## Міністерство охорони здоров'я України Харківський національний медичний університет



## ЗБІРНИК *науково-практичної конференції* <u>«АКТУАЛЬНІ ПРОБЛЕМИ КЛІНІЧНОЇ ТА</u> <u>ФУНДАМЕНТАЛЬНОЇ МЕДИЦИНИ»</u>

14.04.2017 р. м. Харків and the activity of ALT (r=0,81; p<0,001), the severity of inflammatory and necrotic changes (r=0,82; p<0,001) and fibrosis stage (r=0,81; p<0,001), and also between the content of A2M and the activity of ALT (r=0,41; p=0,05), and the stage of inflammatory and necrotic changes (r=0,63; p<0,01), and the severity of fibrosis stage the p<0,001), and activity of GGT (r=0.53: p<0.01). (r=0,884; Conclusions: Activity of GGT and content of A2M in blood serum depends directly on the stage of inflammatory and necrotic changes and the fibrosis stage of patients with Chronic Hepatitis C and also on each other. This gives a ground of using GGT and A2M as additional tests for diagnosing morphological changes in liver.

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Actuality. Chronic obstructive pulmonary disease (COPD) is a major global epidemic that is increasing throughout the world as populations age and survive previous causes of death (Barnes P.J., Burney P.G., Silverman E.K. et al., 2015). COPD is now the fourth-ranked cause of death worldwide and predicted to become the fifth-ranked cause of disability, affecting approximately 10% of persons older than 45 years (Lozano R., Naghavi M., Foreman K. et al., 2012). COPD is a heterogeneous and complex disease with several pathogenetic pathways, such as inflammation, protease-antiprotease imbalance, response to oxidative stress and cell death.

Materials and methods. We have analyzed COPD guidelines in different countries and modern publications using the PubMed database on the impact of inflammation on COPD formation.

Results. COPD is associated with chronic inflammation of the airways and lung parenchyma, which increases further during acute exacerbations and is also associated with systemic inflammation. The systemic manifestations of COPD are widespread and can affect nearly every system in the body. Disease states that are commonly related to the systemic inflammation seen in COPD include: cardiovascular disease, lung cancer, weight loss, osteoporosis, and diabetes.

Historically, two classical phenotypes of COPD had been described: the chronic bronchitic and the emphysematous one. Recently, a number of distinct phenotypes had been described such as, the frequent exacerbator, the fast decliner (fast drop of forced expiratory volume in 1 sec (FEV1) over the years), the phenotype with systemic inflammation, the one with a number of severe co-morbidities such as cardiovascular or metabolic ones. Clinical phenotypes can overlap in the same patient. "Inflammatory" phenotypes include frequent exacerbator, chronic bronchitic, and those with a number of co-morbidities (Siafakas N., Corlateanu A., Fouka E. al., 2017).

Pyroptosis represents a form of cell death that is triggered by proinflammatory signals and associated with inflammation. The lung is continuously exposed to a variety of inhaled infectious agents and exogenous particulates, as well as to host-derived danger signals, and thus, the innate immune response plays a critical role in protecting the pulmonary system from disease. Inflammasomes are key signalling platforms that detect pathogenic microorganisms and sterile stressors, and that activate the highly proinflammatory cytokines interleukin-1 $\beta$  (IL-1 $\beta$ ) and IL-18. Chronic activation of inflammasomes in tissue-resident immune cells or even stromal cells could contribute to pathology such as chronic inflammation or fibrotic responses (De Nardo D., De Nardo C.M., Latz E., 2014).

Conclusion. Future studies of the role and mechanism of participation of inflammasomes and activating the highly pro-inflammatory cytokines in the formation of COPD will open new opportunities for effective targeted methods of early prevention and phenotype-based management.

## Mischenko M.M.<sup>1</sup>, Ryzhenko M.V.<sup>2</sup> HISTORICAL ASPECTS OF STUDYING POSTTRAUMATIC STRESS DISORDERS

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A lot of scientific work confirms the fact that a person's experience of life-threatening events and situations can ultimately lead to unfavorable medical and psychological consequences. The clinical picture of psychopathological disorders in persons subjected to intensive psychotraumatic effects is represented by various disorders in their structure - from psychological reactions to clinically expressed forms of psychopathology. Most often, with psychotrauma, so-called posttraumatic stress disorders (PTSD) develop.

Historically, the diagnosis of PTSD appeared relatively recently. In official sources of PTSD, a nosological unit is first encountered in the US in DSM III (since 1980). However, the disturbances caused by the impact of psychotraumacan not be considered young enough, since their appearance has been noted since the time when mankind began to experience the effect of psychotraumatic factors (wars, murders, cataclysms, etc.).

Among the first mentions of psychiatric disorders due to severe psychotrauma, the work of the English surgeon J.E. Erichsen "Railway and other injuries of the nervous system" (1867), describing the symptomatic complex of mental disorders after a railway accident. A little later (1888) the German neurologist H. Oppenheim introduces into practice the term "traumatic neurosis", which includes the symptom complex of modern PTSD.