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DIAGNOSIS AND TREATMENT OF IRON DEFICIENCY ANEMIA IN EARLY PREGNANCY

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ABSTRACT

This article is dedicated to explore iron deficiency during the pregnancy in an early stage. Moreover, the research presents a great deal of data concern about diagnosis and treatment of iron deficiency in early pregnancy. On the top of that main causes and effects of anemia at this rate, as well as prevention forms dealing with iron deficiency. The research outcomes are implemented in terms of facts, affairs and humans' affections.

KEYWORDS: Anemia, Early pregnancy, Iron deficiency, Treatment, Prevention, diagnosis, woman, drugs.

INTRODUCTION

One of the most common diseases among the population of the republic anemia and its various pathological conditions, in which the blood the amount of hemoglobin, and in most cases the number of erythrocytes decrease is noted. Anemia is a symptom of some disease manifests itself as, i.e., it is a secondary disease. Anemia is not only different at all stages of human life in diseases, but also in some physiological conditions (pregnancy time, during the growth and lactation periods of the organism). Especially since anemia in young children is of great social importance anemia at this age of physical development in the body and iron causes a disruption



of the exchange. Development of anemia with adolescence and menopause, hormonal disorders, nutrition character, digestive system, kidney disease, in the body disorders of the absorption process, autoimmune conditions and other factors may also be related to. The disease is often internal, infectious and oncological diseases were not associated with anything is also a symptom.

Iron deficiency anemia is a pathological syndrome characterized by a decrease in the number of red blood cells and blood hemoglobin. This condition causes major hypoxia of the tissues and organs, as a result of which less oxygen is delivered to the cells.

This condition is especially dangerous for the brain. Nerve cells die during hypoxia.



MAIN PART

In the early stages of the disease, a person feels constant fatigue and decreased performance. If a laboratory blood test is performed on these symptoms, it can detect a decrease in the level of hemoglobin and red blood cells. Iron deficiency anemia is a very common disease that occurs in adults and children. It can develop for several reasons and is a serious medical condition that needs to be treated. Otherwise, anemia can cause great harm to health.

Anemia (anemia) a condition characterized by a decrease in hemoglobin content per unit volume of blood, often while reducing the number of red blood cells [1, 44-45p]

Not only is it important for the body to consume the mineral with food (iron does not form spontaneously in the body), but it is also important for the proper process of assimilating and transporting it. A special protein (transferrin) is responsible for the absorption of iron molecules from the duodenum. It delivers iron to the bone marrow, where red blood cells are synthesized.

Excess minerals are excreted in the urine, feces, and sweat glands. Menstrual bleeding is still common in women from adolescence to menopause. Approximately 2 g of iron is excreted from the human body per day, which means that it is necessary to consume at least a small amount of iron with food to replace it. Maintaining the balance necessary for the tissues to breathe depends on the proper functioning of this mechanism.

Causes of iron deficiency

Iron deficiency can be caused by:



Chronic bleeding (daily blood loss 5-10 ml) - frequent nosebleeds; bleeding from the stomach and intestines; heavy menstruation; characteristic hematuria renal pathology.

Acute blood loss - trauma, severe burns; uncontrolled donation; pathological bleeding (e.g., uterine bleeding in oncopathology, etc.).

Low iron intake - diet and starvation; unbalanced diet; vegetarianism.

Disorders of iron absorption - gastrointestinal diseases, vomiting; old age and infancy.

Increased iron levels - active growth (1-2 years and adolescence); pregnancy, lactation (iron requirement doubled to 30 mg per day); formation of the menstrual cycle; physical education, sports; frequent inflammation (influenza, etc.).

Congenital anemia in children - early pregnancy; anemia in pregnant women.

Iron Deficiency Levels:

Mild - hemoglobin values range from 110 to 90 g / l;

Medium - hemoglobin level 90 to 70 g / l;

Severe - hemoglobin level below 70 g / 1 (2).

Symptoms of Iron Deficiency Anemia:

Symptoms depend on the stage of the disease. At the beginning of the disease the following symptoms appear:

Decreased concentration;

Fatigue;

Memory impairment;

Decreased appetite;

Dizziness;

Decreased performance;

Sluggishness;

Nervousness;

Brittle nails;

Dry skin.

As the anemia worsens, these symptoms become more pronounced.

In the latent stage, patients develop the following subjective symptoms:

- Dry mucous layer of the tongue;
- Pain in the tongue;
- Changes in taste patients eat more salty, sour and spicy foods;
- Difficulty swallowing;

- Sensation of a foreign body in the throat when swallowing;
- Rapid heartbeat.

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During the examination, the doctor also notes the first objective signs of anemia:

Atrophy of the tongue suckers;

In women with iron deficiency anemia, there is itching and burning in the vulva;

cheilitis (whitening and cracking of the lips).

Body changes in iron deficiency:

Doctors note that the severity of symptoms depends not only on the degree of anemia, but also on the age of the patient and the duration of the disease. Symptoms increase over time. The following changes have been noted:

The skin changes. The skin becomes green and pale. Redness appears on the cheeks quickly, the skin loses its elasticity, wrinkles appear and cracks appear.

Hair changes. Hair becomes dry, brittle, and gray in color and loses its luster, becomes thin and quickly turns white.

Nails change. The nail plates become thin, lose their luster, become flat, and in more severe forms of anemia, the nails become concave.

The musculoskeletal system changes. Muscle weakness is a symptom of iron deficiency anemia.

The mucous membranes change. Membranes of the digestive tract, respiratory and genital atrophy.

Diagnosis of Iron Deficiency Anemia:

First of all, it is very important to correctly identify the type of anemia, because the symptoms are common to all types of anemia. This requires a complete laboratory diagnosis of the patient. It includes: blood tests (general and biochemical), bone marrow puncture. Women can also be referred to a gynecologist, as anemia is often caused by diseases of the uterus or its appendages. Men are referred to a urologist and proctologist because anemia in men can develop against the background of hemorrhoids or prostate disease. Only after the final diagnosis and the causes of anemia are identified, the doctor will develop an individual treatment regimen.

Treatment of Iron Deficiency Anemia:

Treatment of iron deficiency anemia is carried out only by long-term administration of iron supplements in moderate doses, and in contrast to the improvement of the general condition, the amount of hemoglobin increases only after 4-6 weeks. Prescribing and calculating the dose of medication depends on the attending physician. Therapeutic doses are prescribed until hemoglobin levels return to normal, after which the patient is switched to prophylactic doses.

Iron Deficiency Diet:

Patients with severe anemia should use a specialized diet in addition to the basic treatment. The basic principles of therapeutic nutrition for iron deficiency anemia are to drastically limit the consumption of fats from plant and animal sources, as well as to fortify them with foods high in



protein. Carbohydrates have been shown to have no effect on the absorption of iron by the body, so their consumption should not be limited.

Iron (liver, beef tongue, lean turkey, red sea fish, buckwheat and millet, berries and peaches) should be added to the patient's diet to replenish the amount of iron needed for normal blood formation. A large percentage of iron is also found in all types of greens, beef and eggs. Among the fruits, dates, quinces and apples should be preferred raw or ripe. It is recommended to completely eliminate dairy products and black tea from the diet of patients with iron deficiency anemia, as they contain substances that prevent the absorption of iron. In order to absorb iron-rich foods well, you should eat foods that contain vitamin C (oatmeal, currants, sauerkraut, freshly squeezed fruit juices and citrus juices).

Drugs Produced against Anemia:

Oral 2 and 3 valent iron preparations are mainly used. Recently, ferlatum (iron-protein complex) is widely used began. Iron for the uncomplicated treatment of anemia adding additional components that facilitate assimilation it is advisable, for example, cysteine (in irradian preparation), ascorbic acid, acid (ferroplex, phenyuls, Ferro-folgamm), succinic acid (conferon), fumaric acid (xeferol), folic acid (ginotardiferon, Ferro-folgamm) can be cited as an example. However, it is worth noting that the above antianemic most of the drugs are considered to be foreign drugs, they are much more expensive in terms of cost, and for most patients it causes discomfort [1, 21p]

Prevention of Iron Deficiency:

The main rules of preventive measures aimed at reducing the prevalence of iron deficiency anemia are:

Eat foods fortified with easily digestible iron;

Use of iron-enhancing agents;

Treatment of chronic foci of infections [4, 22p].

In addition, the prevention of iron deficiency anemia is divided into primary, secondary and, accordingly, tertiary. The primary goal is to eliminate the main factor that leads to anemia, the secondary goal is the timely detection of symptoms, timely diagnosis and treatment of the disease. The goal of tertiary prevention is to minimize possible complications.

In most cases, iron deficiency anemia is successfully corrected, and the signs and symptoms of anemia are reduced. However, if left untreated, complications can develop and the disease can progress. If a person has a low hemoglobin level, a thorough clinical and laboratory examination should be performed to determine the cause of the anemia. Proper diagnosis is the key to successful treatment.

In addition, this condition affects more women than men and tends to reach its peak for women of childbearing age or pregnant women.

How does pregnancy affect iron deficiency anemia?



Pregnancy requires a lot of iron for normal development and growth, especially in the second half of pregnancy. According to Dr. Matthew Cantor of OB / GYN at New York-Presbyterian Hudson Valley Hospital, iron deficiency anemia develops during pregnancy for two reasons:

The amount of blood expands significantly and this weakens the amount of iron.

Women who develop iron deficiency anemia before pregnancy usually exacerbate the deficiency and require careful observation by a physician.

Importance of iron during the pregnancy

Adequate iron intake should be included in the diet or through supplements during pregnancy. Not only does your body need to produce extra blood to provide the placenta with all the nutrients it needs to grow, it also needs iron, which can also negatively affect you and your baby. Iron is needed to prevent leaching conditions.

CONCLUSION

In general, low iron intake is usually the cause of iron deficiency anemia. This can happen as a result of a lack of iron or supplements in your diet or through supplements, due to blood loss and certain health conditions that make it difficult for your body to absorb iron from food. The outcomes show that anemia in an early pregnancy is widely spread among population. The rate is being diminished by professors with the help of drugs and prepartions.

REFERENCES

1. "Application of modern technologies in teaching medical and biological sciences", Tashkent-2017, 54p

2. Iron deficiency anemia: assessment, prevention and control. A guide for programme managers. — Geneva: World Health Organization, 2001 (document WHO/NHD/01.3).

3. Baker R.D., Greer F.R. Committee on Nutrition American Academy of Pediatrics. Diagnosis and prevention of iron deficiency and iron-deficiency anemia in infants and young children (0-3 years of age) // Pediatrics. — 2010; 126 (5): 1040–1050.

4. Recommendations to prevent and control iron deficiency in the United States. Centers for Disease Control and Prevention // MMWR Recomm Rep. — 1998; 47(RR-3): 1–29.

5.Krdgp3.ru