

PATIENTS WITH OBESITY HYPOVENTILATION SYNDROME AND MENTAL DISORDERS

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Objective: Obesity hypoventilation syndrome is a multifactorial clinical condition developing in obese people. The symptomatology of the disease is dominated by disorders of breathing during sleep, and hypoventilation leading to chronic hypercapnia with underlying metabolic and hormonal disorders leading to complications of the cardiovascular disease.

Methods: Here we describe a case of a patient treated for many years because of pulmonary hypoventilation syndrome accompanied by obesity and metabolic syndrome followed by a reduction in blood oxygen tension.

Results: Despite the exacerbation of the underlying disease (parameters on admission 66mmHg pCO₂, pO₂ 29mmHg, SaO₂ 43%) our patient showed no signs of a mental disorder. Slight short-term memory problems, decreased mood and drive relevant to the degraded state of somatic were present. During the hospitalization, the use of oxygen therapy led to the improvement of blood parameters, however the mental state became more complicated. The patient started to develop symptoms of delirium with a delusional interpretation of reality. Despite administered pharmacotherapy and further improvement in respiratory parameters (at discharge pCO₂ 62mmHg, pO₂ 59mmHg, SaO₂ 89%) the patient's cognitive dysfunctions showed no further improvement and delusions of persecution were still present. This required further psychiatric care alongside with patient's somatic treatment.

Conclusions: A strong link exists between disorders of cognition, and chronic respiratory failure (hypoxia with concomitant hypercapnia). This may be also accompanied by psychiatric symptoms, which may become difficult to treat even if the somatic parameters are successfully improved.