

## CONTEMPORARY IDEAS OF THE SCHIZOPHRENIA PATHOGENESIS

Amel Guerbi

Scientific supervisor: assoc. prof. Myronchenko S.I.

National University of Pharmacy, Kharkiv, Ukraine

amelguerbibouarma@gmail.com

**Introduction.** Schizophrenia is a severe, chronic mental disorder. Despite the effort of many experts in the field, however, schizophrenia remains a chronic relapsing and remitting disorder associated with significant impairments in social and vocational functioning and a shortened lifespan. Prevalence is higher than diabetes mellitus, Alzheimer's disease, and multiple sclerosis.

**Aim.** The aim of this review is to provide an overview of the current knowledge on the etiology and pathogenesis of schizophrenia.

**Materials and methods.** Data analysis of literature and Internet sources.

**Results and discussion.** There are two main groups of theories of the etiology and pathogenesis of schizophrenia: theories of psychogenesis and biological theories (genetic hypothesis, biochemical (neurochemical) concept, disontogenetic theory (theory of impaired brain development), and immunological concepts that are usually combined with infectious and viral hypotheses). So, according to genetic theory, the genetic component is considered as one of the main risk factors for the development of the disease. The neurochemical theory of schizophrenia is based on the presence of local disorders at the level of one or more neurotransmitter systems of the brain, in particular dopamine, glutamate and serotonergic systems. According to the theory of environmental effects, social and family instability are factors contributing to the onset of the disease. The viral theory of schizophrenia suggests that a key factor in the induction of this pathology is prenatal viral infection (retroviruses, herpes viruses). From the point of view of immunological theory, the main mechanisms of generation and development of schizophrenia are due to dysfunction of the immune system, in particular the development of autoimmune processes (both primary and secondary). The theory of impaired development of the brain includes impaired brain development occurs at an early stage of its development; the active action of the casual agent causing the defect lasts a short period of time; the behavioral consequences of neuronal developmental disorders are not immediately apparent, but after a rather long period of time.

**Conclusions.** Despite the huge amount of experimental and clinical data accumulated as a result of studies of schizophrenia, as well as theories formulated on their basis, many issues related to the etiology and pathogenesis of this disease are still open.

## CURRENT METHODS AND PROMISING WAYS OF THE GAUCHER DISEASE TREATMENT

Chornovolenko K. V.

Scientific supervisor: ass. prof. Tsyvunin V. V.

National University of Pharmacy, Kharkiv, Ukraine

stud7data@gmail.com

**Introduction.** Gaucher disease (GD) is the most common hereditary disease, classified as an autosomal recessive genetic disorder. The development of the disease is based on a defect in the enzyme  $\beta$ -D glucosidase, which leads to the accumulation of glucocerebrosides (complex glycolipids) in the cells of the reticuloendothelial system (lysosomes of cell-macrophages). The prevalence of GD is approximately 1: 40.000, in the general population, rising to 1:800 among Ashkenazi Jews. GD has a multisyndromic character with predominant damage to the nervous system, bone tissue, liver, spleen, and bone marrow. The high disabling potential of GD encourages the search for new ways of its treatment, including innovative directed drugs.