Altered Sexuality and Quality of Life in Female Hematopoietic Cell Transplant Recipients in The First Year Following Transplantation
D. Kathryn Tierney, Stanford University Medical Center, Stanford, California

Topic Significance & Study Purpose/Background/Rationale: Alterations in sexuality following hematopoietic cell transplantation (HCT) are common and can negatively impact quality of life (QOL). The etiology of these changes is the result of cumulative physiological and psychosocial insults beginning with the cancer diagnosis.

Methods, Intervention, & Analysis: Women were surveyed a four time points, pre-transplant (T1), 2-3 (T2), 6 (T3) and 12 (T4) months post-HCT. Instruments included 1) Menopause-Specific Quality of Life Questionnaire, 2) Female Sexual Function Index and 3) a visual analog scale to measure QOL. Demographics of the sixty-three participants are shown in table one. Statistical analyses included t-tests, one-way repeated measures ANOVA and multiple regression.

Findings & Interpretation: At T4, 51% experienced hot flashes, 59% decreased sexual desire, 46.9% vaginal dryness and 49.2% were avoiding intimacy. At T4, 44.9% reported decreased arousal, 36.7% decreased lubrication, 44.9% difficulty experiencing orgasm, 22.4% dyspareunia and 63.3% reported being dissatisfied with the sexual partner at least half of the time or more. At T4, only 69% of the women had been sexually active in the past month. There was no significant change in mean scores for sexual functioning, sexual satisfaction and vasomotor symptoms from T1 to T4; indicating no improvement in symptoms. A significant decline in mean scores for physical (p = .011) and psychosocial (p = .019) symptoms was observed over the first year indicating a decrease in symptoms. Mean QOL scores significantly increased (p = .028) in the first year, indicating an improvement in QOL. Multiple linear regression analysis indicates that 49.2% (adjusted R² = .492, p = .000) of variance in QOL scores at T4 is explained by psychosocial and physical symptoms, sexual satisfaction, QOL score at T1 and education level. Psychosocial symptoms uniquely explains 21.8% (p = .000), sexual satisfaction 4.58% (p = .023) and education level 5.86% (p = .01) of variance in T4 QOL scores.

Discussion & Implications: Nurses can provide anticipatory guidance on potential changes in sexuality to facilitate adaptation by reducing the discordance between expectations and new realities. Based on these findings, treatment strategies targeted at decreasing hot flashes, vaginal dryness and psychosocial symptoms may result in improved QOL.

A Pilot Study to Examine Sleep in Pediatric Brain Tumor Patients Hospitalized for High Dose Chemotherapy and Stem Cell Rescue
Michelle Rickard, Susan Clifton, Troy Wallach, Belinda Mandress, Margie Kjellin. St. Jude Children’s Research Hospital, Memphis, Tennessee

Topic Significance & Study Purpose/Background/Rationale: During a 5 day hospitalization of high dose chemotherapy and stem cell rescue, is sleep quality and quantity more positive for brain tumor patients ages 4-21 years randomized to a sleep environment intervention compared to patients randomized to standard of care.

Methods, Intervention, & Analysis: Sleep was assessed with actigraph and sleep diary. Those randomized to the intervention arm received “protected sleep time” which consisted of a minimum of 90 minutes of uninterrupted sleep, patient room was darkened and hall light “blackened out” and patients were offered sleep hygiene with white noise, massage, or bedtime story.

Findings & Interpretation: Eighteen patients were randomized to standard of care and 19 to the interventional arm. No differences were found in brain tumor site, risk, presence of VP shunt, gender or age between the groups. Both the interventional and standard of care had disrupted sleep as measured by actigraph; however, a statistical difference in total sleep minutes and wake after sleep onset was found between brain tumor risk groups. Patients treated as high risk had poorer sleep quality and quantity.

Discussion & Implications: Patients and parents were receptive to a sleep intervention during hospitalization, and those on the intervention arm requested sleep hygiene.