AGING AS A BIOLOGICAL PROCESS

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Introduction. For man, aging always had personal significance. However, even today biology of the aging process is not sufficiently studied.

Therefore, this question is relevant and very important.

The problem of aging is associated with many factors that can include human health, indicators of civilization, and so on.

Aim. Old age is the final period of age development and therefore its study is the goal of many biologists, medics and physiologists.

Materials and methods. It was analyzed literature data where this concept described.

Results and discussion. Distinguish natural aging, premature and slowed down, that is typical for the long-livers. Age-related changes in the body that lead to aging are called homeorhesis.

In general, there are more than a hundred theories related to the causes and aging mechanisms. Accordingly, you can divide them into two large groups. The first group includes the notion that aging is a genetically programmed process. According to the ideas of the second group – aging is the result of random processes that destroy the body. The most famous theory of aging is the idea of the genetic basis of aging. By scientists, genetics it was discovered that in the process of aging, partly the DNA molecule decreases. In addition, there are researchers who argue that aging is the result of disorders in the genome itself. Proponents of metabolic theories argue that aging is the result of tissues and a decrease in the speed of metabolic processes in the body.

Among the factors that reduce the rate of aging of the human body are those that can be attributed to a healthy lifestyle, rational nutrition, avoidance of various harmful habits, the ability to relieve stress, social activity, hygiene, and so on. Valeologists claim that it is necessary to prepare their life for the mature age in advance.

Old age must be perceived as a complete period in life. Therefore, people will understand that this part of life is also very interesting as the previous periods.

Conclusions. Aging requires human courage, a sense of humor and positive emotions. This is very important, because one of the mechanisms of aging is the "withdrawal" of the body from the active reaction to stimuli: the old organism reduces the adaptive reaction to external influences.

THE ROLE OF CONNECTIVE TISSUE DYSPLASIA IN THE DEVELOPMENT OF VARICOSE VEINS

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Introduction. Connective tissue dysplasia is a genetically determined condition characterized by defects in fibrous structures and the basic substance of connective tissue, leading to a violation of the formation of organs and systems. Morphologically, these changes are characterized by improper formation of collagen chains, which do not withstand the necessary mechanical loads; changes are also being made to elastic fibrils, and glycoproteins, and proteoglycans with fibroblasts. From the side of the lesions of the cardiovascular system, there are often manifestations of the vascular syndrome - varicose veins of the upper and lower extremities, which is characterized by a change in the structure of collagen.

Aim. Establish the feasibility of determining the concentration of matrix metalloproteinases and the magnesium ion level as an indicator of connective tissue dysplasia in patients with varicose veins.

Materials and methods. Analysis of literary sources.

Results and discussion. According to the literature, the role of magnesium deficiency in the formation of undifferentiated connective tissue dysplasia is described in sufficient detail. By results of