USEFULITY OF THE SCIENCE OF PHYSIOLOGY IN MODERN DIAGNOSTICS

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https://doi.org/10.5281/zenodo.11412828

Abstract. *Diagnostic accuracy surpasses all other elements of clinical decision making. Knowledge of physiology provides a periscope for detecting abnormalities under the skin responsible for clinical manifestations on the surface. Professionals make decisions based on intuition rather than conscious analytical thinking. Intuition is the result of many years of book learning, analytical thinking, and clinical practice. When making routine decisions, doctors usually refer to physiological principles. Making an accurate diagnosis depends on the physiological knowledge and impressions of the doctor; there are several different methods of physiological research, the main ones are highlighted in this article.*

Keywords: *diagnostics, Clinical rationale, Physical examination, Hyperventilation syndrome, Basic examination methods, Palpation, Percussion, Auscultation. Palpation: the doctor examines the patient using the palpation method, in which superficial tissues and deep organs and skin temperature are regularly palpated.*

The three most important things in clinical medicine are diagnosis, diagnosis, and diagnosis. As in a logical syllogism, if the main premise is false, the elegance of the subsequent conclusions will be compromised. For the diagnosis to be accurate, the doctor must have sufficient physiological knowledge. Knowledge in the field of physiology is mainly based on knowledge gained through experiments. Based on the knowledge gained through experiments, several methods of physiological examination have been developed; we will point out the most important of them. Transplantation is a method of transplanting an organ to another location. Denervation - to find out that the activity of an organ depends on the influence of the nervous system, the nerve fibers going to this organ are cut. Ligature method - ligation of various blood vessels to disconnect organs from the vascular system. Vascular anastomosis method - the central part of one vessel is connected to the peripheral part of another vessel. The fistula method is used to study the activity of certain organs that are located inside the body and therefore cannot be directly controlled. Catheterization method - during a series of studies carried out in the heart, blood vessels, glandular tracts, thin catheter tubes are inserted into them, these catheters are connected to various special devices to record the activity of organs, or certain substances are passed through them. These catheters are used in acute and chronic experiments. Acute experiments are carried out with anesthetizing animals or immobilizing them in other ways, studying the functioning of organs.

Physiological elementary research methods:

Palpation: This is a method of examining a patient by palpation, in which the superficial tissues and deep organs, the temperature and humidity of the skin, the size, location, surface of some internal organs and consistency, pulsation characteristics, as well as the patient's reaction to palpation are regularly palpated. The area of the body being examined is tapped with a finger or a hammer. Based on the sound produced, a conclusion is made about the condition of the examined

member. Auscultation: a method of checking their activity and condition by listening to sounds arising in the internal organs. For example, hear the heartbeat and determine its health or illness. During auscultation, the doctor listens to the corresponding part of the body (direct auscultation) or uses special instruments (stethoscope, stethoscope or stethoscope-endoscope) to listen (indirect auscultation). Auscultation has diagnostic value in medical practice in determining diseases of the heart, lungs, blood vessels, and blood pressure.

Conclusion: A high-level diagnostician looks at the results that other doctors see, but thinks about the reasons that other doctors do not realize. The solution to clinical mysteries depends on the imagination of the doctor, his ability to imagine internal biological phenomena that explain surprising clinical manifestations.

Conclusion:

The science of physiology continues to be an invaluable foundation for advancements in medical diagnostics and clinical practice. By providing a deep understanding of the normal structure and function of the body's systems, physiological principles enable clinicians to more accurately identify deviations from homeostasis that may signify disease. Modern diagnostic techniques like medical imaging, genetic testing, and real-time monitoring rely heavily on physiological concepts to interpret findings and guide clinical decision-making. Furthermore, as our knowledge of human physiology expands through continued research, new opportunities arise to develop innovative diagnostic tools that can detect pathological processes at earlier, more treatable stages. Overall, the enduring relevance of physiology underscores its critical role in translating scientific discoveries into practical applications that improve patient care and health outcomes. The strong foundation in physiology remains indispensable for the advancement of diagnostic medicine.

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