Summary

The thesis deals with the sleep paralysis phenomenon characterized by transient inability to move or to speak at sleep onset or on waking from sleep. It is accompanied by unpleasant, often multisensory hallucinations with intense fear and anxiety. The empirical part of this study is divided into four parts, which cover the topics of psychological and electrophysiological aspects of sleep paralysis. The aim is to describe psychological factors affecting the occurrence of sleep paralysis episodes and accompanying phenomena such as hallucination contents and emotional experiences. In the subsequent part we focus on comparisons of macrostructural and microstructural characteristics of sleep between participants with recurrent sleep paralysis episodes and healthy control group, including spectral analysis of EEG brain activity during REM sleep.

We found out that personality characteristics such as personality boundaries and absorption may influence sleep paralysis episodes. We confirm the connection between sleep paralysis occurrence and nightmares - nightmares are a significant predictive factor of sleep paralysis frequency. According to emotional experience, sleep paralysis episodes are mostly connected to fear, although we found that in spite of fear presence, the episodes could be experienced as pleasant. The pleasant experience of sleep paralysis is connected to personality trait Openness to new experiences and also to lucid dreams. On behalf of diagnostic interviews we catalogued the frequency and the amount of fear of accompanying hallucinations and symptoms. The highest level of fear is connected to visual hallucinations and felt presence. The inability to move causes the same level of fear as accompanying hallucinations, both are rated as moderately distressing. Polysomnography study shows prolonged latency of NREM 3 sleep in participants with recurrent sleep paralysis episodes compared to a healthy control group. We didn´t find other differences in macrostructural parameters. REM sleep of participants with sleep paralysis is not more fragmented. Spectral analysis during REM sleep showed higher bi-frontal beta activity. We suggest that our results indicate the presence of some persisting sleep characteristics which lead to a higher predisposition to the experience of recurrent sleep paralysis episodes.

Key words: Sleep disorders, sleep paralysis, hypnagogic/hypnopompic hallucinations, emotional experience, polysomnography aspects.