Appendix

Supplement material

Contents

Measurements

All patients complete a web based intake querying sociodemographic information, medical history, and sleep medical history which included average sleep indices and duration of sleep problems. Patients list and rank current sleep problems as well as identify how long they have suffered from each issue. At baseline subjects were asked to identify all previous insomnia treatments they had attempted and rate their effectiveness in treating their insomnia.

Measurements taken at baseline and repeated biweekly throughout the study included: Insomnia Severity Index, a 7 question scale rating insomnia symptoms and impairment due to insomnia (scale 0-28: 0-7 no insomnia, 8-14 mild/moderate insomnia, 15-28 moderate to severe insomnia); Epworth Sleepiness Scale, an 8 question scale rating daytime sleepiness (scale 0-24: 0-10 mild daytime sleepiness, 11-24 moderate to severe sleepiness); Insomnia Impairment Index, an 11 question scale rating daytime impairment due to insomnia (scale 0-44, higher scores indicate greater impairment); Functional Outcomes of Sleep Questionnaire Short Form, a 10 question measurement assessing the impact of daytime sleepiness on daily living (scale 5-20, lower scores indicate more impairment); Fatigue Severity Scale, a 9 question scale assessing the severity of fatigue and its impact on daily living (scale 9-5, higher scores indicate increased fatigue and impairment); Quality of Life Enjoyment and Satisfaction Questionnaire Short Form, a 16 question scale measuring life quality (scale 0-100%, higher scores indicate greater quality of life).

Daily sleep logs were collected electronically and asked patients to subjectively report sleep indices: bed time, sleep onset latency, total sleep time, wake after sleep onset, time spent out of bed, and total time in bed. Two additional questions asked the subjects to subjectively rate their sleep quality. The first was a 7 point Likert scale (Extremely Poor to Extremely Good), with higher scores indicating higher sleep quality. A second sleep quality metric asked patient to rate their sleep on a 0-100% scale with 0% indicating awful sleep quality and 100% indicating great sleep quality. Daily sleep log responses were averaged for each patient to create 8 data points which coincide with baseline and biweekly follow-up appointments.

Sleep Aids and Psychotropic Medications

A total of 19 patients (13 ASV, 6 CPAP) used either prescription sleep aids or sedating psychotropic prescription medication as a sleep aid (SA+) and 21 did not (SA-). Within mode, there were no differences at baseline between

SA+ and SA- for primary measures [(ASV,CPAP) ISI (p=0.747, p=0.158), SQ-Lik (p=0.366, p=0.883), and SQ-Pct (p=0.679, p=0.840)]. Repeated measures analysis revealed no difference in amount of change within mode for primary outcomes ISI (p=0.570, p=0.672), SQ-Lik (p=0.436, p=0.832), and SQ-Pct (p=0.340, p=0.666)between SA+ and SA- patients (p).