

Sleep quality, fatigue and quality of life in women with lipoedema

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Introduction: Lipoedema is a chronic and progressive disorder of the adipose tissue that mostly affects women¹. Although decreased sleep time and quality are associated with increased incidence of obesity, no previous study has investigated sleep quality in patients with lipoedema². We aimed to assess the sleep quality, fatigue and quality of life (QoL) in lipoedema patients.

Method: 52 patients with lipoedema (Group 1) and 40 age and sex-matched healthy control subjects (Group 2) were enrolled. The demographic variables (age, BMI, marital status, education status) were collected for all subjects and the type and stage of lipoedema were recorded for the lipoedema group. The quality of sleep was assessed by using the Pittsburgh Sleep Quality Index (PSQI). It consists of 7 components: subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbance, use of sleeping pills, and daytime dysfunction subgroups. Fatigue and QoL were assessed by using, Fatigue Severity Scale (FSS) and World Health Organization Quality of Life (WHOQOL-BREF) instruments respectively. WHOQOL-BREF measures physical, mental, social and environmental well-being. The scores were compared between the groups.

Results: The mean age and BMI of the patient and control groups were '45.26±9.81 vs 42.10±6.36 years' and '30.23±4.70 vs 28.55±4' respectively ($p>0.05$). Majority of the patients had type 2 and 1 lipoedema (80.8% of them had type 2, 50% had type 1, 42.3% had type 3) with stage 2 and 1 mostly (51.9% had stage 2, 34.6% had stage 1, 13.5% had stage 3). The median PSQI score was higher in lipoedema group than in healthy subjects (10 vs 8, $p<0.05$). Component analyses of PSQI revealed higher frequency of disordered sleep in patients with lipoedema than in healthy controls. The median scores of FSS was similar between the groups. The QoL scores were also similar between lipoedema and control subjects except in terms of physical health domain. The mean score of physical health and fatigue were correlated with subjective sleep quality, sleep disorder and daytime dysfunction; fatigue was correlated with sleep disorder, daytime dysfunction and use of sleep medications in Group 1 ($p<0.05$). The scores of total PSQI was correlated with physical health subscale of QoL, and fatigue scores in lipoedema group ($p<0.05$).

Conclusion: The patients with lipoedema have poor sleep quality and decreased quality of life especially in terms of physical health. Sleep disturbance is associated with both physical health and fatigue. Therefore assessment of sleep quality and therapeutic approaches are needed in order to enhance the QoL in patients with lipoedema.

References

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