

Anaemia Sign of Neutritional Deficiency to Cancer



P. D. HINDUJA HOSPITAL
& MEDICAL RESEARCH CENTRE

Introduction:

Anaemia is a sign where there is a reduced level of the haemoglobin and red cells in the blood. It is not a disease by itself but is a manifestation of another condition which can be as simple as nutritional deficiency of iron to as serious as bowel cancer or blood cancer.

Blood cells are made by bone marrow, which is a spongy substance in the centre of bone marrow. There is a constant process of production of new blood cells and destruction of old blood cells. The balance between these processes is maintained such that the haemoglobin and other blood cells are kept in the normal range. Your blood is made up of fluid called plasma and blood cells. There are three major types of blood cells.

- Red blood cells (RBCs) that contain haemoglobin.
- White blood cells (WBCs) are part of immune system and help fight infection.
- Platelets that are tiny fragments of cells that stop bleeding.

Symptoms of anaemia

Common symptoms of anaemia include:

- Feeling tired
- Looking pale
- Breathlessness
- Feeling of heart racing or thumping (called palpitations)

Mild anaemia may have no signs or symptoms. If you do develop signs and symptoms, you may have tiredness, weakness, or pale or yellowish skin. These signs and

symptoms are far more obvious, in severe anaemia. As anaemia gets worse, patients also experience faintness or dizziness, increased thirst, sweating, weak and rapid pulse, or fast breathing. Severe anaemia may cause, shortness of breath. Anaemia also cause heart-related symptoms because your heart has to work harder to carry oxygen-rich blood through your body. If anaemia left untreated, it can lead to problems with heart and lungs.

Remember, similar symptoms may be caused by problems other than anaemia. If you have any of these symptoms, consult a haematologist for advice.

There are many types of anaemia, and they are linked to a variety of diseases and conditions. Some types of anaemia are very common, and some are very rare. Some are very mild and have little or no impact on a person's life. Some are severe and can even be life-threatening if not treated aggressively. All anaemias have one thing in common, though: They all affect your overall health. The good news is that anaemia often can be successfully treated or even prevented.

Causes of anaemia

Anaemia occurs when your body makes too few RBCs, destroys too many RBCs, or loses too many RBCs. Many diseases, conditions, and other factors can cause this to happen.

Most fall into the following three groups

- Reduced production of red blood cells and/or haemoglobin. This can happen if you don't have enough iron, vitamin B12 or folate in your diet, or have health problems like problems related to food pipe that stop the absorption of nutrients. The production of red blood cells may be abnormal because of poor bone marrow function itself like aplastic anaemia or if bone marrow space is occupied by abnormal cells like cancer cells as in leukaemia. Patients with kidney problems also have reduced production of haemoglobin because of poor stimulation of the bone marrow.
- Bleeding. You can lose a lot of blood through an injury, an operation, from a stomach ulcer, or if you have prolonged or heavy periods. Small amount of bleeding from the stomach or colon everyday may not even be noticed by the patients. Bleeding from the bowel can be because of a underlying colon abnormality like colon cancer.
- Rapid destruction of red blood cells. Certain medicines can destroy the cells prematurely and cause anaemia, as can a number of inherited conditions such as sickle cell anaemia and thalassaemia.

In elderly population a specific type of bone marrow abnormality called myelodysplastic syndrome (MDS) where bone marrow is defective and produce abnormal blood cells. Majority of times patients suffering from this condition present with anaemia. This is a precancerous condition and treatments are available for this condition.

Diagnosis of anaemia

Haematologist is a specialist in diagnosing anaemia and their causes. You will be asked to have a blood test. Depending on the findings from the blood tests, treatments are offered to treat anaemia as well as underlying cause of anaemia.

Iron-Deficiency Anaemia

Iron plays an essential role in keeping you healthy. Your body needs iron to make haemoglobin, the protein in red blood cells (RBCs) that carries oxygen.

Most of the iron in your body is constantly recycled and reused for production of blood. However, you lose a little iron every day through normal body processes. You need a regular source of iron to ensure that your body has enough to make the RBCs it needs. The main way you get iron is from food.

Iron-deficiency anaemia is a condition in which your body can't match its need for iron.

The common causes for this are nutritional deficiency of iron or loss of blood from food pipe.

Prevention of anaemia

You can reduce your risk of developing anaemia by eating a healthy, balanced diet. For most people this will provide enough essential nutrients without the need to take supplements. Iron rich food items are red meat, beet root, dates, lentils, jaggery and spinach.

To more about Bone Marrow Transplant Center (BMT) at
Hinduja Hospital:

Call: 022 - 3981 8181

Email: dr_balkrishna.padate@hindujahospital.com

BMT Center:

12th floor, South Wing, IPD Building, Hinduja Hospital.

P. D. Hinduja National Hospital & Medical Research Centre

Veer Savarkar Marg, Mahim, Mumbai - 400 016 (INDIA)

Tel: 2445 1515 / 2445 2222 / 2444 9199 Fax: 2444 9151

info@hindujahospital.com

www.hindujahospital.com

P. D. HINDUJA HOSPITAL
& MEDICAL RESEARCH CENTRE