THE STATE OF THE MUCOSAL EPITHELIUM OF THE ORAL CAVITY IN CHRONIC VIREMIA IN PREGNANT AND LACTATING WOMEN

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Abstract.

Pregnancy is an important period for a woman's dental health and is characterized by changes in the level and structure of diseases of the oral mucosa. During pregnancy, the pathogenicity of the oral microflora increases due to increased proliferation of opportunistic microorganisms. A number of scientists hold the opinion about the connection of dental status with hormonal changes in the body of pregnant women [2,12,15]. By the end of the first trimester, a complex hormone exchange is established between the mother and fetus. A number of scientists have found that an increase in the level of estrogens and progesterone of the gum mucosa affects vascular permeability and exudation and leads to an increase in the formation of prostaglandin E2 of the mucous membrane, thereby causing folic acid salts deficiency, reduces the ability to keratinize and cellular regeneration, reduces the barrier function of the epithelium.

Key words: Pregnancy, mucosal epithelium, oral mucosa, lactating women, herpes simplex virus, buccal epithelium.

During pregnancy, the mother and fetus are closely interconnected by the placenta, which causes the restructuring of immunocompetent organs, whose functions are performed mainly by two types of cells [6,7,9,13,14]. According to Zhirov A.I., Zhirova V.G., 2021[5] pregnancy belongs to secondary immunodeficiency states and is characterized by quantitative and functional changes in the T- and B-system of immunity and non-specific protection factors [18]. A decrease in the number of T-lymphocytes in early pregnancy to a minimum is preceded by a peak in the content of

chorionic gonadotropin, which has an immunosuppressive effect [Zubovskaya E.T. et al., 2018] [8]. With gestosis, developing due to the depletion of the neuroendocrine system, immune shifts in the mother and fetus, the failure of the utero-placental barrier, genetic conflict, complicating the course of pregnancy, there is also a natural decrease in the number of active T- and B-lymphocytes with an increase in the severity of late toxicosis. The level of functional activity of buccal epithelial cells is determined by the degree of their maturity, and the processes of differentiation, proliferation, and functional parameters of mature cells are regulated by factors of local and central genesis. Therefore, the state of buccal epithelial cells objectively reflects the intensity of destabilizing mechanisms, and morphologically and electrokinetically recorded changes in epithelial differentiation should be taken into account as express tests for assessing the general state of health [Alimova D.M., Bekzhanova O.E., 2020; Vedeshina E. G., Domenyuk D. A., 2015] [1,3].

The herpes simplex virus (HSV) occupies one of the leading places among viral infections, which is determined by its ubiquitous spread, 90% infection of the human population, lifelong persistence of HSV in the body of infected people, significant polymorphism of clinical manifestations of herpes infection, torpidity to existing treatment methods [11,16,17].

According to WHO, diseases transmitted by the herpes virus occupy the 2nd place (15.8%) after influenza (35.8%) as a cause of death from viral diseases. Herpetic lesions of the oral mucosa have frequent and painful exacerbations in the form of chronic recurrent herpetic stomatitis [Aslanova M., Ali R., Zito P. M., 2020; Ballyram R., Wood N. H., Khammissa R. G et al.,2016; de Suremain N., Armengaud J. B., Arnaud C. et al. 2014; Nozawa C., Hattori L. Y. Galhardi L. C. F. et. al.,2014; Poole C. L., Kimberlin D. W.,2018] [19,20,21].

HSV virus infection in women during pregnancy can cause fetal death, stillbirth, and premature birth. In this regard, the buccal epithelium, which is part of the mucosal system, allows it to be used to study the physiology and reactivity of the mucous membranes, including as an indicator of local and general homeostasis disorders. Like other epithelial cells, buccal cells are able to produce a number of cytokines and chemokines (IL-6, IL-8, granulocyte-macrophage colony stimulating factor (GM-CSF), IL-18 and gamma interferon), prostaglandins (PG) - E2 and leukotrienes (LT) — B4, express antigen-presenting (HLA-1, HLA-2), co-adhesive (CD54) and costimulating (CD40) molecules [Ballyram R., Wood N. H., Khammissa R. G et al., 2016; Egan K. P., S. Wu, et al., 2013] [20,22].

Recently, special attention has been paid to non-drug methods of treating diseases of the oral mucosa, which have non-invasiveness, low toxicity and do not have a selective effect on the pathological focus. [Dzagoeva D. K., 2014; Kamilov, H. P., 2015] [4,10].

Despite some progress in the study of the etiology and pathogenesis of herpetic infection in the oral cavity, studies of the state of local and general immunological status and the development of preventive measures in pregnant women with herpetic stomatitis are relevant, because information on this problem is insufficiently studied.

The purpose of the study: to study the features of the immunological status in pregnant and lactating women with chronic recurrent herpetic stomatitis of the oral mucosa.

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