for blood glucose testing and insulin therapy is needed to meet the unique challenges posed by the BMT patient.

The next step in the TGC project is to implement these standards in the outpatient setting.

**411 RITUXIMAB MONITORING IN HEMATOPOIETIC STEM CELL TRANSPLANT: HOW MUCH IS NECESSARY?**

Blackburn, R.K., Wood, G., Mick, J.M., Munsell, M.S., Neumann, J., Johnston, P. University of Texas MD Anderson Cancer Center, Houston, TX.

**Background:** Rituximab, an unconjugated monoclonal antibody that reacts with the CD20 molecule present on most malignant B-cells, is standard treatment for patients with lymphoma. Most rituximab infusions are well tolerated with a mild infusion related symptom complex (fever, chills/rigors) usually occurring within 1 hour after initiation. Severe infusion related reactions (IRR), such as bronchospasm and hypotension, occur infrequently; most often within 2 hours after initiating the first dose. Reactions are caused by cytokine release associated with high numbers of circulating tumor cells. Incidence of IRRs decreases markedly with subsequent infusions. At a university based comprehensive cancer center, controlled trials using rituximab for treatment of NHL are underway in hematopoietic stem cell transplant patients to determine optimal dosing and scheduling. Patients participating in these trials are heavily pretreated with rituximab, and are in partial or complete remission before admission for transplant. Based on phase I and II trials, frequent vital sign (VS) monitoring and concurrent administration of normal saline are recommended. Current organizational clinical practice standards require between 10–16 sets of VS over 5–6 hours for average rituximab infusions; interfering with patient comfort and requiring significant nursing time. **Purpose:** To determine the frequency and risk of IRRs in patients admitted for transplant and an optimal vital sign monitoring schedule. **Method:** A nurse initiated, IRB-approved, retrospective review of 200 medical records was conducted. Data analysis is in progress to determine IRR frequency, identify patients at high risk for reactions, and determine an appropriate VS schedule. **Results:** Study findings will be reported.

**412 WHOSE WHO? A BROWN BAG LUNCH PROGRAM FOR THE STANFORD BLOOD AND MARROW TRANSPLANT INPATIENT STAFF**

Latchford, T.M. Stanford Hospital and Clinics, Stanford, CA.

Stanford University’s Blood and Marrow Transplant (BMT) Program performs over 200 transplants a year. Over 150 employees with diverse backgrounds and responsibilities perform varied functions to facilitate care of BMT recipients and families. The more than 150 employees are scattered throughout at least 10 different areas within the university, hospital and clinics. The BMT Program staff include: physicians, nurses, advance practice nurses, physician assistants, nurse coordinators, nursing assistants, unit secretaries, housekeepers, social workers, physical therapists, dieticians, pharmacists, financial coordinators, unrelated donor search coordinator, administrative staff, stem cell transplant lab technicians, and basic scientists.

In an effort to help the nurse get to know the diverse role of other BMT staff within the BMT program, we initiated a brown bag lunch “Whose Who Program”. The Whose Who program asks a representative from a given area to bring their lunch, sit, and talk with the nurses over lunch. The goals of the Whose Who program are: 1) to share expertise, 2) to allow staff to get to know others in the BMT program, 3) to develop an understanding of the many different roles required to care for BMT patients and families. Eating lunch, getting to know one another, and discussing how each area contributes to the care of patients in a casual environment has helped to build a more cohesive team among the many players that work in our program.

**413 PRE-STEM CELL TRANSPLANTATION EDUCATION EFFECT ON PATIENT ANXIETY LEVELS**

Scherer, T.M. Christiana Care Health System, Newark, DE.

Stem cell transplantation is a highly technological treatment utilized primarily for hematological malignancies but also used as treatment for selected solid tumor malignancies as well as benign disease processes. The concept of impending stem cell transplantation alone is frightening. The distress caused by the diagnosis and impending complicated treatment can have a negative impact on
compliance leading to unsafe outcomes. Although many patients and caregivers experience distress secondary to diagnosis and treatment, education may reduce this anxiety and help them to better manage side effects through self care management and encourage-ment of the same by the caregivers. Education should be tailored to suit the individual. The need for formalized pre-stem cell transplant education was recognized to not only alert patients and caregivers about the treatment regimen, but also to relieve patient and caregiver distress in order to improve compliance to promote safe outcomes. Patient distress levels were evaluated through the use of the National Comprehensive Cancer Network Distress Thermometer Scale. Ten participants were asked to rate their distress levels on a scale of one to ten pre and post education to validate the necessity of this education in the decreasing of anxiety. Eight patients demonstrated a decrease in distress, one demonstrated an increase, and one no change. Acquired knowledge related to the information as well as the change in distress levels was evaluated through verbal post testing and discussion.

414
70% ETHANOL LOCKS IN THE ROLE OF PREVENTING/TREATING CATHETER RELATED BACTERAEMIA
Sanders, J.M. Christchurch Hospital, Christchurch, New Zealand.
Catheter related bacteremia (CRB) is a major source of morbidity and mortality in patients undergoing intensive cytotoxic therapy who are immunocompromised and neutropenic. There have been many initiatives to prevent these infections, but CRB still remains a major complication of indwelling tunneled central venous catheters.
Ethough at a concentration of 70% used as an antiseptic agent can be introduced into the internal lumen of the central venous catheter to reduce the incidence of CRB, it has also been used successfully as a treatment of CRB in conjunction with appropriate antimicrobial therapy.
There have been two retrospective studies reporting the use of ethanol in the treatment of CRB and one randomised study reporting the use of ethanol in the prophylactic setting.
Presented will be the evidence supporting the use of ethanol locks, its efficacy in the prevention and treatment of CRB, the safety data and our experience using ethanol in our bone marrow transplant unit.

415
CARING FOR THE MORBIDLY OBESE HEMATOPOIETIC STEM CELL TRANSPLANT PATIENT: NURSING INTERVENTIONS AND IMPLICATIONS
Blackstock, J.L., Frey, M.A. Duke University Medical Center, Durham, NC.
Problem: Obesity is one of the largest public health crises in the United States. Obese individuals are at higher risk for major health complications, including cardiovascular disease, diabetes, and impaired physical mobility. When these co-morbidities are coupled with a cancer diagnosis and treatment, such as Hematopoietic Stem Cell Transplant (HSCT) mortality greatly increases. In 2006, at a comprehensive cancer center, fourteen percent of 107 patients who received allogeneic HSCT for acute myeloid leukemia (AML) were considered morbidly obese (Body Mass Index >35). Of these obese patients, sixty percent died within one year of HSCT. When compared to a thirty-eight percent mortality rate for non-obese patients within the same cohort, the findings were alarming.
There is little discussion in the literature addressing the specific needs of morbidly obese patients, and consequently, no consistent plans of care are available to guide the patients’ transplant course. Transplant takes a toll on the patient, the caregivers, as well as the nursing staff providing care. Intervention: In response to the identification of the high mortality rate and special needs of the morbidly obese HSCT patients, nurses developed a multi-disciplinary plan of care in an effort to generate more successful outcomes.
Key pieces of this plan of care included facilitating a multi-disciplinary care conference prior to the patients’ admission to outline transplant risks and the unit’s goals/expectations. Nurses collaborated with the medical team, dieticians, physical and occupational therapists, as well as the patient to set short term goals to meet long term objectives. Education was frequently reinforced to patients and family members. A core group of nurses assigned to the patients promoted continuity of care. Findings: A case study will outline specific nursing interventions implemented at a comprehensive cancer center that guided the care of a morbidly obese allogeneic HSCT patient. It will illustrate how the use of these interventions can promote the health and well-being for both the morbidly obese patient as well as the staff nurses.

416
MULTIDISCIPLINARY INTERVENTION OF ADMISSION PLANNING
Laron, S.M. Barnes-Jewish Hospital, St. Louis, MO.
Background and Purpose: A growing inpatient population of Bone Marrow Transplant and newly diagnosed Leukemia patients poses difficulties for accepting daily scheduled and unscheduled admissions. These appropriate units typically have limited available hospital beds. In order to accept all patients needing medical care for this patient population, more planning was therefore necessary.
Objectives: It was necessary to have representation from all pertinent team members in a multidisciplinary approach to discuss the Bone Marrow Unit and Leukemia Service census as well as the up coming potential discharges. It was essential to identify if certain patient admission dates were to be delayed to allow admissions of higher priority patients.
Method: Outpatient Nurse Coordinators arrange for the patient admission and utilize a computer based document to identify the admission date, patient name, diagnosis and therapy to be given. Routinely, no more than two to three patients are scheduled for any given day. A weekly admission meeting was created to allow representation from the Outpatient Nurse Coordinator Team, Inpatient Nurse Coordinator Team, Pharmacy, Inpatient Lead Charge Nurses/Management Teams, and Data/Study Coordinator Team. Potential discharges are identified to determine whether there will be bed availability to admit the scheduled admissions for the present week as well as the following week. If it is decided to delay any given patient, the appropriate Outpatient Nurse Coordinator will arrange and notify the patient about the delay and will be informed that the admission will not be delayed again.
Results: This “preplanning” of admissions has improved the ability to have all patients receive the care needed. Patients have also reported an increased satisfaction in the improvement of this process and state they understand the importance of allowing the more critical/ill patients be admitted above their scheduled admission.

417
PROPHYLACTIC AND TREATMENT REGIMENS FOR MUCOSITIS
Blackstock, J.L., Frey, M.A. Duke University Medical Center, Durham, NC.
Ulceration of the oral mucosa, mucositis, is a frequent complication found in the pediatric transplant patient. Mucositis is caused by conditioning regimens including cytotoxic agents and radiation. The severity of mucositis ranges from the mild mouth sores to acute mucosal erosion. The ulcerations caused by mucositis can lead to extreme pain and interruption in the patient’s nutrition which may contribute to an increase in morbidity. An intact oral mucosa can provide a barrier to pathogens. Due to the level of immunosuppression in transplant patients, breakdown of the mucosa provides an opportunity for bacteria, viruses or fungi. Mucositis also increases the risk for a superficial infection. The Duke University Pediatric Blood and Marrow Transplant Program developed a prophylactic mouth care protocol to help decrease, or possibly eliminate, complications caused by oral mucositis. This regimen is started pre-transplant during the admission process and is sustained throughout the hospital stay. Patients and families are educated on the importance of being compliant with meticulous mouth care. The purpose of this poster will be to describe the Duke Pediatric Blood and Marrow Transplant Mouth Care Protocol and its importance in the transplant process. This will include the prophylactic and treatment