ТЕОРЕТИЧЕСКАЯ И ЭКСПЕРИМЕНТАЛЬНАЯ МЕДИЦИНА

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HIV INFECTION: A NEW APPROACH TO DIAGNOSIS

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The author of the article declares that the pathogenesis of the connection between HIV infection and cancer is an urgent problem for research at the present time and suggests studying the level of cancer biomarkers in a group of HIV-infected patients who used narcotic drugs in the past and in a healthy control group using immunological methods and statistical analysis methods.

The author clarifies that a selection of blood biomarkers can be useful for diagnosing the cause of infections, as well as for identifying cases when HIV infection turns into neoplasia. Clinical examinations of HIV patients and the results of laboratory studies on specific blood biomarkers provide a lot of information for clinical decision-making. Laboratory diagnostic methods are necessary for monitoring HIV infection and contribute to the proper quality of life of patients diagnosed with HIV.

Key words: patients; HIV; biomarkers; neoplasia; diagnosis

INTRODUCTION

HIV infection is a nowadays pathology that affect persons from all of the world. This disease, is relatively stigmatisant. So, patient must be evaluate and monitorised periodically. Immune system affecting must be evaluate periodically using blood tests and cellular biomarkers evaluation, for prevention or for diagnosis of other developing diseases. Ill human subjects, diagnosed with HIV, are in continue exposure to malignancy, for example but for sure not only [3, 4]. In order to establish the HIV infected patient and individual ill status, inflammatory biomarkers and them laboratory results, play a significant role in developing accompanying diseases [7, 10, 12]. More than, inflammatory biomarkers in patients diagnosed with HIV, are implied in cardiovascular and blood vessels diseases [8, 16]. In this direction, angiogenesis is considered as a dysregulated status in HIV-infected persons [15]. In studies is important to find the permeability level of a blood vessel [2]. A structural analysis from each blood vessel compound is important to find and to show. In vascular endothelial cells developing, research studies could find receptors such as Tie-1 and Tie-2, which are responsible for vascular maturation and angiogenesis [6]. In this direction, best to talk a little bit about angiopoietin-1 via Tie-2 knowing that signaling facilitates endothelial development and also good to mention about Ang-2 that acts as an Ang-1 antagonist by binding to the Tie-2 receptor [14]. From another perspective, we can mention that HER family members also interact with non-HER family members [11, 13]. Human papillomaviruses (HPV) are a group of host-specific DNA viruses with 15 high-risk or oncogenic subtypes with bad implications in developing neoplasia, to patients diagnosed with HIV infection [5, 9]. Results of studies show as that HPV infections are greatest causes of cervical cancer and more than, contribute for developing other neoplasic cells in another locations from the human body. Actually laboratory techniques, such as immunohistochemistry, is consider proper for diagnosis [1]. HIV remains a major public health problem which need a well management in order to avoid developing other bad pathologies as neoplasia, that affect the ill status from each diagnosed HIV infected patient. Epiderm as a barrier for better and for bad, conducing to an illness status in patients diagnosed with HIV infection. Structural analysis (figure 1).

Blood vessels. A specific barrier with implications in pathological status in pathients diagnosed with HIV. Blood analysis and blood vessels alterations, conducing to a presumptive more dangerous illness status. Structural analysis. (figure 2).

KEY POINTS IN STUDY DESIGN

For the purpose of a study, could be used blood serum for the analysis. Also best to analyse both genders, eqaully. So 50% men and 50% women. A statistical analyse also is important and relevant for proper results. Statisticaly 6.0 (StatSoft) by determining of average values is good. More than, the significance of differences could be evaluated using P-value index. In the study good to use 2
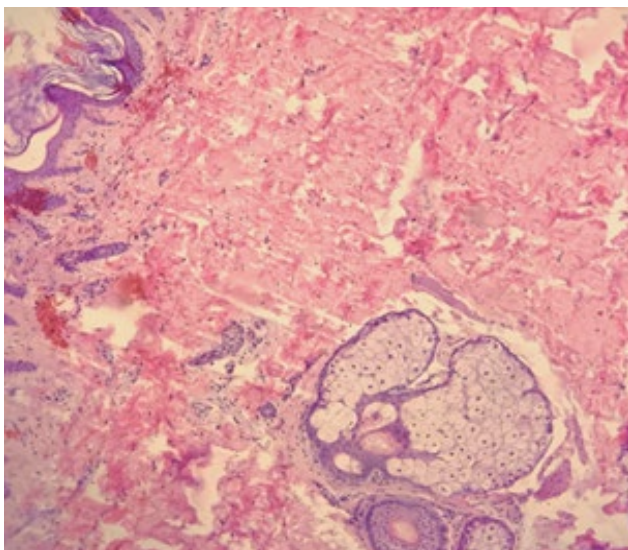
Figure 1 – Epiderm and annex glands. Magnification x10. Staining: Hematoxylin &
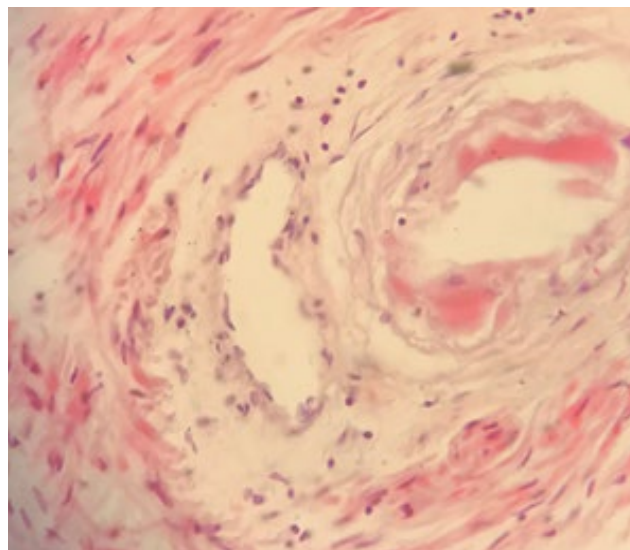

Figure 2 – Blood vessels. Magnification x10. Staining: Hematoxylin &

groups. Ill patients and healthy patients as control group.

The control group could involve specific healthy adults, for sure which will have negative results. Such a study could include specific markers, such as sHER-2, sEGFR.

Ethical standards, must take into consideration in studies.

KEY POINTS REFERRING TO POSSIBLE RESULTS OPINIONS

Possible that in the group of patients diagnosed with HIV infection, to find a significantly increased biomarkers sHER-2, sEGfR, in comparison with results from the control group persons.

Significantly increased: sHER-2 (membrane glycoprotein member of the family epidermal growth factor receptor protein), sEGfR (soluble epidermal growth factor receptor).

In attention, future dangerous alteartions that conduct in developing neoplasic cells that form breast cancer and sometimes the other solid tumors.

CONCLUSIONS

A selection of blood biomarkers could be helpful for diagnosing the cause of infections and also when HIV diseases is going to neoplasic pathology. Clinical examinations in patients with HIV, and specific blood biomarkers laboratory results, show us may informations for clinical decisions. Techniques for the laboratory diagnosis that are implications in monitoring of HIV infection, are implied and conduct to a proper quality of life in patients diagnosed with HIV.

Authors` contribution. Sole authorship.

Conflict of interest. No conflict of interest has been declared.

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TRANSLITERATION

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Теоретическая и экспериментальная медицина

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ВИЧ-ИНФЕКЦИЯ: НОВЫЙ ПОДХОД К ДИАГНОСТИКЕ

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Автор статьи декларирует, что патогенез связи ВИЧ-инфекции и рака является актуальной проблемой для исследований в настоящее время и предлагает изучить уровень биомаркеров рака в группе ВИЧ-инфицированных пациентов, употреблявших наркотические средства в прошлом, и в здоровой контрольной группе с использованием иммунологических методов и методов статистического анализа.

Автор уточняет, что подборка биомаркеров крови может быть полезна для диагностики причины инфекций, а также для выявления случаев, когда ВИЧ-инфекция переходит в неоплазию. Клинические обследования пациентов с ВИЧ и результаты лабораторных исследований по специфическим биомаркерам крови предоставляют много информации для принятия клинических решений. Методы лабораторной диагностики необходимы для мониторинга ВИЧ-инфекции и способствуют надлежащему качеству жизни пациентов с диагнозом ВИЧ.

Ключевые слова: пациенты; ВИЧ; биомаркеры; неоплазия; диагностика

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АИТВ ИНФЕКЦИЯСЫ: ДИАГНОСТИКАНЫҢ ЖАҢА ТӘСІЛІ

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Мақала авторы АИТВ-инфекциясы мен қатерлі ісік ауруының патогенезі қазіргі уақытта зерттеу үшін өзекті мәселе болып табылатынын мәлімдейді және иммунологиялық және статистикалық талдау әдістерін қолдана отырып, бұрын есірткіні қолданған АИТВ жұқтырған пациенттер тобындағы және сау бақылау тобындағы қатерлі ісік биомаркерлерінің деңгейін зерттеуді ұсынады.

Автор қан биомаркерлерінің таңдауы инфекциялардың себебін диагностикалауда, сондай-ақ АИТВ инфекциясы неоплазияға айналатын жағдайларды анықтауда пайдалы болуы мүмкін екенін түсіндіреді. АИТВ-мен ауыратын науқастарды клиникалық тексеру және арнайы қан биомаркерлері бойынша зертханалық зерттеулер нәтижелері клиникалық шешімдер қабылдау үшін көптеген ақпарат береді. АИТВ-инфекциясын бақылау үшін зертханалық диагностика әдістері қажет және АИТВ диагнозы қойылған науқастардың өмір сүру сапасына ықпал етеді.

Кілт сөздер: пациенттер; АИТВ; биомаркерлер; неоплазия; диагностика