thyroid gland in the group of indigenous and non-indigenous in the winter period of the year, in comparison with the summer period of the year, are regarded as compensatory adaptive reactions aimed at maintaining the temperature homeostasis. The obtained results confirm the assumption that in the winter period the inhabitants of the northern regions of the country are in a state of increased stress caused by adaptation of the organism to the cold. At the same time, according to our data, in the winter of the year the group of indigenous people changed the part of the follicular apparatus of the thyroid to a state of increased secretory activity to a lesser extent than the non-indigenous group, which can be regarded as a functional glandular strain in non-indigenous men, necessary to maintain the optimal level of life-sustaining activity in this period of the year.

Conclusions. In the extreme climatic conditions of the Far North, it is necessary to monitor the functional state of the thyroid gland in different seasons of the year, both in the adult population and in children of older age groups for early detection and secondary prevention of thyroid pathology.

CYTOARCHITECTONICS OF THE LARYNX IMMUNE TISSUE IN LOW TEMPERATURES

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Key words: *cells of lymphoid tissue, larynx, hypothermia, Yakutia*

Aim. Studying diffuse lymphoid tissue of the laryngeal mucosa in hypothermia conditions.

Material and Methods. For research we used pieces of the larynx of the lining of the vestibule, left and right ventricles and the infraglotic area recovered from the bodies of the deceased men in the territory of Yakutia. The material was taken in the summer and winter seasons on the basis of the State Bureau of Forensic Medical Examination of Sakha (Yakutia) Republic. The preparation of histological preparations was carried out according to the generally accepted method.

Results and Discussion. During research of micropreparations of a group of people who died from general hypothermia of the organism in the climatic conditions of Yakutia, we found that when affected by low temperatures, the multilayered flat epithelium swells, a large amount of mucus is deposited in epitheliocytes, the mucosa itself is swelling, the glands and ducts widen; in the lumens there is a conglomeration of mucus. There significant changes in the cellular composition of diffuse lymphoid tissue in the walls of the larynx in males under the influence of low temperatures when compared with the data of the summer period of the year. Thus, it was established that the diffuse lymphoid tissue of the laryngeal mucosa in persons who died from hypothermia is depleted, which is manifested by a decrease in the number of immunocompetent cells in comparison with the indices of a group of people who died in the summer, which is characterized by a decrease in the number of T lymphocytes, B lymphocytes, plasma cells, and also a significant increase in the number of destructively altered cells and macrophages. In addition, under the influence of hypothermia compared with the summer period of the year, there is a significant suppression of lymphocytopoietic processes, which is manifested in a decrease in content of lymphoblastic cells and cells in the state of mitosis.

Conclusions. Peripheral immune structures have a high sensitivity to the effect of low natural temperatures, which manifests itself in the form of pathomorphological changes in diffuse lymphoid tissue in the mucous membrane of the larynx, as well as suppression of cellular and humoral immunity.

ANTHROPOMETRY AS A CHARACTERISTIC OF A BIOLOGICAL AGE OF THE CHILD

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Key words: *anthropometry, biological age, development, children*

Background. The biological age is closely connected with a number of morphological and functional indicators. Dynamics of physical development is an indicator of biological age of the child.

Aim. The research objective is to estimate a biological maturity of children using anthropometrical measures.

Material and Methods. This research is based on studying and analysis of 146 organized children from 2 to 7, 5 years of Samara.

Results and Discussion. During research we observed disharmonious development. At the examined children in 25.8% of cases it has been revealed excess body weight, especially in group of boys. In 42% of observations high growth has been noted where the ratio of boys and girls was identical. The average ratio of the head circumference to the tho-