

The Use of the Sleep Assessment Questionnaire[®] As A Measure Of Responsiveness To Nasal CPAP Treatment For Obstructive Sleep Apnea

H. Moldofsky, A.Cesta, C. Sammut, A. MacLean

Sleep Disorders Clinic of The Centre For Sleep And Chronobiology, Toronto, Canada

Purpose: To determine the value of The Sleep Assessment Questionnaire[®] (SAQ[®]) in assessing changes in the sleep-related symptoms of sleep apnea patients, following treatment with nasal CPAP.

Method: The SAQ[®] is a 17 item self-rated validated questionnaire, with favorable sensitivities and specificities for the following six factors: insomnia, nonrestorative sleep, sleep schedule disorder, daytime sleepiness, sleep apnea, and restlessness¹. In order to determine the value of the SAQ[®] in assessing response to a standard treatment procedure, the SAQ[®] was applied to a population of people who were diagnosed, by clinical assessment and polysomnography, with obstructive sleep apnea. These patients were selected from a database of 3370 patients who completed the SAQ[®] on the nights of their sleep studies. Patients were entered into the study providing they fulfilled criteria for sleep apnea before treatment and reported in a CPAP Evaluation Form that they used nasal CPAP for a minimum of 1 month and at least 5 nights a week. Of the patients who completed the 392 CPAP Evaluation Forms only 52 patients (13 females, 39 males, mean age = 49.9, s.d. = 11.1) fulfilled criteria. The mean respiratory index at baseline was 46.3 (s.d. = 26.64) and 14.9 (s.d. = 13.3) post treatment. Paired t-tests were used to compare pre and post treatment SAQ[®] total and factor scores.

Results:

SAQ [®] Factors	Mean Pre SAQ [®] Scores	Mean Post SAQ [®] Scores	T	df	P
Total SAQ [®]	25.8	19.8	4.330	32	<0.0005
Insomnia	7.2	6.0	2.723	45	0.009
Nonrestorative sleep	6.2	5.1	3.585	45	0.001
Sleep Schedule disorder	1.7	2.2	1.062	42	0.294
Daytime Sleepiness	2.8	2.1	2.410	47	0.02
Sleep Apnea	4.2	2.5	3.975	49	<0.0005
Restlessness	1.9	1.5	1.662	48	0.103

Statistically significant changes were found for improvement in the Total SAQ[®] score and Insomnia, Non-restorative, Daytime Sleepiness, and Sleep Apnea factors of the SAQ[®]

Conclusion: The SAQ[®] is a favorable, brief assessment tool for assessing treatment response to nasal CPAP in patients with sleep apnea who use the treatment faithfully for at least one month. Such patients report overall improvement, specifically in self-ratings of insomnia, nonrestorative sleep, daytime sleepiness, and sleep apnea factors.

References:

1. Cesta A., Moldofsky H., Sammut C., The sensitivity and specificity of the Sleep Assessment Questionnaire[®] (SAQ[®]) as a measure of non-restorative sleep. *Sleep*, 22(1 Suppl):14 1999