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Cancer metabolism and Warburg effect as anabolic processes outcome of oncogenes operation

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Background: Mutual depending on one another intracellular balance catabolic and anabolic processes with extracellular balance catabolic and anabolic processes promote maintenance stability Internal Medium (concentrations of substances in blood and in neurolymph) and Internal Energy (temperature 36,5°C – 37,2°C, by which all enzymes operate, etc.) of an organism and cells in norm. Unlike norm, the excessive shift into anabolic endoergonic processes of intracellular balance catabolic and anabolic processes suppress catabolic exoergonic processes which is characteristic cancer tissue metabolism in comparison with the excessive shift into catabolic processes characteristic inflammatory processes.

The results: It was offered the common concept of Warburg effect mechanism that was enabled to explain the mechanisms of cancer manifestations as well as to eliminate the doubts and/or queries which were expressed by the authors of the some experiments. Highlight: As outcome of oncogenes operation the huge anabolic processes cause huge consumption of energy and Acetyl-CoA and suppress the catabolic processes in cancer tissue. Lactic acids accumulate energy for anabolic processes in condition glycolisis metabolism in cancer tissue.

The significance: This concept gives possibility to explain Warburg effect mechanism and distinction between mechanisms Pasteur effect and Warburg effect. Besides it gives possibility to explain mechanisms of unhealed cancer wound, irrepressible cancer growth, metastasis etc. Also the violations mechanisms of maintenance stability Internal Medium and Internal Energy of an organism by cancer disease development was elucidated in comparison with the violations mechanisms of maintenance stability Internal Medium and Internal Energy of an organism by inflammatory processes. All of it gave possibility to eliminate a lot of doubts and/or queries which were expressed by the authors of the some experiments.

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