

practice with subsequent hospitalizations. Patients treated with high dose chemotherapy and stem cell rescue for CNS tumors have disrupted sleep and those with high risk disease appear to have poorer sleep quality in comparison to average risk. Poorer sleep quality in high risk patients may be a result of more extensive surgery, residual tumor and higher doses of radiation. Lastly, nurses play a role in optimizing the sleep environment for patients; attention needs to be focused on sleep interventions for high risk patients undergoing stem cell transplantation.

120

Hear Our Voices: Patient's Perspective of Financial Impact of Allogeneic HCT

Mary Weise, Nandita Khera, Pierre Noel. Mayo Clinic Arizona, Phoenix, Arizona

Topic Significance & Study Purpose/Background/

Rationale: Medical science has made great improvement in Allogeneic Hematopoietic Cell Transplantation (HCT) over recent decades. Current treatment modalities offer many recipients curative treatment or increased long-term survivorship. Practice guidelines are working to identify and improve patient care outcomes and long-term effects of HCT, offering patients an opportunity to live with their disease post-transplant. However, the reality is that, for many, surviving HCT offers a mixed blessing. Many practitioners have identified frustrations in post-transplant follow-up care related to the financial impact of HCT care. Patients report devastating impacts upon quality of life (QOL), beyond the medical concerns of GVHD or other chronic health problems related to HCT. They report life stressors which may ultimately affect their health and well-being. While much has been done to offer improved survivorship and quality of care with HCT, little seems to have been studied regarding the QOL and financial impact of HCT upon post-transplant survivors.

Methods, Intervention, & Analysis: Data analysis included qualitative analysis based on a questionnaire which was mailed to 482 patients (268 respondents= 56%) who had survived allogeneic HCT at the 3 study sites at Mayo Clinic from 1/06 to 6/12. Questions in the survey were about health insurance, prescription/medical costs, and employment which allowed for subjective data on illness and the impact that HCT has on one's QOL, physical and emotional well-being, personal finances, as well as resource allocation post-HCT. A section in the questionnaire allowed for patient comments. This study discusses their open-ended, candid responses to the impact of transplant. It also allowed for any thoughts in information that could have helped them better prepare financially for post-transplant care.

Findings & Interpretation: Our sample (n=268 respondents) reported issues with employment, insurance, and disability. A majority conveyed an adverse financial impact (>54%) such as a reduction in household income >50%, need to sell/mortgage home, withdraw money from savings, and paying more than they could afford for their medical care. 73% reported that being sick had hurt them financially, with 3% declaring bankruptcy.

Conclusions: A significant proportion of post-HCT survivors report an impact on their personal finances and QOL, despite having health insurance coverage. Future research could help identify at-risk patients, counsel resources, and support interventions which could improve outcomes of HCT.

Discussion & Implications: As transplant practitioners, we are trying to be advocates of cancer survivorship, yet consideration of QOL and the financial impact of transplant

care should be considered if we are to practice ethically. Recommendations for correlating QOL studies in HCT, can help to improve patient outcomes throughout the continuum of care, while helping our patients in what can be life-long coping with chronic survivorship. Open-ended patient responses help give practitioners a sense of the emotion and depth of impact as they tell us how transplant affected their lives. It is important to let patient's know we are listening, so that we can open paths for conversation and improve outcomes.

TRANSPLANT NURSING RESEARCH

121

Comparing the safety and efficacy of red blood cell transfusion dose in hematopoietic stem cell transplant patients: single versus double unit transfusions

Rhonda Evans, Aldijana Avdic, Anne Smith, Sharon Tucker. University of Iowa Hospitals & Clinics, Iowa City, Iowa

Topic Significance & Study Purpose/Background/

Rationale: Until recently, the national standard practice for blood transfusions in bone marrow transplant patients was two units of red blood cells (RBCs) per transfusion episode. This practice was called into question due to safety concerns, suggesting that one unit of RBCs per transfusion episode may be an equivalent or even safer and less costly practice (assuming factors such as amount of bleeding and hemoglobin level are equal). Following a thorough review of existing blood management practices and review of the literature, our academic medical center changed practice to routinely transfuse one unit of RBCs per low hemoglobin (7-8 g/dL) episode if certain clinical criteria were met. Following IRB approval, a retrospective medical record review began to evaluate this practice change among two groups of hematology-oncology patient populations (allogeneic and autologous bone marrow transplant). Patient records from these two groups of patients are being evaluated before and after the practice change (one vs two units of RBCs/transfusion) looking at average units of blood products transfused per patient, impact on length of stay, and estimate of nursing time costs. The project is expected to generate new knowledge regarding safe blood management practices in hematology oncology patients.

Methods, Intervention, & Analysis: The project is using the hematology oncology inpatient unit log of admissions and discharges to identify adult allogeneic and autologous bone marrow transplant patients who received a blood transfusion for a hemoglobin of 7-8g/dl and hematocrit above 21%; and were not actively bleeding, septic, experiencing a major infection, or pregnant. Patient data are being obtained from the University HealthSystem Consortium (UHC) database. 400 cases are being enrolled, 200 from pre-practice change (7-1-2009 to 6-30-2011) and 200 from post-practice change (9-1-2011 to 8-31-2013). A two-month gap was purposefully included between the two time periods to allow for full transition to the new practice standard of one unit of RBCs/transfusions. Data thus far suggests a reduction in red blood cell utilization at an average of 1.3 units per hospital discharge. Based on these utilization trends, we are estimating a cost savings of at least \$1300 per month just in purchase cost (\$200 per RBC unit X 1.3 units per discharge X an average of 5 patients/month). Additionally, we are estimating a savings in nursing hours of approximately 13 hours per month (2 hours per RBC transfusion X 1.3 units per discharge X an average of 5 patients/month).