

FMD in the palliative management of an unconscious patient with Glucksberg Grade IV GVHD gut post HSCT. Use of the device over the final 5 days of life was uneventful. Following this experience we have gone on to use the FMD successfully in 3 further patients with severe acute GVHD gut post-HSCT. Observed direct benefits for the patients include promotion of dignity, facilitation of uninterrupted rest, absence of odour, reduction of embarrassment and more comfortable access to visitors. Clinical benefits included improved accuracy of fluid balance assessment, maintenance of skin integrity, absence of healthcare associated infections & the ability to devote more nursing time to the other needs of the patient. Our only negative finding was that the FMD can leak, however this is minimal, and can be reduced by regular flushing of the device. The device was replaced every 28 days and was in use for up to 63 days, without complications. We have found the FMD to promote the effective & compassionate care of patients with severe GVHD gut.

## 513

### COLLABORATING WITH OUR COLLEAGUES TO ENHANCE CARE: A MULTIDISCIPLINARY WORKFLOW FOR BUSULFAN PK SERUM LEVELS

Choo, K., Grant Navarro, P., Wallace, M.H. Memorial Sloan Kettering Cancer Center, New York, NY

**Significance and Background:** Busulfan is administered as part of a myeloblastic conditioning regimen for allogeneic hematopoietic stem cell transplant. Plasma pharmacokinetic analysis (PK) is used to determine a patient's Busulfan serum level. Maintaining therapeutic levels of Busulfan decrease the risk of Busulfan related toxicity, graft rejection and disease progression. In 2011 this NCI-designated Comprehensive Cancer Center initiated processing of PK levels instead of sending them to another facility almost 3000 miles away. We believe patient care is improved as the results are obtained the same day instead of the next day providing the opportunity to adjust the 4th dose versus the 7th dose. This practice change required effective collaboration between nursing, medicine, pharmacy and the clinical laboratory.

**Purpose:** The purpose of in-house pharmacokinetic analysis (PK) is to obtain results the same day and adjust the dose as necessary to maintain a therapeutic serum level.

**Interventions:** A multidisciplinary team developed a new RN workflow for obtaining specifically timed specimens, an LIP order set, an electronic notification when a Busulfan order is initiated, a workflow for storing and transporting the specimens to the lab and a workflow for the lab to verify receipt of specimens. A multidisciplinary education plan was developed educating the medical, nursing, pharmacy and clinical laboratory staff regarding the new in-house Busulfan PK level process.

**Evaluation:** As a result of the new Busulfan PK level process, levels are obtained with the first dose of Busulfan and results are reported in the afternoon. On evening rounds, a determination is made whether to adjust the 4th dose of Busulfan considering the PK result.

**Discussion:** We believe that being able to adjust the dose of Busulfan earlier in the treatment process may help maintain a therapeutic level enhancing the chance of a successful transplant outcome.

## 514

### SAME QUALITY, FEWER RESOURCES: PREPARING PATIENTS FOR DISCHARGE AFTER HEMATOPOIETIC STEM CELL TRANSPLANT

Blackburn, R.K., Doyle, K., Jewell, J. University of Texas MD Anderson Cancer Center, Houston, TX

**Background:** Preparing for hospital discharge following hematopoietic stem cell transplantation (HSCT) involves extensive multidisciplinary teaching to patients and caregivers. Historically this has been accomplished with printed materials, individualized teaching, and formal group classes held weekly on the HSCT inpatient

unit—a strategy that is labor and resource intensive, and inconvenient for out of town caregivers.

**Purpose:** The nursing leadership on a 64 bed HSCT unit at a NCI-designated cancer center identified a need for patient/caregiver educational methods that provided opportunities for patients to view repeatedly, and for their caregivers to view from home.

**Intervention:** A multidisciplinary health care team from the HSCT unit developed scripts for 16 minute discharge films aimed at either allogeneic or autologous patients that could be viewed on television through the patient education system in patient rooms, or could be accessed as 2 minute segments in links through the institutional intranet. Caregivers receive access from HSCT patients to view the web based chapters that cover all aspects of care after discharge.

**Evaluation:** For one month HSCT inpatients viewed both the video, and attended the existing 1 hour discharge class, and then completed an evaluation of which form of education they preferred. Of the 38 evaluations returned, patients overwhelming reported that the content covered in the video prepared them for discharge, and appreciated the ability to view it repeatedly in the comfort of their room. Patients did, however, request an opportunity to ask questions in a live format. Based on these results, 30 min weekly question and answer sessions were scheduled that patients/families may attend after viewing the video. Attendance at these sessions has been low, as many patients feel the videos adequately addressed their concerns.

**Discussion:** One of the biggest challenges facing healthcare organizations in today's economic climate is maintaining high quality patient care programs with fewer financial resources. Preparing HSCT patients for discharge from the hospital involves extensive education of complex post transplant guidelines. Moving from labor and resource intensive individual classes to film and web based applications are useful ways to assure patient education content is thoroughly covered. Providing 30-minute weekly scheduled question and answer sessions allows patients an opportunity to have concerns addressed.

## 515

### NON-PHARMACOLOGICAL STRATEGIES TO PREVENT NEUTROPENIC FEVER IN HEMATOLOGIC MALIGNANCY

Weiner, H., Lunsford, V., Potter, P. Barnes Jewish Hospital, St. Louis, MO

Neutropenia is often an inevitable part of treating hematologic malignancies. It is the most common cause of limiting the dose of chemotherapy and if neutropenia occurs, it puts a patient at a much higher risk of developing an infection that can quickly become life threatening. As such, it is a goal for nurses to prevent neutropenic infections as much as possible. Because the first sign, and often only sign, of a neutropenic infection is fever, oncology staff use a fever as an objective measure to gauge the health status of the patient. In the past, common nursing interventions used to prevent neutropenic fever have included protective isolation and neutropenic diet. However, there is little data to support the use of either. In addition, these measures are difficult to adhere to and create a feeling of isolation in the patient. The purpose of this review of literature is to critically analyze current literature to determine if there are data that indicate that neutropenic diet and protective isolation are effective forms of preventing neutropenic fever. CINAHL, MEDLINE and the Cochrane database were searched for key words "neutropenia", "fever", "infection", "prevention", "isolation", and "diet", with a time limitation from 2001 until present. Additional articles were identified from the reference lists of these articles. Twelve articles were identified as being pertinent to the subject matter. Both qualitative and quantitative studies were included in the review. The data found in the literature review does not support the use of neutropenic diet or reverse isolation for the prevention of neutropenic fever. Instead of using resources and time on these interventions, nurses should emphasize that patients employ proper hand hygiene and that fruits and vegetables are thoroughly washed before eating them.