Conclusions. People with BPD breathe in smaller volumes, but more frequently compared to the control group, without differences in respiratory flow. The hyperventilation sample highlights the changes in the respiratory pattern of healthy persons compared to people with borderline type personality disorder, probably due to changes in the cortical and subcortical structures that are responsible for the voluntary and involuntary control of breathing.
Key words: Borderline Personality Disorder, respiratory pattern, PID

280. THE IMPORTANCE OF LIGHT AND DARKNESS IN THE DEVELOPMENT OF THE CIRCADIAN RHYTHM

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Introduction. Currently, in the world, nights are extremely illuminated, whereas during daytime people are exposed to dim light conditions. Exposure to artificial light at night results in a disruption of the circadian system and melatonin suppression associated with an increased prevalence of numerous diseases.
Aim of the study. The aim of this review was to assess the current information regarding the influence of light and dark on the secretion of human melatonin.
Materials and methods. A broad English search was undertaken of the PubMed and Scopus database for the terms ”melatonin suppression”,”melatonin and light”, articles from 2010-2020 were selected.
Results. Studies have shown that light-induced nocturnal melatonin suppression may be affected by intensity (350-1000 lx was sufficient to significantly suppress melatonin levels), wavelength (459 nm to 484 nm), time of exposure (5 seconds-6,5 h), temperature (6500k induced greater suppression). Appropriately timed light exposure has been shown to phase-shift human circadian rhythms. More prolonged exposure to light during the day (summer, bright environment) might reduce melatonin suppression at night, blue light having a more acute preventive impact. Light influences melatonin's functions, increasing the risk for diabetes type 2, heart disease, obesity, some types of cancer, depression, bipolar disorders.
Conclusions. Further research assessing the impact of light on melatonin secretion should be undertaken considering the following factors: alcohol consumption, age, eye color, posture, phase of the menstrual cycle, administration of oral contraceptives, physical exercise, pupil size, sleep pattern and clearly indicating the details of the experimental protocol.
Key words: melatonin suppression, light, circadian rhythm, light at night

281. THE CIRCADIAN RHYTHM – THE MEDICAL AND SOCIAL IMPORTANCE

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