THE TASKS OF PATHOPHYSIOLOGY IN VETERINARY MEDICINE AT THE PRESENT STAGE Mazurkevich A. Y., doctor of veterinary medicine, professor, National university of life and environmental sciences of Ukraine, <u>amaz@nauu.kiev.ua</u>

The development of scientific research in biology in recent decades has led to revolutionary discoveries that have greatly accelerated the use of highly effective methods and tools in medicine, surgery and other fields of biomedical Sciences, including pathophysiology as a basic integration of biomedical science as a fundamental theoretical basis of veterinary medicine.

In the future the role and place of animals pathophysiology education and science will grow. The development of this discipline is in three main sections: General pathophysiology, special pathology (organs and systems) and clinical pathophysiology. In addition, intensive tempo gain molecular and cellular pathophysiology.

General pathophysiology of carefully reviewing its main provisions in connection with increasing rates of development of related Sciences and the growing volume of diverse information material about the mechanisms of development of different forms of pathology, which develop together with medicine, biology and veterinary medicine. It is common pathophysiology systematizes and generalizes the results obtained. This approach allows a deeper understanding of the mechanisms of various pathological processes and their biological importance.

The article determines the role of pathophysiology as a science and academic discipline at the present stage of development of biological and veterinary Sciences as a basic integration of biomedical science and fundamental theoretical foundations of veterinary medicine. Examines the opportunities for scientists and educators to improve the methodology and methods in-depth study of pathophysiological phenomena through the application of new approaches. The role of the new discipline of "Clinical pathophysiology" as an important propaedeutic science in the system of training of bachelors and masters in the transition from basic preclinical disciplines.

Due to the success of scientific and technological progress there are new methodological possibilities in the study of processes at the molecular level, which I. P. Pavlov called "the bottom of life." However, knowing only the molecular and cellular processes inadequate for understanding system implementation mechanisms of body functions in health and their abnormalities in pathology. The task of pathophysiology is to establish not only the mechanisms and patterns of molecular and intracellular violations, and the resulting disorders of the functions of the whole organism. Now in Biomedicine science formed a number of new directions. These include cellular technologies, genomics, bioinformatics and proteome that cover a variety of processes in nature and, in particular, in the organism in norm and pathology. Research findings in these areas must be assimilated patofiziologiju and used it for its further development.

Pathophysiology due to new methodological possibilities and new biomedical technologies has moved beyond the traditional laboratory experiment to study the development and elimination of pathological processes in organs and systems. It has become possible to study the disturbances of the activity of organs and systems not only on computer models, cultures, tissues and organs, but also on a sick animal, using methods angaston, biopsy.

Thus, the tasks of pathophysiology as a science and as an academic discipline is critically examining pathological phenomena in an integral body with the purpose of obtaining for the formation of basic scientific knowledge necessary for successful diagnosis, prevention of diseases and treatment of sick animals. To this end, despite all the difficulties and miseries of scholars and teachers in the field of veterinary medicine have to implement the most modern research methods, to improve the system of training of specialists of veterinary medicine, focusing on the methodological principles of studying fundamental disciplines, and in particular, the pathophysiology of animals.

Key word: pathophysiology, clinical pathophysiology, alternative research methods, syndromic principle diagnosis, diagnostic algorithm, the principle of optimal diagnostic feasibility.