

FERROKOMED

5 +
mg

**NEW GENERATION OF
ANTIANEMIC DRUGS**

A.B.-BIOKOM

NEW GENERATION OF ANTIANEMIC DRUGS

FERROKOMED

- THE FIRST AND THE ONLY PRODUCT CONTAINING IN THE STRUCTURE OF ELEMENTAL IRON IN THE LIMITS OF THE DAILY PHYSIOLOGICAL NEEDS AND POSSESSES THE «AFTEREFFECT»
- THE DRUG IS USED NOT ONLY AT IRON DEFICIENCY ANEMIA, BUT ALSO FOR ANEMIA OF THE MIXED GENESIS (VITAMIN B12, FOLIC AND IRON DEFICIENT)
- THE DRUG THAT IS FULLY SUPPLIES THE DAILY PHYSIOLOGICAL NEED OF THE ORGANISM NOT ONLY IN THE IRON, BUT ALSO IN SUCH VITAL MICROELEMENTS, LIKE COBALT AND COPPER
- MEDICINE, WHEN USED IN THE TREATMENT OF SUPERSEVERE AND SEVERE ANEMIA, EXCLUDES THE NECESSITY OF PARENTERAL IRON PREPARATIONS.
- THE DRUG POSSESSES THE IMMUNOMODULATING EFFECT

Ferrokomed is composed of three complimentary biocomplexes of vital elements by clinical effect:

Glutafer (iron complex (III) with glutamic acid) – 20 mg
(equivalent to 5,6 mg of elemental iron)

Kobavit (complex of cobalt with glutamic acid and vitamin U) – 10 mg.
Glutamed (complex of copper (II) with glutamic acid) – 5 mg.

Due to a specially developed structure, Ferrokomed has a specific mechanism of action, which results in fast and effective absorption of iron, which is both in the chemical composition of the drug and in other alimentary products. It is actively involved in metabolic process.

Use of the drug. The drug is used for iron deficiency anemia (IDA) of any genesis, for anemia of mixed genesis (vitamin B12, folic acid and iron deficiency) and chronic post-haemorrhagic anemias.

Method of application and doses. The drug is taken with water, 1.5-2 hours before a meal (patients with diseases of the gastrointestinal tract should take the drug after a meal, according to the following scheme.

Severity of anemia	Doses	Duration of the therapy
Super severe, Severe	By 1 tablet 3 times a day	Until the hemoglobin level normalizes
Moderate	By 1 tablet 2 times a day	Until the hemoglobin level normalizes
Mild case	By 1 tablet 1-2 times a day	Until the hemoglobin level normalizes

Annotation. The recommended duration of the therapy with Ferrokomed:

- In cases of supersevere and severe anemias – 45 days
- In cases of moderate and mild anemia – 35 days.

Side effects. The drug is transferred well. In very rare cases, nausea may occur.

Contraindications. The drug should not be used in conditions, characterized by increased iron content in the organism (hemolytic anemia, hemosiderosis, and hemochromatosis) and in increased sensitivity to the drug.

Drug interactions. Patients should not simultaneously prescribe antibiotics of the tetracycline series with Ferrokomed due to the deterioration of their absorption.

FERROKOMED –

10 STEPS TO SUCCESSFUL TREATMENT OF ANEMIA

1. Ferrokomed is the first and only medicine containing elemental iron in its composition within the daily physiological requirement (5.6 mg per tablet).

The amount of elemental iron entering the patient's organism in the composition of Ferrokomed is 18-22 times less than in the case of prescribing drugs containing 100 mg of iron (Fig. 1).

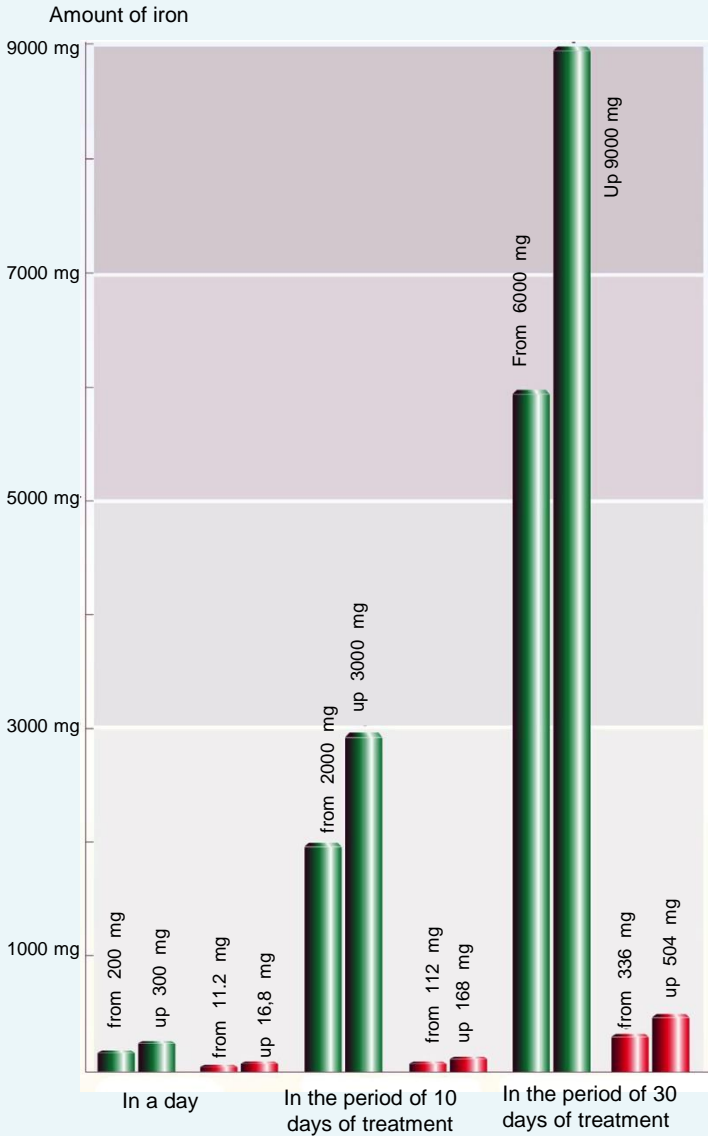


Fig.1. The amount of elemental iron entering the patient's body when taking well-known iron preparations (green columns) and Ferrokomed (red columns)

Reference. The total amount of iron contained in the body of a healthy person with a body weight of 70 kg is 3000-4000 mg.

Due to the content of iron within the physiological need, the Ferrokomed simultaneously promotes the solution of two very important problems: the effective and safe treatment of IDA (1); safe prevention of IDA (2).

2. Due to the unique composition, Ferrokomed has the “aftereffect” (the conception is introduced for the first time), as a result of which the increase in the level of hemoglobin and an increase in the number of erythrocytes continue and after the end of the therapy.

The occurrence of the “aftereffect” is a result of the fact that the endogenous systems responsible for the assimilation and the involvement of iron in exchange processes induced under the influence of the Ferrokomed remain in active state even after the end of the therapy (Fig. 2).

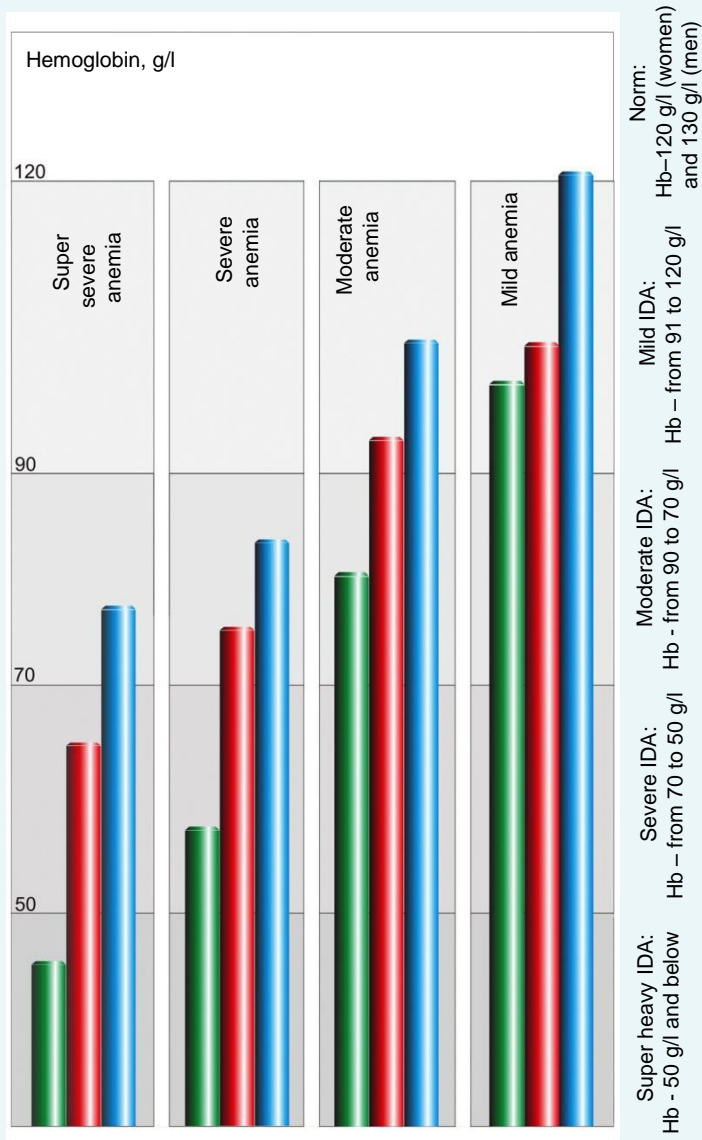


Fig. 2. Influence of Ferrokomed on reducing the severity of anemia during the first 10 days of its use and indicators of the “aftereffect” (before treatment - green columns; after using Ferrokomed during the first 10 days - red columns; the “aftereffect” of Ferrokomed - blue columns).

3. The assimilation by the body of the components of Ferrokomed (Glutafer, Kobavit, Glutamed) subordinate to the “priority principle” (the conception is introduced for the first time):

- First is absorbed Kobavit.

Kobavit activates the systems responsible for the absorption of iron, including the process of synthesis of apotransferrins (natural proteins – carriers of the iron) in the liver, activates enzymes of the antioxidant

system, accelerates the metabolic process and energy and etc.;

- Second is absorbed Glutamed.

Glutamed exerts the activating influence of the systems responsible for the red blood, accelerates the processes of maturation of the reticulocytes, activates the proteins responsible for absorption of iron and etc.;

- The third and the last is absorbed the absolute component containing iron (Glutafer).

By that time all endogenous systems responsible for the assimilation of iron and involvement in exchange processes, including the process of hemoglobin synthesis, under the influence of the first two components – Kobavit and Glutamed, are in the most active state.

As a result of this, iron, which is constituent part of the drug, is absorbed completely. Due to this fact, blackening of faeces and dyspeptic symptoms are not observed when taking the Ferrokomed.

Also, the pains in the epigastric area, the vomiting, smack of iron in the mouth, blackening of enamel and other side effects, characteristic of the usual iron drugs are not observed when taking the Ferrokomed.

4. Each component of the Ferrokomed (Glutafer, Kobavit and Glutafer) not only have their own hematopoietic activity, but also due to the synergistic effect of influence reciprocally intensify hematopoietic activity.

As a result of 10 day Ferrokomed therapy, severity of IDA is decreased by one or two degrees in 100% of patients.

Medicines	The effect of Ferrokomed on the severity of anemia during the first 10 days of its use (%)			
	super severe	severe	moderate	mild
Indicators of patients treated in the group of super severe anemia (severity before treatment – 100%)				
Parenteral iron medicines + tablets of drugs containing 100 mg of elemental iron	12.0	47.0	41.0	-
Ferrokomed	-	75.0	25.0	-
Indicators of patients treated in the group of severe anemia (severity before treatment – 100%)				
Parenteral iron medicines + tablets of drugs containing 100 mg of elemental iron		18.5	54.5	27.0
Ferrokomed		-	75.0	25.0
Indicators of patients treated in the group of moderate anemia (severity before treatment – 100%)				
Tablets of drugs containing 100 mg of elemental iron			50.0	50.0
Ferrokomed			-	100.0

5. Kobavit and Glutamed provide a rapid and effective assimilation of iron in the composition of both Ferrokomed and iron from alimentary products, contribute to the inclusion of iron to the process of hemoglobin synthesis, activate the bone marrow function, and accelerate the maturation of erythrocytes and their admission to the circulating blood.

6. The drug promotes the inclusion of tissue iron in the composition of hemoglobin. Due to these properties of Ferrokomed, an early and high increase in the level of hemoglobin, amount of erythrocytes and reticulocytes is observed.

7. Due to its unique composition, Ferrokomed, unlike other iron-containing preparations, is used not only for iron deficiency anemia, but also for anemia of mixed genesis (vitamin B12, folic and iron deficient).

Moreover, the constituent components of Ferrokomed fully provide the daily physiological need of the organism not only for iron, but also such vital microelements as cobalt (Kobavit) and copper (Glutamed).

8. Ferrokomed refers to harmless drugs (Fig.3).

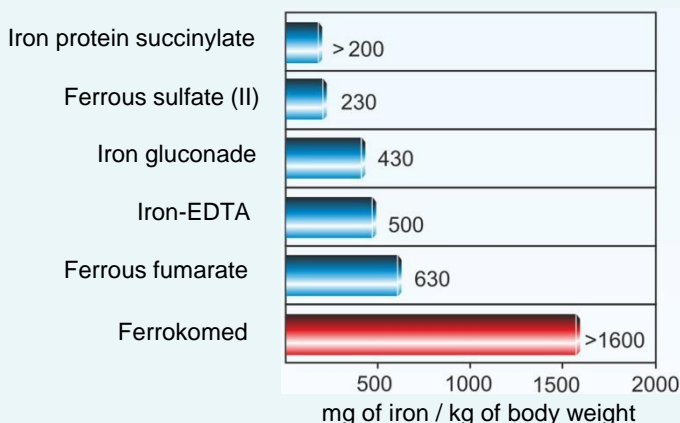


Fig. 3. Toxicity of iron preparations when taken orally

Even in the cases of long-term use, Ferrokomed does not have an irritating and erosive effect on the integrity of the structure of the gastrointestinal mucosa tract and does not have a depressing effect on the functions of the hematopoiesis systems.

Under the influence of Ferrokomed, symptoms of asthenization disappear in a short time (weakness, fatigue, dizziness, sweating, etc.).

9. Ferrokomed enhances the synthesis of proteins, and as a result of this, it effectively restores the disturbed links of protein exchange processes characteristic for iron deficiency states. Thereby prevents the occurrence or facilitates the disappearance of states of dis- and hypoproteinemic nature.

10. Ferrokomed has an immunomodulatory effect, which is very beneficial for severe and prolonged forms of anemia, accompanied by a deep deficiency of both iron and an immunodeficiency state.

The simultaneous restoration of the iron level and the immune status, observed under the influence of the drug, contributes to the acquisition of the organism's natural resistance to infectious illnesses and colds.

REFERENCE LIST

1. Clinical trial of a new domestic antianemic drug – Ferrokomed // Information letter of the Ministry of Health of the Republic of Uzbekistan №0182 from 03.07.2009.

2. Бахрамов С.М., Фарманкулов Х.К., Нигматова М.С. Клинические испытания нового отечественного антианемического препарата – феррокомеда // Центральназиатский медицинский журнал, 2008. Том. XIV. №3, С.206-209

3. Фармонкулов Х. К. Феррокомед – новое поколение ферропрепаратов // Бюллетень ассоциации врачей Узбекистана, 2011. № 1, С. 71-76.

4. Reports of clinical trials of the drug.

5. Geisser P., Baer M., Schaub E. Structure / histotoxicity relationship of parenteral iron preparations// Drug Research, 1992. V.42: 1439-1452.

6. Forster R. Iron protein succinylate: preclinical safety assessment // Int. Journal clinical Pharmacology, Therapy and Toxicology, 1993. V.31: 53-60.