Sleep disorders in patients with acute stroke

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Objective: To assess the frequency of sleep disorders(SD) in patients with acute ischemic stroke (IS) and its prognostic value for the effectiveness of treatment, clinical outcomes and mortality rate. Study Design: Observation and clinical follow up of SD in 87 patients in the acute period of IS with severe (19 and above NIHSS) and moderate (15-18 NIHSS) stroke was conducted and a retrospective analysis of 102 is incidents, which had previously been treated in the IS and the intensive care unit of tertiary level clinical hospital, was done. Result: In the group of patients with moderate and severe stroke clinical course of the disease was often accompanied with psychomotor agitation and SD. Among main types of SD (ICSD-3) about 94% belonged to the Circadian Rhythm Sleep-Wake Disorders and Irregular Sleep-Wake Rhythm in particular. The remaining incidents were divided almost equally between the Delayed Sleep-Wake Phase and the Advanced Sleep-Wake Phase. Inversion SD with circadian rhythm disturbances took place in 57% of patients (107) for a duration from 1-2 days to 7 days on the background of corrective pharmacotherapy. The other type of SD, without circadian rhythm disturbances, was observed in the rest 43% (82) of patients. The mortality rate within 90 days after an acute IS incident was reliably higher in the group with a circadian rhythm SD (32%) compared with other patients, who did not have SD (18%). Conclusion: Sleep disorders, in particular the circadian rhythm sleep disturbances in acute period of IS, are quite common clinical phenomenon, which affect about 84,7% of patients with severe and moderate course of the disease. It seems like different types of SD in such group of patients might be associated with an unfavorable prognosis for the course of IS. Further investigations with larger group of patients should be carried on.