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## Research Article

### ANEMIA IS A CHRONIC DISEASE

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#### ABSTRACT

**Purpose:** transition of anemia chronic disease along with other chronic diseases

**Materials and methods:** 82 patients with chronic anemia were observed

**Results:** Anemia occurs in infectious diseases, non-infectious diseases, asthma, and autoimmune diseases. The frequency of anemia in chronic diseases is 100%. In terms of prevalence, anemia ranks second after iron deficiency anemia in the elderly, from 2.9 to 61% in men and 3.3 in women. from 41%. Chronic anemia occurs in half of all patients with systemic diseases of the connective tissue. In chronic diseases of the kidney, the hemoglobin level is below 100 g/l. In the treatment of anemia in this category, the main disease is treated first (in infectious diseases, antibacterial treatment against infection, basic and anti-inflammatory treatment in rheumatic diseases, surgery treatment if there is an indication (abscess in the head of the abdomen, purulent pyelonephritis, etc.

Recommending iron preparations and vitamin 12 to these patients will be ineffective because the underlying disease must be treated:

**Conclusion:** Anemia aggravates the course of a chronic disease if it is accompanied by other chronic diseases.

#### KEYWORDS

Anemia, chronic disease, distribution, hepcidin protein, transferrin, treatment tactics.

## INTRODUCTION

Anemia accounts for 8% in Men, 4% in women, and 8-44% in middle and old age. One of the common anemia is anemia chronic disease (ASK) which occurs in patients with chronic diseases with activated cutaneous immunity. Anemia chronic disease stands on the 2nd Orin after iron deficiency anemia. In the elderly, 2.9-61% occur in men and 3.3-41% in women. It is 36-80% in elderly patients treated in inpatient stay and 5-14% in outpatient patients due to the prevalence of anemia. Anemia disease in the elderly iron deficiency anemia-45%, anemia chronic disease 68-76% (anemia chronic disease -22.6% in chronic kidney diseases, jigr diffuse chronic diseases-22.4%, OPCA chronic diseases -19%, gastrointestinal diseases -18%, chronic endocrine system diseases-16%, malignant tumor diseases -6%, rheumatoid arthritis-6%), anemia after acute and chronic bleeding -6%, in acute and chronic hemolytic anemia-3%, aplastic in anemia-3-4%, B12 and folideficitis anemia 2-3%, undifferentiated -17%.

-When determining the cause of anemia, it is necessary to pay attention to the symptoms of the underlying disease. Anemia chronic disease will depend on the state and severity of the chronic disease in the body.

The body gets used to low hemoglobin i.e. adaptation is. Gets used to his rapid tingling, headache, psychoemotional changes in weakness. Changes also appear in the system of internal organs in the body if hemoglobin decreases from 80-70 g/l. The likelihood of developing anemic coma increases if hemoglobin is below 40 g/l.

Anemia(Bose): less than -120 g/l in the female fetus (-110 g/l in fetal payitis), when the hemoglobin concentration in men is less than 130 g/l.

Anemia in mild to moderate severity of chronic disease, the hemoglobin concentration is 100-110 g/l, in severe degrees it is below 80-90 g/l. If the severity of anemia does not correspond to the severity of the chronic disease, then it is necessary to determine the cause of anemia i.e. hemorrhagic anemoya and hemolysis in the first place. Etiology of anemia. pathogenesis and clinical-hematological symptoms are all diseases. According to clinical pathogenetic classification, anemia is divided into anemia caused by impaired iron metabolism (iron deficiency anemia, anemia caused by impaired iron distribution, sideroachrastic anemia). anemia due to morphological classification is a chronic disease normocytic anemia, regeneratory anemia due to the degree of regeneration.

Clinical situational anemia chronic disease: acute and chronic infections-viral, bacterial, parasitic, fungal, Tumor Diseases-hemablastoses, solid-state tumor diseases, autoimmune diseases-rheumatoid arthritis, systemic lupus erythematosus and other chronic connective tissue diseases, vasculitis, sarcaidosis, chronic intestinal disease, pathology of the endocrine system, liver diseases, chronic non-inflammatory diseases-severe traumas, thermal burns, all diseases alcoholic liver diseases cirrhosis, blood circulation it is observed in patients with deficiency disease, thrombophlebitis, ischemic heart disease.

Anemia is a chronic disease in which there are normacitar, and in the base there are microcitar red blood cells.

Iron formed from the spread of erythrocytes is spent on the formation of new molecular hemoglobin. As a result, the FS mugger increases.

Anemia chronic disease diagnostic criteria: clinical symptoms, (depending on the disease: lameness, tumor or infection) pathological (hypoproliferative anemia, phagocyte mononuclear system for hemoglobin synthesis, the release of iron in the cutlets is disrupted, the life cycle of erythrocytes is reduced), laboratory examination results (leukocytes and platelets are observed to change depending on the disease). It decreases normocytic/normochrome anemia, microcytic anemia, reticulocytes count is normal or slightly increased.

Anemia in chronic laryngeal diseases (infectious diseases). Patients with pus of OPCA, kidneys and other organs develop anemia 1 month after the onset of the disease. A decrease in Hb 110-90g/l is associated with signs of the onset of chronic disease anemia. In this anemia no specific treatment of a chronic disease is necessary, treatment of the underlying disease is necessary.

Anemia against the background of HIV infection. In HIV infection, all hematological indicators change in the nature of the viral load. As a result of the development of the disease cytokines in most Mughals, erythropoiesis decreases, EPO concentration decreases, and opportunistic infection development cartilage increases.

Anemia is a severe course of the disease in HIV-positive persons, causing a reduction in life [9].

Anemia in chronic kidney disease. Diabetes mellitus and arterial hypertension are diseases that lead to chronic kidney diseases up to terminal levels. In this case, the main treatment measures are the prevention of Avicenna of the disease and the treatment of the underlying disease. Anemia in chronic kidney diseases, the kidney does not produce enough erythropoietin to stimulate erythropoiesis in the patient, in severe

hyperparathyroidism, in acute or chronic laryngeal diseases, the life cycle of erythrocytes is reduced.

Diagnostic criteria in chronic kidney diseases; Clinical signs (anemia depends on the degree of severity), pathology (insufficiency of the excretory function of the kidney, accumulation of substance exchange products in the blood plasma, reduction of the life cycle of erythrocytes and apparent hemolytic anemia, insufficiency of the development of erythropoietin from the kidneys. Laboratory is the norm of thrombocyte-normocytic/normochrome anemia, erythrocyte-normocytic / normochrome anemia, reticulocytes (echinocytes), without morphological changes (leukocytes in the blood. [11].

Anemia in systemic diseases of connective tissue.

Erythropoietin synthesis is impaired, as a result of taking anti-inflammatory drugs for a long time, erosion and bleeding from wounds in the gastrointestinal tract are observed, as a result of which a state of iron deficiency is observed. In patients with rheumatoid arthritis, 16-65% are observed along with anemia. In 77% of patients diagnosed with anemia, anemia is a chronic disease, in 23% of patients, iron deficiency anemia is observed. Even with an increase in the motility of cytokines, anemia can develop. Approximately half of patients with systemic lupus erythematosus have Hb from 100 g/l low normochrome or hypochrome anemia is observed. In the case of anemia, which comes against the background of systemic diseases of the connective tissue, it is necessary to hurry the underlying disease.

Diagnostic indications in anemia in systemic lupus erythematosus disease;

Clinical signs (increased body temperature at subfebrile levels, arthritis and arthralgia, skin hoarseness

Changes in the nervous system (psychological and neurological Reserve), pericarditis, chest pain, pleurisy, anorexia, nausea, vomiting, pain in the abdominal area, hepatomegaly, clotted immunity decreases, the immune complex circulating in the blood damages the organ system, tolerances.

Labarator tekshurov natiyzhas: the number of leukocytes in the blood decreases 2.0-10/ g/l); the number of trobocytes and the number of erythrocytes also decrease. Normocytic and normochrome anemia is observed, hemolysis, autoantitela, anticoagulants circulating in the blood lead to copulation of the time of the portial thromboplastin.

Diagnostic indicators of concomitant anemia in chronic hepatitis and cirrhosis of the liver.

Clinical signs (nemegaloblastny macrocytar anemia, which appear as a result of impaired liver function, are observed in 50% of patients with liver diseases, pathological changes occur every day (hemolysis, decreased bone comic response, folic acid deficiency, blood rubs, changes in the lipid structure of erythrocytes).

Result of Labarator tekshurovs

Leukocytes-neutropenia, nitrophilesis, or lymphopenia, decrease in platelets in the blood, anemia mild, severe levels (macrocytar, normocytic, microcytar) are observed in round macrocytes, target red blood cells, acontocytes, increased reticulocyte mucus in the blood), red bone coma (normal cletchy or hypercletchy erythroid hyperplasia..

In diseases of the endocrine system, anemia is observed in large numbers. In diseases of the endocrine system, all morphological variants of anemia can develop (norm, micro, giocyte anemia) in Birlamshi

hyperparathyroidism anemia chronic disease which occurs in every second patient. Anemia is observed in 30-60% of patients with hypothyroidism. In hypopituitarism, anemia is observed in 32-46% of cases, in diabetes mellitus, there is a contraction of the basal membrane of the renal tubules, in which the internal pressure of the kidney increases and the synthesis of erythropoietin decreases, as a result of which anemia was observed [12].

Clinical indications for anemia in diseases of the endocrine system

Clinical signs (main disease symptoms hyperthyroidism, hypothyroidism, adrenal hyperfunction: apparent degree of polycythomy, collar of androgens magdor, decreased adrenal function-to normal or slightly absent appearance of hematocrit, deficiency of mineralocorticoids: hypogonadism-decrease in anemia androgenic magdor: diabetes mellitus-false increase in hematocrit, acute hemolysis in ketoacidosis develops [13].

Anemia in tumor diseases with braces: 5-90% of patients with Tumor Diseases with braces experience anemia. Mild-degree anemia is observed in 100% of patients receiving 1-chemotherapy, while 80% can be observed in moderate-grade and severe-grade anemia. The appearance of anemia leads to the progression of the underlying disease. 75% of patients with convex Tumor Diseases Arize to rapid charshash, weakness, sleep disorders during the day, pain associated with a Convex tumor). Other keri effects of anemia; acceleration of heart rate, cognitive changes

Nausea, drop in dtana temperature, changes in the immune system, dizziness, headaches, chest pain, respiratory failure, depressive states, impaired

labor loyalty. Anemia disease increases the incidence of death cartilage in patients with valvular tumor disease. In the treatment of anemia, hematranfusion is used in 7-47% of patients, intravenous administration of iron preparations is also used [14].

Anemia in chronic heart failure. Anemia is observed in 17% of patients with chronic York deficiency. In the same 17% of patients 58% are diagnosed with chronic disease of anemia. With an increase in the functional classes of chronic heart failure, the severity of aneia disease also increases. In chronic heart failure, ischemia is observed in the bone support, cytokines against licking increase, normal hematopoiesis decreases, the survival time of erythrocytes decreases, erythropoietin synthesis decreases. Taking aspirin for a long time stomach in the intestinal system, the wound is observed and, in severe cases, causes bleeding from the wound. As a result of anemia, an ischemic condition of the myocardium is observed. Even if there is no organic change in the cardiovascular system, heart failure is observed. The appearance of heart symptoms will also depend on the condition of anemia. In cases of anemia in chronic heart failure, erythropoietin and iron preparations are given. Given erythropoietind it is necessary to pay attention to an increase in the level of Ht. Otkir myocardial infarction is observed if Ht exceeds 35%. In some patients, however, at the terminal level of the kidney deficiency is observed. 5].

Diagnostic algorithm for the chronic course of anemia;

In the first, it should be clarified that it is not anemia of a hemolytic nature. To do this, it is necessary to identify bilirubin, reticulocytes and sterkobilin in the blood, and peripheral blood Cardin should be determined. If the color index is low there will be iron deficiency anemia, and in this it is necessary to toppish the main cause of hypochromia and eliminate it. These can be causes every bleeding, exacerbation failure, tumor diseases,

chronic infection are considered. If there is an increase in color, and in the case of pancytopenia, a sternal puncture should be performed. To the result of the Sternal puncture depending on the leukemia or megaloblast transformation into bone marrow can be detected in blood analysis depending on the reticulocyte mogul and its dynamics, it is possible to determine the effectiveness of adjuvant therapy, and when given to patients for the treatment of vitamin V12, it is necessary to clarify the development of reticulocyte crisis.

Of great importance is the determination of the morphology of red blood cells in peripheral blood. By determining the morphology of erythrocytes, anemia can be clearly external.

Algorithm for checking normacitar anemia.

In patients with anemia, reticulocyte mughdori should be counted if the erythrocyte is normal and the morphology is also normal. If an increase in reticulocytes moğdori is observed postgemorrhagic and hemolytic anemia should be differentiated [16].

Anemia is not a diagnosis syndrome. After carrying out Laborator examinations anemia chronic disease externalization, a comprehensive examination of the patient is necessary to identify the underlying disease. In infectious diseases of the OPCA (bronchiectasis, abscesses, pleural empyema), examination with radiography and method of tamography, bronchological examinations (bronchography, bronchoscopy) are performed.

In diseases of the abdominal organs (cholangitis, liver abscesses, diaphragmatic abscesses, peritonitis, licking diseases in the human pelvic organs), UTI examination, laparoscopy, gynecological examinations are carried out. gynecologicheskogo obsledova-why.

Pathologicheskije processi V pochkax I kidney and urinary tract diseases (in apostamosny nephritis, renal carbuncle, chronic pyelonephritis and other diseases) kidney UTIs, nephrological examination, Bacteriological Analysis of urine. Primary diagnosis of chronic osteomyelitis is performed by radiography of the bones, bacteriological examination of the blood in the infectious endocarditis, echocardiography, bacteriological examination of the blood in the case of Sepsis, radiological examination of the OPC, gynecological examinations, examination of the abdominal organs and kidneys. . Chronic hepatitis-examination of functional probes of the liver, detection of hepatitis markers in blood acne, immunological indications, determination of the antigenic antitela complex, liver biopsy, UTI, rheumatoid arthritis-X-ray of ligaments, determination of the Rheumatic factor in the blood, radiography of the lumbar-buttock section of the umirtka patch in seronegative arthritis, examination of chlamydia infection, blood rheumatoid factor. To diagnose tuberculosis, it is necessary to make an opka X-ray and tomography, check the washing water of the bronchi and sputum examination, nephrological examination Bacteriological Analysis of urine.

Determination of renal and urinary tract tuberculosis using UTI, X-ray method.

Diagnosis of sarcoidosis-opka radiography, computed tomography tomography is performed. A complete program of oncological examinations (endoscopic examinations, X-ray examination method, UTI, biopsy) examinations are performed when suspected of a Convex tumor disease, a biopsy is performed from the peripheric lymph nodes and skin (where changes have occurred) to determine the birlamshi tumor or its metastasis, [5].

General treatment principles: if anemia cannot be cured with the treatment of the underlying disease additional treatment method should be used. For exacerbation of erythropoiesis in patients with anemia chronic disease, the substance EPO (erythropoietin) is used.

Anemia chronic disease EPO therapy is used in 25% mielodysplastic syndrome, 80% mieloma, 95% rheumatoid arthritis and chronic kidney disease. Endogenous EPO concentrations must be measured before EPO therapy is performed. Synthetic EPO application is not necessary if the endogenous EPO is higher than 500 me/ml.

The use of the drug Parenteral iron increases the body's response to EPO.

Hypercoagulatory syndrome occurs in vascular diseases of the heart, in anemia, which comes against the background of infectious diseases. To restore the HB mugger, dezagregate solutions are poured into the plasma, controlling the coagulogram.

In chronic anemia, there is no need to undergo hematransfusion even if there is severe degree anemia. Because the patient will have had a gradual adaptation to anemia. If you make a transfusion, the patient's life is in danger. In the vascular system of the heart and the respiratory system (tachycardia, shortness of breath), there is a depletion of the patient's condition day after day, hypervolemia and heart failure develop.

In bone comygium, regeneration is observed the number of reticulocytes is 1.5-5%. leukocyte mughdori has a disease pathology. In infectious and severe intoxication diseases, toxicene wisdom is observed in neutrophils. For diagnosis, it is necessary to assess the state of iron exchange; it is necessary to determine the

level of iron absorption in the blood Sivert, ferritin in the Sivert, transferrin in the iron, and the state of transferrin receptors in the sivertka.

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