Discussion results: Instrumental food-procuring movements are accompanied by a validated HR decrease occurring at the moment of food ball capturing with further restoration to the original level in some seconds. The findings give evidence of direct correlation between training level and the HR decrease.

Conclusion: Combined response of the autonomic nervous and motion control systems suggests that reactions revealed are caused by a CNS joint center. Greater levels of HR decrease evolved in the process of skill improvement may contribute to more successful capturing of food balls.

Keywords: heart rate, rat, food-procuring movements

34. GENETIC CONTROL OF HYPERTENSION
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Introduction: Hypertension is a multifactorial, complex and polygenic human disease that causes significant morbidity and mortality worldwide. The World Health Organization suggests that the number of people affected by hypertension will rise to 1.5 billion in 2020, or 29% of the total population by 2025. In adults there is a continuous, incremental risk of cardiovascular disease, stroke and renal disease associated with high blood pressure.Identifying risk factors for this disease is one of the main directions of research initiated by World and European scientific community. Among these, genetic factors have a decisive impact, role of genetic factors ranging from 31% to 68%.Monogenic and polygenic forms of hypertension have been described. Rare monogenic blood pressure syndromes are characterized by a major gene defect, affecting a single pathway ordinarily involving renal electrolyte balance. Thus, there is a pressing need for a greater understanding of the pathophysiological and genetic underpinnings of blood pressure regulation and dysregulation.

Purpose and Objectives: characterization of the genetic factors involved in the production of high blood pressure; classification of the etiopathogenetic factors that predispose to the occurrence of hypertension; characterization of genes involved in the control of hypertension; study the distribution of the polymorphisms II, DD, ID of the ACE gene and GG, TT, GT of the NOS gene in people affected by essential hypertension and non-affected from the population of Republic of Moldova.

Materials and methods: The study has included 30 persons, 15 affected by essential hypertension and 15 non-affected. Methods which have been used are DNA isolation, PCR and electrophoresis of DNA fragments.

Results: The results of the analysis of the ACE genotype frequency in the study group showed an increased frequency of 55% for ID genotype in compared to 25% for II and 20% for DD genotypes. The results of the analysis of the NOS genotype frequency in the study group showed an increased frequency of 72% for GT genotype in healthy individuals, the homozygous genotypes are seen with greater frequency in affected individuals.

Conclusion: There is an association between ACE and NOS gene polymorphisms with hypertension prevalence.DD genotype of ACE gene and TT genotype of NOS gene may be associated with increased risk of hypertension.

Keywords: genetic control, hypertension, ACE, NOS

35. SUICIDE CELLS IN NORMAL AND PATHOLOGICAL
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Introduction: The cells of a multicellular organism are members of a highly organized community. The number of cells in this community is highly regulated — not simply by controlling the rate of cell division, but also by controlling the rate of cell death. If cells are no longer needed, they commit suicide by

activating an intracellular death program. This process is called programmed cell death, or apoptosis (from a Greek word meaning "falling off," as leaves from a tree). Apoptosis is a vital component of various processes including normal cell turnover, proper development and functioning of the immune system, hormone-dependent atrophy, embryonic development and chemical-induced cell death.

The purpose of this review is to provide a general overview of current knowledge on the process of apoptosis, the role of apoptosis in health and disease, as well as a discussion of potential alternative forms of apoptosis.

The mechanisms of apoptosis are highly complex, involving an energy-dependent cascade of molecular events. Recent studies indicate that there are two main apoptotic pathways: the extrinsic and the intrinsic. There is an additional pathway, that involves T-cell mediated cytotoxicity and perforin-granzyme-dependent killing of the cell. The perforin/granzyme pathway can induce apoptosis via either granzyme B or granzyme A. The extrinsic, intrinsic, and granzyme B pathways converge to the same final, or execution pathway. This pathway is initiated by the cleavage of caspase-3 and results in DNA fragmentation, degradation of cytoskeletal and nuclear proteins, cross-linking of proteins, formation of apoptotic bodies, expression of ligands for phagocytic cell receptors and finally uptake by phagocytic cells. Abnormalities in cell death regulation can be a significant component of diseases such as cancer, autoimmune lymphoproliferative syndrome, AIDS, ischemia, and neurodegenerative diseases such as Parkinson's disease, Alzheimer's disease, Huntington's disease, and Amyotrophic Lateral Sclerosis. Some conditions feature insufficient apoptosis whereas others feature excessive apoptosis.

Conclusions: Apoptosis is a highly regulated energy-dependent process. The importance of apoptosis consists in understanding its mechanism, because it is a vital component of health maintenance and disease outbreak. The widespread involvement of apoptosis in the pathophysiology of disease define studying the treatment strategies of that disease. Understanding the mechanisms of apoptosis at the molecular level provides deeper insight into various disease processes and may thus influence therapeutic strategy.

Keywords: Apoptosis, programmed cell death

36. THE ROLE OF THE 3 GENERATIONS OF ANTIHISTAMINES IN TREATING ALLERGIES
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Introduction: Recent statistical data show a constantly increasing incidence of allergic disorders emphasizing the role of the development of new anti-allergic medication in the treatment of different allergies. H1-antihistamines (H1A) represent the class of anti-allergics most used by physicians in handling the immediate-type of hypersensitivity reactions. Currently, there are 3 generations of H1-antihistamines, classified according to their selectivity and sedative properties.

Purpose and Objectives: The study was designed to find the prevalence of H1-antihistamines among other administered anti-allergic drugs and to determine the particularities of their use.

Materials and Methods: We collected data from 53 medical records inscribed in the department of Allergology from Republican Clinical Hospital of Republic of Moldova, in November – December, 2013.There were patients diagnosed with various immediate-type allergic reactions, such as : Quincke's edema, allergic dermatitis, acute and chronic urticaria, drug allergy and Stevens-Johnson syndrome. The information about the antihistamine drugs prescribed, length and route of administration in stationary versus further ambulatory periods was analyzed.

Results: We found that 28 patients out of 53 (52,83%) were prescribed antihistamines stationary and 20 out of 53(37,73%) – ambulatory. The drugs used stationary were: chloropyramine and promethazine – both first (classical) generation H1A, administered in all patients(100%), intravenous, for an average of 7-8 days. The drugs used ambulatory were as following : clemastine