

Poster presentation

## Sleep disturbances in peri-menopausal and post-menopausal women

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### Background

The changing endocrine profile in premenopausal women alters aspects of sleep and circadian rhythms. Subjectively women appear to feel a greater need for sleep and report poor and insufficient sleep more often than men. Insomnia and daytime sleepiness may be directly linked to the changes that occur during the peri/post-menopausal periods. Despite the fact that a large number of women report sleep disturbances associated with peri-menopausal and post-menopausal periods, there is a surprising lack of literature related to this issue. We assessed the characteristics of 40–60 years old women in peri-menopausal and post-menopausal period complaining about sleep disturbances.

### Materials and methods

In our study we present the main sleep disorders that have been diagnosed in women in peri-menopausal and post-menopausal period, 40–60 aged years old, who have been visited our Outpatients' Clinic for Sleep Disorders for a period of 2 years (2000–2002). In a total of 185 women examined in our Outpatients' Clinic, 63 women (percentage 34.05%) 40–60 years old (mean age  $48 \pm 6.2$  years). Mean duration of climacteric symptoms were  $7 \pm 5.3$  years. Patients were interviewed regarding their sleep habits, sleep complaints, menopausal symptoms, medical history and life style and 26 women underwent full PSG. The clinical evaluation of the patients consisted of a neurological examination, an interview with her, and an interview with her bedpartner. They also underwent a full laboratory and biochemical evaluation. Additionally, an EEG, a neuroimaging examination and psychometrics

tests (BDI, Epworth Sleepiness Scale, (EPS), and Max Hamilton's scales (estimation of stress), SCL-90-R), were conducted.

### Results

49 women reported insomnia, use of hypnotics and menstrual status in a similar manner as the group of women that were sleepy. The sleepy women reported more often frequent climacteric symptoms during daytime, like hot flushes and palpitations. There was no difference between these two groups when comparing lifestyle, working hours, marital status, use of tobacco, caffeine and alcohol. 14 women suffered from moderate to severe daytime sleepiness (scored 12 or more on the Epworth sleepiness scale). 10 women of this group significantly more often had complained of tiredness and not of daytime sleepiness and this group scored significantly higher on the BDI scale. Sleep apnea diagnosed to 5 of them and Periodic limb movements to 3 women suffering from both symptoms insomnia and daytime sleepiness.

### Discussion

Insomnia and daytime sleepiness is common among women 40–60 years old. Insomnia appears to be due to night sweats caused by the hormonal changes which occur and which lead to an increase in arousals. Persistence of insomnia symptoms after adequate hormone replacement therapy may indicate that behavioral conditioning of the insomnia initially triggered by the night sweats may have occurred. Alternatively, such an insomnia in a peri/post-menopausal woman could be due to unresolved grief related to going through menopause or could reflect

an independent sleep disorder, such as periodic movements of sleep, sleep apnea, etc. Subjective repercussions include increased daytime sleepiness, lethargy, and fatigue. Treatment strategies for menstrual-associated complaints include using oral contraceptives, antidepressants and psychostimulant for daytime sleepiness.

## References

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