Introduction: Most patients with organic and symptomatic mental disorders due to endocrine disease have varying degrees of cognitive impairment.

Objectives: The study involved 281 patients with primary hypothyroidism, aged 36 to 59 years.

Aims: Establishing mechanisms for the formation of cognitive disorders in patients with organic and symptomatic mental disorders due to primary hypothyroidism.

Methods: MMSE, cognitive induced potentials P300.

Results: In patients with primary hypothyroidism organic mental disorders with cognitive disabilities from mild to moderate manifested in 30.9%. Neuropsychological study found lower overall cognitive performance and dependency on the stage dysmetabolical encephalopathy (DME): mild cognitive impairment (27-25 points for the MMSE) at the first stage of DME, mild to moderate cognitive disorders (24-21 points for the MMSE) at the second stage, at the third stage of DME in 36.5% of patients diagnosed dementia. The study of cognitive induced potentials of patients with primary hypothyroidism revealed increased latency peak P300 to 369 ± 21 ms (p < 0.05) relative to controls (320 ± 18 ms) and decreased resulting waves are neurophysiological correlates of brain fatigue in hypothyroid conditions.

Conclusions: The ways of optimization of diagnosis and treatment of patients with cognitive disorders who are in early intervention at the stage of functional psychosomatic disorders, the diagnosis of factors, etiopathogenetic significant in the development of cognitive disorders and their correction.