process was time consuming (4,5 months) and required a combination of different techniques.

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EVIDENCE BASED MEDICINE AS AN INSTRUMENT FOR THE STUDY OF INTERNAL MEDICINE

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The present time the proper medical practice, healthcare organizations and research activity requires the ability to critically and competently evaluate the results of the latest scientific and clinical research. It is necessary to stimulate the clinical and scientific thinking of the students, the use of interdisciplinary approaches for the acquisition of knowledge and skills. Currently, evidence-based medicine is a mandatory educational discipline for the third year students in accordance with Kazakhstan educational standards. Semey State Medical University actively implements of the method of integration of disciplines «Internal Medicine» and «Evidence-based medicine» to improve the skills of students in determining the optimal methods of diagnosis, treatment and prevention of disease in a particular patient in a concrete situation. The forms of such integration could be different. They include

1. Selection of optimal methods of diagnosis, treatment, prevention using case based learning method (CBL). In the clinical department the students under the guidance of teacher perform examination of the patient, an analysis of the examination results, define the clinical problem and discuss the reasonable tactic for examination and treatment. Then they confirm their opinion using the databases of evidence based medicine. For the searching of the necessary information the students use method (patient/population, intervention, comparison, outcome), define the key words to search the proper scientific based information in the different data bases including PubMed, MEDLINE, EBSCO, International Clinical guidance. Our students have very good possibility to use The Cochrane library. Then the students demonstrate the found information, discuss it and analyze the results of work.

2. Using the knowledge of evidence-based medicine in the independent student work for the description of clinical cases, presentations and essay.

3. Demonstration of knowledge in the clinical conferences and clinical symposia for discussion the most difficult and controversial clinical situations. In this case, the assessment of evidence-based medicine knowledge and skills is held by the expert in the field of evidence-based medicine

Analysis of the feedback from the students showed that almost 100% of them said that integration of evidence-based medicine and internal medicine is helpful to improve their knowledge and understanding in the field of study, research skills, critical and clinical thinking, 80% said that such learning improves their communication skills and teamwork skills. Only 10% of students reported difficulty in finding of relevant information due to lack of good knowledge of English.

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THE ROLE OF IMMUNE CELLS IN CARCINOGENESIS OF HPV ASSOCIATED ETIOLOGY

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There are bon the basis of their own data presented a comparative analysis of the existing model of carcinogenesis and the author's model in the work, as the development of Correa (1998). Author's concept involves ethiotropics factors for all effects of neoplastics of any nature, causing activation of proliferative activity and apoptosis leading to the depletion of the Cambium tissue. The authors acknowledge neoplastical processes local changes that are not related to changes in the genome of cells and induced when control of effector immunocytes processes of cell proliferation and apoptosis leading to generalized changes in the body, and secondary immune deficiency. Author's model of carcinogenesis based on data from the literature and own data involved in the formation of tumor blood stem cells migrated to the zone of damage may not initiate signalling molecules, and other effects, including the bioelectrical signals. The authors suggest that the local main damage cells even before the first clinical and morphological characteristics of leading cancer in humans, cause the start of generalized process violations in the regulation of differentiation and specialization of blood stem cells, circulating in the body, followed by the development of secondary immunodeficiency. Migration of blood stem cells, leaving them in the area damaged by the physiological tissue and inability to query a differentiation in the changed circumstances of the situation also involved a change of contact interactions. Reparative regeneration occurs with an attempt

to close the defect without specialized tissue barrier function.

Relevance. According to Zur Hausen H. (2008–2012) as well as the majority of supporters of the virus theory of cancer, human papillomavirus (HPV) is now recognized as the primary etiologic agent of carcinogenesis. Narisawa-Saito M., Kiyono T. Et al. (2007–2012) indicate a high mortality from HPV infection, and believe that the human papilloma is the main cause of the development of neoplastic or malignant neoplasms of cervix; types 16 and 18, which relate to the high-risk strains of carcinogenesis, are present in more than 90% cervical carcinomas. Many authors suggest that the viral genes HPV E6 and E7 play a major role in epithelial malignancy, as they contribute to the degradation of p53 and disrupt the complex formation of transcription factors, inducing multistage carcinogenesis. The availability of carcinogens, proliferation's dependence on estrogen as well as WHO's recognition of HbP being the cause of carcinogenesis in the stomach, provide grounds to believe that the solution to the mechanisms of carcinogenesis is to be found in the future. At the same time, the analysis of immune cells interaction in the mechanisms of neoplasia and the role of effector immune cells have been insufficiently studied. Spontaneous recovery in 98% of *papilloma virus* cases, Hb pylori carrier state in 95% at 10% developing ulcers and 3% getting cancer, suggests that the key pathogenetic process of oncogenesis is yet to be found.

The aim of our study is to analyze the concepts of oncogenesis and develop the author's model based on an existing neoplasia algorithm provided by Correa (1998).

Materials and methods. Research data from 2000 to 2013 served as materials for the analysis, containing information on carcinogenesis in various human organs. We also used the results of own research of skin with human papillomavirus infection and reparative regeneration after the burn, as well as mucous membranes of the gastrointestinal tract of humans at ulcerative processes, metaplasia and cancer.

Own research results. The analysis of data on the regeneration process in the burn wound area showed that the migration of leukocytes and undifferentiated cells transforming into fibroblasts with protective and synthetic function for the formation of matrix and substrate for epithelial migration contribute to covering the tissue defect. In this case, restoration of an epithelial layer occurs through the restitution of the burn wound edges as well as through the cambium of hair follicles and sweat glands. It was found that burn wound's infection with staphylococcus, despite its high pathogenicity and purulent fusion of tissue, results in reparative regeneration with repairing of epidermis at burns surface, even at significant decrease in patient's immunity. At the same time, the reparative regeneration may be of pronounced hypertrophic character, or accompanied by the formation of poorly rendered normotrophic scar, in case burn wound area is minor. According to our data, in case of HPV infection, first there is an increase in mitotic activity of cambium keratinocytes of the basal and spinous layers, which is consistent with the results of Borgogna C., Lanfredini S., Peretti A., et al. (2014).

The epithelial layer's adaptation to the HPV consists in amplified proliferative activity of epithelial and connective tissues, hyperkeratosis, as well as the formation of papillomas, represented with outgrowths of epidermis and underlying connective tissue. The HPV tropism to cambium cells and triggering of apoptosis in the epidermis as well as the subsequent destruction of cambium cells lead to the impossibility of restitution in the damage zone. In the absence of spontaneous recovery or in case of long-term infection with HPV, there is a formation of necrotic foci and later – cysts with blood infiltration. Cysts are characterized by the fact that the apical surface of skin retains shiny and corneous layers. There are no granular, tubercular and basal layers. The damage of cambial layer that has a regenerative potential leads to a lack of basement membrane, as it is a derivative of the basal cells and those of underlying connective tissue. Therefore, the basal part of the cyst has no clear outlines. In the epidermis adjacent to the lateral surface of the cyst, total apoptosis takes place. Cyst cells are presented with a pool of cells morphologically identical to blood cells in leukemia; they have numerous figures of abnormal divisions, such as holoschisis and polycentric mitosis. A portion of the fibroblast-like cyst cells produces fibers organizing the structure of cyst; from liquid, it acquires a more dense texture, filled with undifferentiated cells and intercellular substance. Regeneration results in closure of the defect without performing barrier and protective functions inherent in epithelial tissue. The lack of cambium, which generates growth factors of lymphocyte differentiation, leads to the impossibility of cells-migrants' specialization. There is a decrease in the amount of CD68 cells in the area of expanding tumor as well as an increase in peripheral blood, CD68 cell migration from the epidermis to the connective tissue adjacent to the damage area, and the loss of epidermis restitution abilities, suggesting an explicit dysregulation in the epidermis regeneration process. Cystic formation, emerging in the zone of epidermis damage filled with cells-migrants with numerous abnormal mitoses and cells with morphological features of fibroblasts, show that carcinogenesis is not associated with dysregulation of gene expression and accumulation of epigenetic abnormalities in cambial keratinocytes.

One of the gastric carcinogenesis hypotheses provided by Chiariotti L., Angrisano T., Keller S., Florio E., Affinito O., Pallante P., Perrino C., Pero R. and Lembo F. (2013) suggests that Hb pylori interaction with gastric epithelial cells triggers epigenetic reprogramming, leading to genomic instability, just as in HPV infections, thereby causing

tumor growth. Study of the dependence of stomach ulcers and malignancy development on strains with high pathogenicity genes, such as cagA and vacA associated with carcinogenesis, showed the same shifts of CD cells number in the local immune homeostasis of mucous membrane in the pyloric, fundal and cardial section of the stomach. In our opinion, this may indicate that the key role in the pathogenesis of gastric ulcers and carcinogenesis is played not by the pathogenic agents, but the state of local immune homeostasis of the gastric mucosa, providing barrier properties of the surface epithelium. Preceding carcinogenesis atrophy of the gastric mucosa indicates the common mechanisms of carcinogenesis in tissues of various organs, and does not endorse the view on the absence of apoptosis in tissue malignancy. In our studies, total apoptosis and atrophy precede carcinogenesis.

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FEATURES OF ATOPIC DERMATITIS IN CHILDREN WITH HERPES INFECTION

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The purpose of the study: to study the frequency of infection in children with atopic dermatitis gerepesvirusnymi infections, a study of the psychological characteristics of status. Material and methods: in the clinic in the department of dermatology TashPMI were examined 35 children with a diagnosis of «atopic dermatitis» in age from 1 to 7 years. The complex studies of sick children were included traditional methods, PCR diagnosis of peripheral blood was determined by dermatological quality of life index, the index of itching. Conclusions: In order to correct pathology therapy were included Cyclopheron, Gipovin. To correct the psychological status was used Adaptol. Results: 19 patients were diagnosed AIT, a 17 – set changes in the psychological status.

Atopic dermatitis – a multifactorial disease in most cases with a hereditary predisposition, having a chronic relapsing course with a certain age evolutive dynamics characterized by itchy eczematous and lichenoid eruptions, as well as abnormalities of cellular immunity in the skin with dysregulation of T-cell immunity strength. In children with AD usually occurs early in life and is characterized by severe severity of clinical manifestations, chronic recurrent nature. The disease often manifests continuous flow (without remission), frequent complications and worsening of the skin process. Known combination with various AD, including infectious diseases [7].

Allergic diseases have a high share in the structure of human disease. Very often, both in children and adults occurs – Atopic dermatitis (AD). In the world of this disease suffer from 3% to 15% of children from 2 to 10% of adults [8, 10]. In the general structure of dermatoses AD is from 5 to 30% [4, 5, 6, 7], infant morbidity structure – from 20 to 66%. Currently, there is a significant increase in the incidence of atopic dermatitis in children, which is manifested in 90% of children in early childhood, treated by a dermatologist. [8] Numerous recent studies have shown that AD identified in childhood still persist in 45–60% of adult patients. These data suggest that AD is one of the very significant health problems.

Psychological disorders in patients with chronic skin diseases recorded in 30-40% of cases and are relevant subjects for the study, analysis and discussion.

Previously, it was suggested that psychosomatic factors play an important role in dermatological diseases. According J.W. Ironside (1994) – the body vulnerable to psychosomatic illnesses, under the influence of several etiological factors, including genetic predisposition and constitutional. There is a view that emotional factors managed CNS include intrapsychic processes such as self-esteem or identity of the body, which in turn is subject to «conversion» due to emotional arousal associated with intrapsychic problems, social factors determining the state of the body [9].

It is known that mental stress is associated with increased levels of opioid neuropeptides and amplifies certain dermatological conditions which are psychosomatic and immunological component type psoriasis, chronic idiopathic urticaria, allergic dermatitis. According to V.V. Nikolaeva, any chronic illness puts one flowing into the specific conditions of life, which include: the need for adherence, diet, perform various medical recommendations stimulated limiting contact with people, sometimes – the difficulty in performing professional activities, maybe even access to disability. The study of all these conditions may contribute to the understanding of some mechanisms of identity formation, which in turn is necessary for solving the problems of prevention in individual psychologically pathological personality development. With AD, early onset, chronic long-term course of the disease with periodic exacerbations, resistance to therapy, the need for dieting, painful subjective experience itching, constant feelings of discomfort experienced by patients when communicating with others, lead to the development of the specific identities of these patients [6].

Currently, AD is also referred to as psychosomatic illnesses, as well as patients with clinical manifestations of the disease and experiencing psychological problems.

Herpes simplex, especially its relapsing form belongs to a group of dermatological diseases, depending on the psychological stress and is a disease in which dominate psychosomatic disorders as a result of the reaction of the person on recurring throughout the process. Many consider this disease,