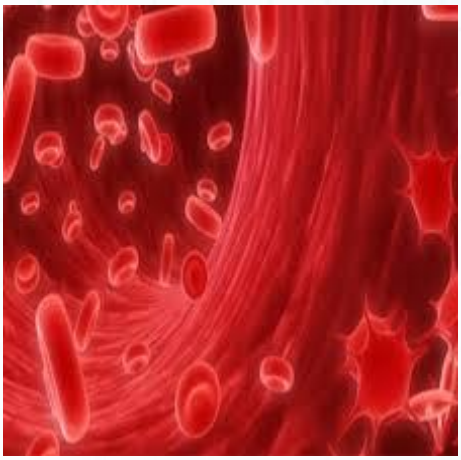
Hematology



Hematology is a branch of medication concerning the investigation of blood, the blood-forming organs, and blood maladies. "Heme" originates from the Greek for blood. Hematology includes the study of etiology. It involves treating diseases that affect the production of blood and its components, such as blood cells, hemoglobin, blood proteins, and the mechanism of coagulation. The laboratory work that goes into the study of blood is frequently performed by a medical technologist. Hematologists also conduct studies in oncology-the medical treatment of cancer.

Scope of hematology

- Hematology is practiced by specialists in the field who deal with the diagnosis, treatment and overall management of people with blood disorders ranging from anemia to blood cancer. Some of the diseases treated by hematologists include:
- Iron deficiency anemia and other types of anemia, such as sickle cell anemia or trauma-related anemia
- Polycythemia or excess production of red blood cells
- Myelofibrosis
- Leukemia
- Platelet and bleeding disorders such as hemophilia, idiopathic thrombocytopenic purpura and Von Willebrand disease
- The Myelodysplastic syndromes
- Hemoglobinopathies such as thalassemia and sickle cell disease
- Multiple myeloma
- Malignant lymphomas
- Blood transfusion
- Bone marrow stem cell transplantation

Symptoms of moderate to severe iron-deficiency anemia

- General fatigue
- Weakness
- Pale skin
- Shortness of breath
- Dizziness
- Strange cravings for non-food items, such as dirt, ice, and clay

- Tingling or a crawling feeling in the legs
- Swelling or soreness in the tongue
- Cold hands and feet
- Fast or irregular heartbeat
- Brittle nails
- Headaches

Treatment of Iron-Deficiency Anemia

Iron Supplements: Iron tablets can help restore iron levels in your body. If possible, you should take the iron tablets on an empty stomach to improve absorption. If they upset your stomach, they can be taken with meals. You may need to take the supplements for several months. Iron supplements may cause constipation or stools that are black in color.

Diet: Diets high in red meat, dark leafy vegetables, dried fruits and nuts, and iron-fortified cereals can help treat or prevent iron deficiency. Additionally, vitamin C helps your body absorb iron. If you are taking iron tablets, a doctor might suggest taking the tablets along with a source of vitamin C, like a glass of orange juice or citrus fruit.

Treating the Underlying Cause of Bleeding: Iron supplements will not help if the deficiency is caused by excess bleeding. Oral contraceptives (birth control pills) might be prescribed to women who experience heavy periods to reduce the amount of menstrual bleeding each month.

In the most severe cases, a blood transfusion can replace iron and blood loss quickly.

Prevention from Iron-Deficiency Anemia

When caused by inadequate iron intake, iron-deficiency anemia can be prevented by eating a diet high in iron-rich foods and vitamin C. Mothers should make sure to feed their babies breast milk or iron-fortified infant formula.

Foods high in iron include:

- Meat, such as lamb, pork, chicken, and beef
- Beans
- Pumpkin and squash seeds
- Leafy greens, such as spinach
- Raisins and other dried fruit
- Eggs
- Seafood, such as clams, sardines, shrimp, and oysters
- Iron-fortified, dry and instant cereals

Foods high in vitamin C include:

- Citrus fruits, such as oranges, grapefruit, strawberries, kiwis, guava, papaya, pineapple, melons, and mango

- Broccoli
- Red and green bell peppers
- Brussels sprouts
- Cauliflower
- Tomatoes
- Leafy greens

As we all know that blood performs vital activities in our body. It carries oxygen and circulate it throughout the body along with the escalation of the oxygenated blood from the body. So it's important to keep track record of normal functioning of our blood reports.

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