MODERN ASPECTS OF REVITALIZATION AT THE PROFILACTION OF THE PREMATURE AGING OF ORGANIZM

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Introduction. Extension of life of people is one of the most actual problems, which mankind facing. Aging of the main part of population of Ukraine is going on by pathologist, precocious variant.

Aim – to determine modern aspects of prevention of the premature aging of the organism, using anti-aging therapy, with applying stem cells.

Materials and methods. Stem cells are the primary basis of the organism, and all the 240 types of specialized cells and tissues of the body are formed of them. Stem cells energetically play the most important role – replacing (restoring) diseased and old cells of an aging organism, rejuvenating it, and no drugs are able to do it.

Results of the research. It's established, that one of the most effective method of anti-aging therapy is using stem cells and placenta extract for rejuvenate the body. After injection of stem cells, they move to the damaged organs and provide powerful renovation of biological structures, normalize metabolic processes, which lead to the updating of the body's immune status, activating antitumor factors. Thus, it was found that the injection of cell suspension to the body leads to an increase in the number leukocytes in cancer patient's organism, with chemoradiation depression of hematopoiesis from 2 to 5 thousand in two weeks. Revitalization (rebounding) is the latest method of rejuvenation. Using the latest advances in the molecular and cellular biology, we can update and rejuvenate cellular composition of the aging organs without altering and damaging them. Revitalization's aim is slowing down aging and restoring of the whole organism to its' last, biologically young and active functional level. We can observe the increase of sexual function, libido and potency. After Injection of stem cells and placenta extract into the body, double effect can be observed. Injected cells begin work intensively, regenerating and "revitalizing" aging organs and tissues. Besides they also launch a mechanism, which helps to rejuvenate and activate the stem cells already existed in the body.

Conclusions. Using of stem cell based biological products, which contain low molecular weight proteins, hormones and human growth factor is an effective method of the multifunctional rejuvenation of the body and prevention of the premature aging. They normalize and stimulate metabolism, increase the activity of the immune and neuroendocrine systems, have expressed antitumor effect and therapeutic effect at various pathologies.

PROSPECTS FOR THE CREATION OF FETOPLACENTAL DRAGS

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Introduction. In modern clinical medicine, fetoplacental drugs (FPD) have been used since the first quarter of the XX century. This is a promising group of drugs, which include embryonic tissues of the tissue of the fetoplacental complex. The fetoplacental complex includes a set of tissues of the fetus, placenta and amniotic membranes. The healing properties of the placenta were known in ancient Egypt, but progress in this field of pharmacy has become possible only in recent years.

Aim. Identification of prospects for the creation of an FPD for use in clinical practice.

Materials and methods. The biochemical composition of the placenta and peculiarities of the use of FPD are analyzed. In the placenta, more than 4.000 different proteins are identified, including growth factors, cytochromes, fibrinolysis factors, enzymes of energy metabolism, prostaglandins, enkephalins, neuropeptides, and trace elements.

Results and discussion. FPDs are divided into two groups: preparations containing extracts from the fetoplacental complex and preparations of stem cells derived from this complex. The first group FPD is widely used in modern medicine and cosmetology. They are the product of placental processing, their main active substances are placental proteins, amino acids, glycosaminoglycans, hormones. The drugs in this group exhibit adaptogenic, reparative, anti-inflammatory, antioxidant analgesic and anti-stress properties of FPD of the second group are administered to patients immediately after receiving cells from the embryo and fetoplacental complex or after storing them in the cryobank. Unlike other tissues, embryonic, fetal, and placental tissues have an inherent immune tolerance, that is, FPDs do not cause rejection reactions. FPD is used in the treatment of Alzheimer's, Parkinson's, Huntington's disease, atherosclerosis, myocardial infarction, hepatitis, leukemia, rheumatoid arthritis retinal degeneration, consequences of stroke, diabetes, HIV and other diseases. The development of FPD-based therapy are limiting by the moratorium on stem cell use, that has been in force in Ukraine since 2004.