

Summary of PSQI Components. Mean Difference from Placebo for Gabapentin ER

Component	1200 mg WK 4	1800 mg WK 4	1200 mg WK 12	1800 mg WK 12	1200 mg WK 24	1800 mg WK 24
Disturbance p value	-0.22 0.0003	-0.29 0.0001	-0.10 0.1086	-0.15 0.0194	-0.08 0.1882	-0.08 0.2250
Quality p value	-0.40 <0.0001	-0.37 <0.0001	-0.28 0.0011	-0.18 0.0279	-0.25 0.0032	-0.20 0.0214
Latency p value	-0.14 0.1187	-0.26 0.0023	-0.14 0.1225	-0.12 0.1788	0.01 0.9014	-0.05 0.5589
Duration p value	-0.28 0.0003	-0.31 <0.0001	-0.18 0.0375	-0.15 0.0729	-0.06 0.4676	-0.19 0.0312
Efficiency p value	-0.49 <0.0001	-0.38 0.0004	-0.33 0.0019	-0.19 0.715	-0.24 0.0290	-0.31 0.0049
Sleep medication p value	-0.18 0.0196	-0.14 0.0554	-0.16 0.0575	-0.11 0.1846	-0.15 0.0679	-0.10 0.1999
Daytime Dysfunction p value	-0.10 0.1572	0.02 0.8265	0.00 0.9844	0.08 0.3136	0.02 0.7844	-0.03 0.7029
Global p value	-1.74 <0.0001	-1.68 <0.0001	-1.16 0.0014	-0.80 0.0246	-0.77 0.0458	-0.93 0.0146

P-69.

Symptoms of depressed mood, disturbed sleep and sexual problems in midlife women: cross-sectional data from the Study of Women's Health Across the Nation (SWAN)

Beth Prairie, MD, MPH¹, Stephen R. Wisniewski, PhD², James Luther, MA³, Rachel Hess⁴, Rebecca C. Thurston, PhD^{2,5}, Robin Green⁶, Katherine Wisner^{7,1}, Joyce Bromberger^{7,2}. ¹Ob/Gyn, University of Pittsburgh, Pittsburgh, PA; ²Epidemiology, University of Pittsburgh, Pittsburgh, PA; ³Epidemiology Data Center, University of Pittsburgh, Pittsburgh, PA; ⁴Medicine and Center for Research on Health Care, University of Pittsburgh, Pittsburgh, PA; ⁵Psychology, University of Pittsburgh, Pittsburgh, PA; ⁶Obstetrics and Gynecology, Albert Einstein College of Medicine, Bronx, NY; ⁷Psychiatry, University of Pittsburgh, Pittsburgh, PA

Objective: Depression is known to be associated with both sleep disturbance and sexual problems in midlife women. These three symptoms may co-occur and represent a particular symptom complex during midlife. These symptoms are commonly reported but there are minimal data to examine whether they co-vary in individual women. We sought to evaluate the interrelatedness of symptoms of depressed mood, disturbed sleep and sexual problems in the SWAN cohort at single study visit and to characterize women exhibiting this symptom complex with respect to demographic, psychosocial and clinical characteristics. We hypothesized that women with this complex of symptoms would have more stressful life events, lower social support, and be in the late peri-menopausal stage. **Design:** SWAN is a multi-ethnic observational cohort study of the menopausal transition in women across the United States. Demographic information was acquired at baseline, and menopausal status was assessed at the time of the study visit. Depression was assessed using the Center for Epidemiological Studies Depression Scale (CES-D) with a total score ≥ 16 indicating high levels of depressive symptoms. Sleep disturbance was defined as reporting waking at night, waking early, or difficulty falling asleep at least 3 times in each of the past 2 weeks. Sexual function was assessed by self-report on a 20-item questionnaire derived from several sources and addressing multiple domains of sexual function, including desire, arousal, satisfaction, orgasm and vaginal dryness. Women were identified as having a sexual problem if they had a problem in any of these five domains. Women who reported all 3 symptoms were compared to those who did not. Logistic regression models were used to estimate the association of the demographic, psychosocial and clinical characteristics with the symptom complex. P values ≤ 0.05 were considered statistically significant. **Results:** Study subjects (N=1716) were 49.8 years old on average, 49.7% Caucasian, 24.2% African-American, 10.1% Japanese, 9.3% Chinese and 6.7% Hispanic. The majority were either early or late peri-menopausal, married, not using hormone therapy, and rated their overall health as excellent or very good. 16.5% had CES-D scores ≥ 16 , 36.6% had a sleep problem, and 42.2% had any sexual problem. Five percent of the women (N=90) experienced all 3 symptoms. In multivariable models, women with the symptom complex were more likely to have lower household incomes, less education, be surgically postmenopausal (OR 3.37 (95% CI: 1.56, 7.26)) or late peri-menopausal (OR 1.99 (95% CI: 1.06, 3.75)), rate their general health as fair or poor, have a higher number of stressful life events and lower social support. No effect was noted for race/ethnicity or for hormone therapy, although few women (19.8%) were using hormones. **Conclusion:** In this cross-sectional analysis of the SWAN cohort, 5% of women were affected by the complex of symptoms of depressed mood, disturbed sleep and sexual problems. The predicted prevalence of this symptom complex in this sample if each of these symptoms were completely independent would be 2.6%. The higher prevalence found in this analysis suggests that these symptoms do co-vary within individual women and are interrelated. The association with menopausal stage supports the hypothesis that this complex is related to the menopausal transition, with surgically post-menopausal at particularly high risk for having this complex. Psychosocial factors which are known risk factors for depression, including poor social support and more stressful life events, were also risks for having the symptom complex. Thus, during midlife, these symptoms may be more likely to cluster in peri-menopausal women with these risk factors.

P-70.

Sexual function and breast cancer: the elephant in the bedroom

Beth Prairie, MD, MPH¹, Sybil Crawford², Rakhshanda Layeequr Rahman³, Marjorie Jenkins^{4,5}. ¹Ob/Gyn, University of Pittsburgh, Pittsburgh, PA; ²Preventive and Behavioral Medicine, University of Massachusetts Medical School, Worcester, MA; ³Surgical Oncology, Texas Tech University Health Sciences Center School of Medicine, Amarillo, TX; ⁴Women's Health and Gender Specific Medicine, Texas Tech University Health Sciences Center School of Medicine, Amarillo, TX; ⁵Laura W. Bush Institute for Women's Health, Texas Tech University Health Sciences Center, Amarillo, TX

Objective: Understanding disease-related quality of life (QOL) issues is important for breast cancer survivors. Women are frequently affected by menopausal symptoms, which may include vaginal dryness or other sexual function problems, following breast cancer treatment. Sexual function is an important, but under-recognized, component of survivor quality of life. We sought to evaluate the impact of sexual function on health-related quality of life in breast cancer survivors. We hypothesize that poor sexual function will significantly affect overall quality of life. **Design:** Women who were known breast cancer survivors not currently receiving hospital-based treatment were identified in a single hospital system through chart review. Eligible women were offered participation in a cross-sectional study to identify significant determinants of QOL in breast cancer survivors. Informed consent was obtained. Demographic information and detailed information regarding the women's breast cancer history and treatment were obtained. Women were asked to complete the Functional Assessment of Cancer Therapy-Breast (FACT-B), a self-administered quality of life survey specific to breast cancer survivors in which higher scores indicate better QOL. Initial analysis indicated that menopausal symptoms had a significant effect on FACT-B scores, and women were subsequently asked to complete the Menopausal Rating Scale (MRS), a questionnaire designed to elicit menopausally-related symptoms in the domains of psychological symptoms, somatovegetal symptoms, and urogenital symptoms. Higher scores indicate higher symptom level. Both the FACT-B and MRS contain specific items related to sexual functioning. Summary statistics, means and standard deviations for continuous variables and percentages for discrete variables, were used to describe the sample. Spearman correlations, nonparametric analysis of variance, chi-square test and 2-sample Wilcoxon were used to evaluate associations between the sexual function variables and BMI, age, and endocrine treatment. **Results:** Average age of participants (N=92) was 62.8 years. The majority had Stage 0 or 1 tumors. Almost 70% underwent endocrine treatment, 67.4% underwent radiation, 40.2% received chemotherapy, and only 19.6% underwent breast reconstruction. Average FACT-B score was 113.7, similar to the US population mean of 111.8. The average total score on the MRS was 13.0 (SD=8.2), which is significantly higher than the general population sample mean of 9.1 ($p < 0.0001$). 60% of women had either no or only mild sexual problems, while only 17% had severe or very severe sexual problems. This is in contradistinction to vaginal dryness, where 28% had very severe symptoms, and 38% had moderate or severe dryness. Vaginal dryness was not significantly associated with age, BMI, or history of endocrine treatment in this sample. Women had significantly lower well-being on the sexual function questions on the FACT-B than their overall scores reflect. 44% were not at all satisfied with their sex lives, and 32% did not feel sexually attractive at all. BMI was inversely associated with perceived sexual attractiveness, with women with higher BMIs having lower sexual attractiveness ($p=0.006$), but not associated with sexual satisfaction. **Conclusion:** Breast cancer survivors in this cohort had high levels of vagina dryness, low levels of sexual satisfaction, and low levels of feeling sexually attractive. Low scores in these domains reduced their overall quality of life scores on the two measures used (MRS and FACT-B). Focusing on overall QOL may miss an important contribution of sexual well-being to long, healthy survivorship.

P-71.

Effect of a Moderate-to-Vigorous Intensity Exercise Program in Body Composition and Basal Metabolic Rate of Postmenopausal Women: The Role of Hormone Therapy

Josiane Rocha^{1,3}, Betania Ogando^{1,2}, Ronaldo Gabriel², Marco Monteiro², Helena Moreira². ¹Physical education, unimontes, montes claros, Brazil; ²Universidade Tras os Montes e Alto Douro, Vila Real, Portugal; ³Faculdades Integradas Pitagoras, Montes Claros, Brazil

Objective: – The present study intended to analyse the effect of an exercise program of step, weight-training and flexibility on the levels of adiposity and on muscle condition of postmenopausal women, based on the conduction of an investigation with a 12-month intervention, aiming the influence of hormone therapy (HT). **Design:** : One hundred sixty-nine women (56.80±6.47 years old), 55% with HT, were randomly introduced into an exercise group (EG, n=91) and a control group (CG, n=78). Height (H) was measured in anthropometric position, as well as body composition (W, weight, FM, fat mass; FFM, fat-free mass, SM, skeletal muscle mass) and basal metabolic rate (BMR) by using octopolar bioimpedance (InBody 720). The skeletal muscle mass index was calculated (SMI= [SM/W] ×100) and the food record method was used. The EG performed a 60-minute exercise set, three times a week, involving step (50% to 85% heart rate reserve), weight training (8-10 repetitions at submaximal intensity for two sets) and stretching. The t-test and analysis of variance (age control) were employed to compare groups. **Results:** No differences were found among the averages of the variables in both groups at the beginning of the study, except for age. In absolute terms the CG revealed ($p < 0.01$) an increase of FM (1.86%) and a decrease in SM, SMI (-1.06%), FFM and BMR (-27.95 kcal/day). Differences were identified in the percentage of changes of these variables between the two groups, having these always been more favourable in the EG in relation to the CG. Height presented a significant increase in EG (0.59 cm, $p < 0.01$). Exercise influenced ($p < 0.01$) the variation of H ($p=0.03$) SM and of SMI ($p=0.04$), while the HT