

THE ROLE AND EFFECT OF MODAFINIL ON NORMAL-PHYSIOLOGICAL NIGHT SLEEP

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Modafinil is a unique wake-providing drug approved for narcolepsy, shift work sleep-disorder and as adjunctive treatment of OSAS. Modafinil is well-tolerated drug with low predisposition for abuse, it is very effective on narcolepsy and excessive daily sleep. But the role of modafinil on normal night-sleep is obscure. We studied the effect of modafinil on normal physiological sleep. Therefore we designed 33 double-blind and 30 placebo-controlled trials. All volunteers (33 patients and 30 control group) were evaluated at outpatient unit of Selcuk University Hospital, Department of Neurology. All patients indicated with usage of modafinil for narcoleptic situation were investigated just before and 90th day with Polysomnography. All data collected from pre and post-period of medications were compared in between and with the control-group data. This showed us that modafinil is not just effect daily awakening but also with physiological sleep at night. Another important thing is that severity of Epworth score is not affective on PSG findings. With increasing age, the effectivity of Apnea-Hypopnea Index improvement is better with modafinil usage. The role of modafinil is well known in daily sleep condition, and narcolepsy; but the role of it on the coming nights-sleep is a strange and important concept. Utilizing GABA, serotonin, glutamate, epinephrine, histamine and hypocretin, are the well-known pathway for modafinil effect. But this interactions may make different effect on night sleep other than the awakening roles and the effects are mostly related with REM period, age, Epworth score, family history for narcolepsy, daily napping relaxation.