Anaemia in pregnancy

ASSIGN BUSTER

Anemia is a condition of too few red blood cells, or to reduce the ability of red blood cells of oxygen or iron. Organizations rely on the enzyme iron can affect the function of nerve and muscle cells. The fetus depends on the mother’s blood and anemia can cause problems with fetal growth, preterm birth, and low birth weight (8).

During pregnancy, the blood volume of a woman has increased by 50%. This causes the concentration of red blood cells in the body to dilute. This is sometimes called anemia of pregnancy, do not think this is not normal, unless the level is low (4).

Definition

Pregnancy

The time, when a woman carries a developing of the fetus in her womb. For weeks (first12 the first three months of the child) is known as an embryo, what is called a fetus. Gestation period of about 280 days, and calculate every last day of the first menstrual iPod. The existence of the pregnancy tests depend on the hormone Î² Human chorionic gonadotropin (BHCG), excretion of women From 30 days from the last menstrual period urine. Estimated delivery date . Accurately estimate the size of the ultrasound measurements of fetal development 7 weeks and 24 weeks. “ Long-term” means when the baby because, may arrange Stop in early pregnancy of 38 weeks for 41 complete changes occur weeks. Physical Enlarged abdomen. Prominent veins, swollen breasts, Black papilla. Three women have nausea, encountered such a Severe vomiting requiring hospitalization rehydration (10)

In many societies' medical and legal definitions, pregnancy is somewhat arbitrarily divided into three three-month period, as a means to simplify reference. The various stages of fetal development. Greater risk of miscarriage in the first quarter (The natural death of embryo or fetus). In the second trimester of fetal development . May be easier to control and diagnostics. The beginning of the third semester is often close with or without the help of a doctor, beyond the point of viability or survival of the fetus, Uterus (6).

Anemia

Anemia described in which the number of red cells in the blood is low. For this reason, doctors sometimes describe anemia with a low blood count which is known as anemia(1).

Blood is made up of two parts of the liquid portion is called the plasma and cellular components. The honeycomb section contains several cell types. Wherein one of the largest and the maximum amount of cell types is red blood cells. Other types of cells are white blood cells and red blood cells platelets. The goal is to deliver oxygen from the lungs to other parts of the body (1, 2, 6).

The generation of red blood cells through a specific series of complex steps. They are some of the bones in the bone marrow (the part of most cells in the blood), and all appropriate steps, in his maturity, they are released into the blood. The hemoglobin molecule is the functional unit of red blood cells and proteins is a complex structure; it is in the red blood cells. In contrast, most

cells in the body’s red blood cells without a nucleus (central cell metabolism) (2).

While red blood cells (RBC) in the bone marrow in their production are involved in many other factors (4).

The disease process is actually a sign of anemia, rather than the disease itself. It is generally classified as a chronic or acute. Chronic anemia occurs in a very long time. Acute anemia occurs soon. Determined whether anemia has been in existence for a long period of time, that is something new to help doctors find the cause. It can also predict the symptoms can be severe anemia. In chronic anemia, symptoms usually begin slowly and gradually progress, and sudden acute symptoms of anemia, and even more painful (6).

The survival of red blood cells in about 100 days, so that the body is constantly trying to replace. In adults, the production of red blood cells produced in the bone marrow. The doctors are trying to determine whether the low number of red blood cells caused by blood loss increased red blood cells, or to reduce production in the bone marrow. Know also changed the number of white blood cells and platelets, to determine the causes of anemia (1, 3).

Type of anemia.

Under normal circumstances, there are three main types of anemia, the red blood cell size classification (4).

- If the red blood cells are smaller than normal, this is called small cell anemia. The main reason for this type is iron deficiency anemia (low iron) and Mediterranean anemia (hereditary hemoglobinopathies) (5).
- If the size of the red blood cells are normal size (small number), which is known as anemia of normal cells, anemia associated with kidney disease related to chronic disease or anemia (5).
- If red blood cells are larger than normal, it is called large-cell anemia. The main cause of this type of pernicious anemia and anemia associated with alcoholism (5).

Anemia of chronic disease:

All long-term medical conditions that can lead to anemia. The exact mechanism of this process is unknown, but long-term conditions and ongoing medical conditions such as

Chronic infection or cancer can cause this type of anemia.

Anemia and kidney disease:

A hormone released by the kidneys called erythropoietin EPO can help the bone marrow to produce red blood cells. Kidney disease and chronic (long term) in the population, reduce the production of this hormone, which reduces the production of red blood cells, causing anemia. This is called anemia associated with chronic renal failure.

Malnutrition anemia

Vitamins and minerals are required to make red blood cells. In addition to the normal production of iron, vitamin B12 and folic acid hemoglobin. In one of those missing because of the lack of production of red blood cells can

cause anemia. Bad low dietary intake of low levels of folic acid and vitamin B12, an important reason. Who do not take enough vitamin strict vegetarian risk of vitamin B12 deficiency.

Anemia Bone marrow

Anemia may be associated with diseases involving the bone marrow. Certain blood cancers such as leukemia or lymphoma can affect the production of red blood cells and causes anemia. Other processes may spread to the bone marrow of cancer to other organs.

Aplastic anemia

Sometimes, certain viral infections can seriously affect the bone marrow and the production of all blood cells significantly reduced. Chemotherapy (anticancer drugs) and certain other medicines can cause the same problem.

Hemolytic anemia

The normal form of red blood cells is important, its function. Hemolytic anemia is a type of anemia in which red blood cells break down (hemolysis itself), and become dysfunctional. This can happen for various reasons. Some forms of hemolytic anemia is a hereditary, destruction and rapid reproduction of red blood cells (eg, as elliptocytosis hereditary spherocytosis hereditary histiocytosis, glucose -6 – phosphate dehydrogenase or G6GD

Pernicious anemia

Anemia may result in absorption of vitamin B12 bad stomach or intestines. This can lead to anemia, vitamin B12 deficiency is called pernicious anemia.

Sickle cell disease

For some people, this problem may be related to the production of abnormal hemoglobin molecules. Under these conditions, the hemoglobin is qualitative in nature, or function. The structural integrity of abnormal hemoglobin molecules in red blood cells and can cause problems, they can become crescent (sickle cell anemia). Sickle anemia call types, varying severity. This is typically inherited from common ancestors in the Middle East, Africa and the Mediterranean.

Thalassemia

This is another group of hemoglobin causes anemia, thalassemia. There are many types of thalassemia varies in severity from mild (thalassemia), severe (heavy thalassemia). Are hereditary, but they lead to quantitative hemoglobinopathies, which means that the lack of the proper amount of hemoglobin molecules. Mediterranean anemia is more common ancestors in Africa, the Mediterranean and South Asia.

Alcoholism

The shortcomings of malnutrition, vitamins and minerals with alcohol. Alcohol itself can be toxic to the bone marrow, and can slow the production of red blood cells. The combination of these factors can lead to anemia, alcoholism.

Anemia during pregnancy

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Risk factors for anemia in pregnant women

All pregnant women, the risk of anemia. This is because they need folic acid and more iron than usual. Higher risk, in this case:

- Pregnancy has more than one child
- Two closely spaced pregnancies
- Vomiting a lot, because morning sickness
- Young pregnant
- Do not eat enough food rich in iron
- Period of strong before you get pregnant

The most common types of anemia occurs during pregnancy

Iron deficiency anemia

During pregnancy, the growth and development of cells of the fetal red blood

Mother, especially during the last three months of pregnancy. If the mother has excess red blood cells stored in the bone marrow before her pregnancy, she can use these stores during pregnancy, to help meet the needs of her baby. Women who do not have enough iron stores can develop iron deficiency anemia. Anemia during pregnancy, which is the most common type. It is the lack of iron in the blood, which is necessary, so that – the

distribution of oxygen from the lung tissue in the part of the body’s blood hemoglobin. Good nutrition before pregnancy is very important to help establish these stores and prevent iron deficiency anemia.

Vitamin B12 deficiency

Vitamin B12 is important in the formation of red blood cells and protein synthesis. Women who are vegetarians (who eat no animal products) are most likely to occur vitamin B12 deficiency. Including animal foods in the diet, such as milk, meat, eggs and poultry can prevent vitamin B12 deficiency. Strict vegetarians usually need supplements of vitamin B12 by injection during pregnancy.

Intraoperative blood loss

Childbirth and postpartum blood loss after childbirth can also cause anemia. The average blood loss at vaginal delivery of approximately 500 ml, 1000 ml, caesarean section. Adequate iron stores, can help a woman to replace lost red blood cells.

folate deficiency

Folic acid, also known as folic acid, B vitamins, iron and cell growth to help you. Often associated with iron deficiency, folic acid deficiency during pregnancy, folic acid and iron in the same type of food. Studies have shown that folic acid can help reduce before conception and during early pregnancy, a baby’s brain and spinal cord, the risk of certain birth defects.

Cause of anemia during pregnancy

Blood loss

- Due to trauma.

This is perhaps the simplest example, following the accident at the great artery, severe bleeding.

- Menstruation.

Monthly blood loss, women continued pressure menstruation has always been the hematopoietic organs. If this loss is excessive, then over a period of time, it can lead to severe anemia.

- Delivery.

Never lost a considerable amount of blood during childbirth, if it’s serious, if the woman during pregnancy, anemia, and severe anemia can develop.

A lack of blood formation

This is the main reason for anemia microbial infections. Account for Infected by the harmful effects of blood-forming organs just because it is in the other parts of the body.

- Toxins. Depending on conditions, such as chronic glomerulonephritis and uremia has severe anemia due to the effect of the disease in the formation of blood.
- Drugs. Some drugs, such as aspirin and non-steroidal anti-inflammatory the drug can cause occult gastrointestinal bleeding

Insufficient production of red blood cells

Aplastic anemia, bone marrow does not make enough red blood cells. This may be due to a viral infection, or exposure to certain toxic chemicals, radiation, drugs (such as antibiotics, ants, anticonvulsants, or cancer). Some childhood cancers can cause aplastic anemia, chronic diseases affect the ability of cells from the bone marrow into the blood.

High concentrations of hemoglobin and red blood cells to carry adequate oxygen to help environment relatively oxygen-poor blood from the fetus in the womb. After the birth of a child, the more oxygen and hemoglobin in children are usually about 2 months, this is called physiological anemia in infancy has fallen to the lowest point. This temporary decrease in expected blood count is considered normal and do not require treatment, because the body of the child is about to start on their own red blood cells.

Lack of iron absorption

This may occur in diseases of intestinal malabsorption. This is a serious Anemia in women, known as the choir was once common, but now rarely seen.

Inadequate intake of iron

Iron daily requirement for adults is 12 mg and 15-20 mg for adults Women during pregnancy. This is a cover ordinary regime itself, it is not a common cause. But if you have a stable blood loss due to menstruation or loss Contribution bleeding piles “ of iron in the diet may not be sufficient to maintain Formation of hemoglobin.

Anemia related drugs:

Many common medicines can sometimes cause side effects in some anemias. Which medications can cause anemia mechanism much (hemolysis, bone marrow toxicity) and specific drugs. The most common cause of anemia drugs for chemotherapy drugs to treat cancer. Other common drugs that can cause anemia, including some anti-epileptic drugs

transplant drugs against HIV, against malaria medications, certain antibiotics (penicillin, chloramphenicol), antifungal drugs, and antihistamines.

Among other reasons:

Other less common causes of anemia include thyroid disease, cancer, liver disease, autoimmune diseases (lupus), paroxysmal nocturnal hemoglobinuria (PNH), lead poisoning, AIDS , malaria, viral hepatitis, mononucleosis only, parasite infections (hookworm), coagulation disorders, and exposure to insecticides. It should be noted that there are many other potential causes of anemia, are not included in this list, because these are only some of the most common and important ones. ealthy RBCs

Iron at low revs. And diet, vegetarian, should ensure that their eating habits, they provide enough iron,

Vitamin B12 deficiency, lack of folic acid in the diet, or the more rare bleeding hemorrhoids (piles) or bleeding gastric ulcer

Anemia is common in women having closely spaced pregnancies, women also have twins or triplets.

Symptoms of anemia during pregnancy.

The first symptoms are fatigue, if the woman is healthy, she rarely has symptoms of anemia, pale 8g/dl. and unless the hemoglobin (red pigment) below.

- Paleness of the skin, lips and nails
- Tiredness or weakness
- Dizziness

- Shortness of breath
- Rapid heartbeat
- fault concentration
- fatigue
- Reduce Energy
- weaknesses
- shortness of breath
- Dizziness
- palpitations (feeling of the heart racing or beating irregularly)

Light

Anemia early stages, you do not have obvious symptoms. Most of the symptoms you may be pregnant, even if you do not have anemia. So make sure you get the control of anemia prenatal routine inspection.

The diagnosis of anemia during pregnancy.

In addition to clinical symptoms, anemia, most often detected in prenatal screening. Blood tests, usually at the first consultation, and again in the second half of pregnancy.

- A description of red blood cells – blood test results will be included in its various forms and sub-circle.
- Women in Africa – Caribbean or Mediterranean origin, additional test to detect genetic causes of anemia caused by sickle cell anemia and thalassemia.

Possible complications of anemia

Blood loss after delivery with severe anemia reasons. In this case, a woman may be advised blood transfusion.

The doctor can easily be detected in blood samples for complete blood draw anemia Count. According to the test results and detailed evaluation of the patient, the doctor may order tests to determine the exact cause of the anemia. Complete blood count may be a routine check, according exist, may be some of the signs and symptoms of anemia.

Physical examination and medical history also played a crucial role in the diagnosis of the causes of anemia. Part of the story of a family history of anemia or other chronic diseases, medications, feces and urine color, personal history of bleeding problems, habits, social and professional (such as alcohol), on issues important characteristics. Perform a complete physical examination, the physician may focus on appearance (signs of tiredness, paleness), jaundice (yellow skin and eyes), the nail bed is pale, enlarged spleen (splenomegaly), the liver (liver), swollen lymph nodes and heart sounds.

Anemia testing laboratory

Complete blood count (CBC) to determine the severity of anemia and type (small cell anemia and small red blood cells, anemia normocytic or normal-sized red blood cell, or large cell anemia or large red blood cells) is usually the first test order. Other blood cells (white blood cells and platelets) and related information is also included in the CBC report.

Stool blood in the stool may be bleeding from the stomach or intestine (or stool guaiac test for occult blood) to detect hemoglobin test:

- Peripheral blood smear: look in red blood cells was observed under a microscope to determine the size, shape, number and color, as well as the evaluation of other cells in the blood.
- The iron content: levels of iron can tell the doctor the possibility of iron deficiency and anemia or not. The test is often accompanied by other tests, measuring the storage capacity of the iron body, such as the level of ferritin and transferrin rate.
- Turn Level: evaluation of a protein, iron around the body.
- Ferritin: an evaluation of the total iron in the body.
- Folic acid: vitamin necessary for the production of red blood cells, people with poor eating habits.
- Vitamin B12 vitamin necessary for the production of red blood cells with poor eating habits or pernicious anemia, low.
- Bilirubin: useful red blood cells to determine whether the destruction of the body, which may be a sign of hemolytic anemia.

Lead levels of lead poisoned children anemia, one of the most common causes.

Treatment of anemia

Self-care at home

Few people can do self-treatment of anemia, and usually require treatment. Important to continue to take medication, other chronic (long term) medical provisions. The causes of anemia are known, then take steps to protect the holding control, it is very important. For example, if anemia is gastric ulcer drugs, such as aspirin or ibuprofen should not be used unless otherwise doctors.

Medical Treatment

Medical treatment of anemia varies considerably, depending on the cause and severity of anemia.

If anemia is mild, there are no symptoms or mild symptoms, the doctor will perform a thorough examination in the outpatient doctor's office. If, for any reason, is it will start the appropriate treatment. For example, if anemia is mild and low iron, iron supplements may be given a more thorough investigation to determine the causes of iron deficiency.

On the other hand, if the injury or sudden blood loss anemia, gastric ulcer bleeding quickly and hospitalization and transfusion of red blood cells may also relieve symptoms and replace lost blood. Other measures to control bleeding may occur at the same time stop the blood loss.

Transfusion may be necessary in the case of other less critical, and. For example, a person can expect problems related to chemotherapy, bone marrow is a doctor who is undergoing chemotherapy for cancer treatment.

Drugs of Anemia

Common Underlying causes of anemia drugs and Improve Treatments That can include the Following:

Iron can be taken during pregnancy and the iron content is low. Important to determine the reason of the iron deficiency, and treat it correctly.

Vitamin supplements of folic acid and vitamin B12 may replace people with poor eating habits. Pernicious anemia is Unable to absorb a Sufficient

Amount of vitamin B12, and vitamin B12 injections monthly commonly filled with vitamin B 12 levels, correct anemia.

Poetic Alpha – (general Crete or Epogen) injections can be used for the manufacture of red blood cells Increased kidney problems. Reduction in advanced kidney disease, Such as the human erythropoietin previously Described erythropoietin production.

Stop causes anemia drugs may be reversed aussi anemia Effective consulting the doctors.

If the alcohol is because of anemia, in addition to taking vitamins and nutrition to maintain adequate, alcohol consumption needs to be stopped

Surgery

There are no specific surgical interventions in the treatment of anemia. However, the causes of salon anemia, surgery may be a treatment choice.

Prevention of anemia:

Good pre-pregnancy nutrition not only helps to prevent anemia, aussi contribute to the establishment of other nutrition store in the mother's body. During pregnancy to eat a healthy, balanced diet helps to Maintain the level of health of the mother and the baby growing need iron and other major nutrients.

Good food sources of iron include the Following:

- Meat – beef, pork, lamb, liver, and other internal organs
- Poultry – chicken, duck, turkey, liver (Especially red meat)

- Fish – shellfish, Including clams, mussels, oysters, sardines, anchovies

Green leafy vegetables of the cabbage family, Such as broccoli, kale, turnip greens, collard greens

Vegetables, lima beans Such as, green beans, dried beans, peas, pinto beans Such as, black-eyed peas, and canned baked beans

Yeast fermentation of whole wheat bread and rolls

Rich in iron, white bread, pasta, rice, and grains

The Following list of food, good source of iron. About the recommended daily iron Requirements, be safe to consult with your doctor.

Iron-rich food quantity about iron Content (mg)

Oyster 3 ounces 2. 13

3 ounces of beef liver 7. 5

Prune juice 1/2 cup 5. 2

2 ounces Clams 02. 04

Walnuts 1/2 cup 3. 75

Three ounces of ground beef 3. 0

Chickpeas 1/2 cup 3. 0

1/2 cup oatmeal 2. 8

Pork roast 3 ounces 2. 7

Cashew nuts 1/2 cup 2. 65

Shrimp 3 ounces 2. 6

The prognosis of anemia

Recovery of anemia causes anemia and how serious it is. For example, if gastric ulcer Caused by bleeding and anemia Because of anemia can be cured if the treatment. of ulcers and bleeding stopped.