Impact Factor: 9.2 ISSN-L: 2544-980X

Some Laboratory Indicators of Inflammatory Cytokines in Helicobacter Pylori-Associated Iron and Vitamin V12 Deficiency Anemia

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Abstract: The article highlights the role of inflammatory cytokines, particularly interleukin-6 and O-tumor necrosis factor in the development of iron and vitamin V12 deficiency anemia. It revealed a positive correlation between Helicobacter pylori and interleukin-6 and -tumor necrosis factor, and a negative correlation between these cytokines and iron and vitamin V12 levels in the blood. This indicates that the proliferation of Helicobacter pylori in the human body activates the production of inflammatory cytokines, causing anemia.

Keywords: Helicobacter pylori, interleukin-6, H. iron and vitamin V12 deficiency.

Introduction. Helicobacter pylori bacteremia has been confirmed in clinical observations as one of the causes of iron and vitamin V12 deficiency. The deficiency of Semiotic acid and the presence of abundance in II. Pylori were first published in the press in 1991 by Blecker and Dammuallio. They reported that a 15-year-old girl suffering from hemorrhagic gastritis caused by H. Pylori caused deficiency, and they treated it during adjunctive therapy without iron preparations. Research on the relationship between H. Pylori and iron deficiency by researchers and authors showed 15 meta-analysis results TTEL23:14G.X 8 64% article. Mamatkulov ... 3 and colleagues published 15 meta-analysis results on the study of the relationship between H. Pylori and the deficiency of temiolitis [12].

During the observations of Sarari and co-authors, 67.4% of patients diagnosed with H. pylori had symptoms of vitamin V12 deficiency [13]. Note that H. Pylori was found in patients with low levels of vitamin v12 in the serum of Shuval-Sudai and co-authors mine³. According to some observations, under the influence of Helicobacter pylori, the production of cytokines increases in the mucous membrane of osko30H, and the infiltration of neutrophils is induced in it. Helicobacter pylori infection requires leukocytes from epithelial cells. Ferments and iodine radicals released from intercellular neutrophils threaten the integrity of the mucosal lining of the stomach [4, 5, 7, 11]. The release of interleukin-6 and -ysma necrosis factor, the cytokines involved in the inflammatory process, activates the entry of leukocytes into the mucosal layer [10, 9, 8, 3]. In turn, tissue damage causes the activation of macrophages, monocytes, and myocytes in the duodenum and duodenum, and in this process, the production of heat necrosis factor, interleukin-1,6,8, and oxygen superoxide radicals is created [1, 2, 6].

Long-term antigenicity of Helicobacter pylori and auto-immune inflammation causes the destruction of immune homeostasis in the body, which causes the expression of dioxins such as interleukin-6, 8, 12 and sigma necrosis factor. On the other hand, under the influence of Helicobacter pylori in the body, conditions are created for the development of a number of extra gastroduodenal diseases, including infertility. The purpose of the study: to study the correlation of lyllane dioxins with some laboratory indicators in helicobacter pylori-associated temio and vitamin B12 deficiency.

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Material and methods of research. According to the source of the research, there is a shortage of patients treated in the department of hematology and gastroenterology of the comprehensive medical center of Samarkand region. Also, 120 patients who were diagnosed with Helicobacter pylori antibodies by immunoassay method were selected. they were treated in an outpatient setting before being treated in an inpatient setting and were treated in two groups. The first group was organized by 60 patients diagnosed with iron deficiency. they, in turn, were divided into three small groups based on the degrees of inferiority. 20 patients of the first sub-group (mean 45.35 ± 2.7, 14 females and 6 males) of mild (NHgb 90 r/n), second sub-group 20 (mean 44.65 ± 2.42, 17 females and 3 males) at the oio level (Ngb 70-90 g / l), 20 third sub-groups (average age 46.35 2.472, of which 18 females and 2 males) third sub-groups (total 46.35 2.472, 18 females and 2 males) + Second main group 60 negative Helicobacter pylori Patients with vitamin B12 deficiency were diagnosed in turn, they were assigned to three small gurus because of the severity of their deficiency. Classification into groups is based on the level of vitamin B12 and other hematological indicators, as well as the symptoms identified in the gastrointestinal tract and nervous system. First junior group 20 main 64% 1 (average 37.4 ± 2.3, of which 15 women and 5 men) had a slight decrease in vitamin V12 (127.8 pg/ml) and gastrointestinal complaints. In the second sub-group, 20 (mean age 43.6 ± 3.25, 16 females and 4 males) serum vitamin V12 decreased to a high level (94.3 pr/M), gastrointestinal and nervous system complaints. 20 patients of the third sub-group (average um 47.4 ± 2.4, 15 females and 5 males) had significantly decreased vitamin V¹2 (73.03 pg/ml) in the serum of mine, had only gastrointestinal and nervous system complaints, vitamin V12 deficiency diagnosed patients. The patients under follow-up were diagnosed with the following indicators: the detection of Helicobacter pylori indicators: the detection of Helicobacter pylori in the serum was performed using ^{9} 6 tests of Vester-Vest HOA. this collection is based on the determination of the quantitative indicator of Helicobacter pylori in mine serum using immunofermention. 400 tests were carried out from the "HUMAN, GERMANY" immunoassay kit for the purpose of detection of tampion in mine serum. This set is based on the quantitative index of iron in human serum. In order to determine Vitamin V12 in mine serum, a total of 96 tests were selected from the "ELABSCIENCE v12, Termaniya" iA ioA package. this collection is based on the determination of the quantitative index of Vitamin V 12 in human mine serum by immunoassay. The detection range is 0.781-50ng/ml. Sensitivity: 0.469ng/ml. The method for determining the indicators of interleukin-b and ysma necrosis factor in the mine was prepared from the reagent of the company "AO VECTOR BEST RUSSIA" from 96 tests. this collection is based on the analysis of the quantitative indicator of the shiokines recorded in the human mine serum in the immunological test.

Analysis of research results. In our observation, patients diagnosed with a mild level of iron deficiency have iron deposits with Helicobacter antibodies. ferritin. We studied the correlation between 3-transerin interleukin-6 and -growth necrosis. in which the correlation between Helicobacter pylori and iron (g 437, p = 0.05) and þerritin (r = -446, p = 0.05) parameters was analyzed. this verified abundance confirms the decrease of temio and ferritin indicators in parallel with the increase of helicobacter antibodies in the mine, and consequently the development of deficiency. Helicobacter pylori antibodies and interleukin-6 (r = 731, p = 0.01) and -growth necrosis (r = 691, p = 0.01) samples were found to be positive in the erythrocyte, as shown in Fig. Therefore, the presence of Helicobacter pylori in the body of IHSO increases the indicators of inflammation, and they, in turn, lead to a decrease in inflammation. The significant correlation between the temiocytic index in the analyzed field and the interleukin-6 and swelling necrosis factor (g = -489, p = 0.05 and r = -618, p = 0.01, respectively) confirms this and is shown in Figure 2 . like him. hemoglobin (r = -630, p = 0.01), temip (r = -610, p = 0.01) and þerritin (r = -416, p = 0, 05) with the indicators of wealth was analyzed. At the oio level of the disease, interleukin 6 (g = 651, p = 0.01) and - YcMa necrosiomylic (g- 666, p = 0.01) Kypsatkis with Helicobacter pylori antibodies in mine, interleukin-b with iron (r = 616, p = 0.01) p = 0.01) □ significant correlation with amda-isma necrosis factor (r = -464, r = 0.05) was noted. Similarly, we studied correlation coefficients between Helicobacter pylori antibodies and different levels of vitamin V12 deficiency. in the case of mild deficiency of Helicobacter pylori, interleukin-6 and – swelling sssnecrosiomy in the bone were found to be positively correlated with vitamin V12 in the correlation coefficient = 588, p = 0.01 and r = 657, p = 0.01 (Figure 3). . In addition, vitamin V12

levels and interleukin-6 (r = -431, p = 0.05) in the deposit are associated with necrosis (g - 445, p = 0.05). Correlations of vitamin V 12 deficiency in severe and acute levels and in its mild level have been observed, with a slightly higher level of KO. Correlation test showed a strong positive correlation between CaM Helicobacter pylori and inflammatory cytokines (interleukin-6 and sma necrosis factor) in both deficiency groups, as well as a significant correlation between these cytokines and vitamin B12. Correlation between V 12 level and bacterial antibodies Greek 1 Ounce 64 % 1 [[|] O Halicabator nderime no IPOnumuru.

Conclusion.

1. In the body, the ability of Helicobater rolls to open the inflammatory cells, which in turn leads to the blocking of absorption of vitamin B12; 2. Blockage of absorption of iron and vitamin B12 leads to the development of hypothyroidism.

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