

THE ROLE OF DOPAMINE IN THE CONTROL OF SLEEP-WAKE STATES

Summary

Sleep and wakefulness are regulated by a number of neurotransmitters and neuromodulators of the central nervous system. This paper presents the facts supporting the role of the dopaminergic mesocorticolimbic and mesostriatal systems in the regulation of sleep and wakefulness. The effects of dopamine, its agonists and dopamine transporter

on wakefulness, sleep, sleep disorders and the role of dopamine in the induction of REM sleep and dreams are discussed. Mesolimbic pathways are included in a suggested model of generation of hippocampal theta rhythm, which is one of the criterial features of REM sleep.