30%) и железы, выстланные «индифферентным» эпителием.

- 3. Развитие АП, видимо, не связано с нарушением гормонального статуса.
- 4. На фоне АП может развиваться серозная аденокарцинома – гормононезависимая опухоль с высокой степенью инфильтративного роста, неблагоприятным прогнозом.
- 5. Потому морфологическое исследование полиповидных образований развивающихся в менопаузе на фоне атрофии эндометрия является чрезвычайно важным и обязательным.

## ВЫЯВЛЕНИЕ ЦИТОЛОГИЧЕСКИХ АНОМАЛИЙ У ДЕТЕЙ С АЛЛЕРГИЧЕСКИМИ ЗАБОЛЕВАНИЯМИ С ПОМОЩЬЮ МИКРОЯДЕРНОГО ТЕСТА

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Now one third of the population of the world is suffering from allergic diseases, according to facts of World Health Organization or WHO. About 15-25% of Russian population are suffering from urticaria. More than 50% of patients with urticaria at the same time indicate the development of angioneurotic edemas, which are the most dangerous for children at the age of 1-3 years old. About 20% of Russian population are suffering from atopic dermatitis. More often than not the children at the age of 6 months - 3 years old are ill of atopic dermatitis. The development of allergic diseases is characterized with free radical mechanism of oxidation, which damages the genetic material of different cells. The research objective is to investigate the stability of genome of children with allergic diseases, such as urticaria and atopic dermatitis, and also to research the hormones, which are regulating the activity of these allergic diseases.

The materials and methods. The investigation was full filled on the base of «Children's municipal hospital  $N_2$ ». 60 children at the age of 1-3 years old with different allergic diseases have participated in this investigation. Two clinical groups were formed according to allergic diseases: 1 group -29 children with atopic dermatitis; 2 group -21 children with urticaria.

The assessment of stability of genome of children, which are suffering from allergic diseases, was full filled with the help of micronucleus test and detection of blood level of total 8-OHdG. The content of total IgE and hormones (cortisol and insulin) in blood was defined with the help of immune-enzyme analysis. We have analyzed 1000 cells from each child and have found out cytogenetic anomalies, such as: micronucleus, protrusions, multinuclear cells, karyolysis, karyorrhexis and the appearance of vacuole in the nucleus. The received results were compared with indices of the control group (n=10 children).

The children, which are suffering from urticaria, had greater frequency of occurrence of anomalies cells (82%) with a big quantity of cytological damages, such as micronucleus and protrusions, than the children with atopic dermatitis (59%). We suppose that such differences are evidence of severity of clinical course of allergic process.

For example, we have detected micronucleus of 34,4% of children with atopic dermatitis (2,3%), protrusions of 24% of children with atopic dermatitis (1,4%), karyolysis of 38% of children with atopic dermatitis (6%), karyorrhexis of 20% of children with atopic dermatitis (1%). We have found out micronucleus of 41% of children with urticaria (3%), protrusions of 29% of chil-

dren with urticaria (1,5‰), karyolysis of 35% of children with urticaria (4,3‰).

It is interesting to know that, such raw damages of the genetic material, as karyolysis and karyorrhexis, were found out in large quantities in the cells of children with atopic dermatitis. We suppose that such differences are connected with very long disease course of atopic allergic processes. More than that, all children, which are suffering from allergic diseases, have low level of total 8-OHdG (12,5 ng/m). We suppose that this fact is evidence of good reparation and regeneration of child's organism. It is interesting fact that, all children with urticaria and atopic dermatitis had serious disturbance of hormonal background. For example, the level of cortisol of the children with urticaria is lower in 1,5 times; the level of cortisol of the children with atopic dermatitis is higher in 1,5 times, than the results of control group (212 nanomoles per liter). The level of insulin of the children with atopic dermatitis is higher in 1,5 times; the level of insulin of the children with urticaria is higher in 2 times, than the results of control group (6 micro units of activity per milliliter). We suppose that such serious disturbances of hormonal background are connected with very long disease course of allergic process. More than that, fast developing of the clinical features of urticaria can lead to the emission of cortisol and the decreasing of the level of cortisol in blood plasma of children. The decreasing of quantity of glucocorticoides in blood stimulates the secretion of adrenocorticotropic hormone, which influenced on the increasing of the level of insulin in blood of children. It is very important, because this mechanism can help child's organism to keep the balance of carbohydrate metabolism and to decrease the development of the allergic process. The high level of cortisol in blood of children with atopic dermatitis is connected with long-lasting allergic process. The increased level of cortisol and insulin is one of the main mechanisms of stress-regulation of child's organism.

The level of total Ig E of the children with urticaria is higher in 3 times; the level of total Ig E of the children with atopic dermatitis is higher in 4 times, than the results of the control group (51 international units per milliliter). All children with atopic diseases have a high level of total Ig E, for example, children with atopic dermatitis. It is a well known fact, that all atopic diseases have Ig E – mediated mechanism.

The cytological and biochemical findings indicate of negative influence of allergic diseases on the stability of genome of children. So it can be the base of the formation of more serious forms of diseases, such as chronic, autoimmune, genetic and oncological diseases of children.

## ГИСТОЛОГИЧЕСКОЕ ИССЛЕДОВАНИЕ УЧАСТКА КОЖИ ПОСЛЕ ЛОКАЛЬНОГО ТЕРМОКОАГУЛЯЦИОННОГО ПОВРЕЖДЕНИЯ И ПРИМЕНЕНИЕ ДСИП В КАЧЕСТВЕ АДАПТОГЕНА

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Ожог кожи характеризуется не только местным — локальным повреждением, но и развитием полиорганной недостаточности, причём отмечается большой процент осложнений, длительные сроки лечения и высокий уровень инвалидизации. Поиск и разработка новых перспективных протекторов, способных ослаблять токсическое действие окислительного стресса и предотвращать негативные изменения в организме после ожога, не вызывает никаких сомнений и является актуальной задачей. Состояние ожоговой раны