F3.1: Objective Sleep, Insomnia Symptoms and Daytime Sleepiness in Older Women with Breast Cancer

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Abstract:

Introduction: This study described and compared the objective sleep, insomnia symptoms and daytime sleepiness of two groups of older women with and without non-metastatic breast cancer.

Method(s): The sample included 32 women with breast cancer and 35 without cancer, 50 to 90 years of age. Participants completed 72 hours of home actigraphy recording plus self-maintained Pittsburgh Sleep Diary reports at bedtime and wake time. The Insomnia Severity Index and...
Epworth Sleepiness Scale were administered during two brief telephone interviews. Actigraphy data were initialized, downloaded and analyzed using Act Millenium 3.10.11.2, and AW2 Action w.v.2.5.30 equipment. All other data were analyzed using NCSS. The three days of actigraphy and two interview assessment findings were averaged, for final analysis and comparison. Descriptive statistics were used for demographics, clinical and treatment data, and sleep variables. Independent T-tests, Kolmogorov-Smirnov, or Chi-squared tests were used for comparisons with Yates correction and Bonferroni adjustment as appropriate.

**Results:** Nocturnal awakenings (9 vs 8; expected 2-6/night) and day sleep time (127 vs 120 minutes; expected 14-31 minutes/day) were similar and exceeded expected limits in both groups. Mean sleep onset latency was normal but longer (33 vs 15 minutes; expected < 35 minutes) in the breast cancer group (p=0.01). Mean insomnia scores (9 vs 6; normal under 8) reflected subthreshold insomnia in the breast cancer group, with score categories indicating worse insomnia symptoms (19% vs 9%). Mean daytime sleepiness scores score categories indicated excessive sleepiness in one fifth of both groups (22% vs 20%).

**Discussion & Conclusions:** Objective sleep and daytime sleepiness were similar between groups, including frequent nocturnal awakenings and excessive day sleep time. Insomnia symptoms were more severe in the breast cancer group. These findings support baseline screening and intermittent monitoring of sleep in this population to promote early identification and management of sleep impairment. Further research is needed regarding possible contributing factors to frequent nocturnal awakenings.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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