TESTS FOR ANAEMIA

A blood test called a Full Blood Count (FBC) should be performed. This will enable the laboratory to determine if anaemia is present. The laboratory will then advise your doctor on the type and cause of your anaemia and will guide further testing that may be required.

Additional tests that may be helpful include iron, vitamin B12 and folic acid levels.

For the more rare causes of anaemia, your doctor will determine which further tests are required.

TREATMENT

The treatment of anaemia will depend on the cause and can vary from simple vitamin/mineral supplementation (iron, vitamin B12 and folic acid) to blood transfusion.

Your doctor will determine whether additional treatment is required.

PREVENTION/DIETARY CONSIDERATIONS

A balanced diet is advised including adequate meat, eggs, leafy green vegetables and dairy products.

Should you have dietary restrictions (vegetarian/vegan), long term supplementation is advised.

At times of increased demand (e.g. pregnancy and breastfeeding), temporary supplementation, over and above your normal diet, is suggested.

BLOOD DONATION

In certain settings, a blood transfusion may be a life-saving intervention, for example:

- Trauma e.g. motor vehicle accidents
- Massive bleeding e.g. after childbirth or major surgery
- Oncology

As blood is often in short supply, those that are able to donate should consider doing so regularly. If you are interested, please contact your nearest blood bank for further information.

Your consulting pathologists

PATHOLOGISTS · PATOLOE
Drs Du Buisson, Kramer, Swart, Bouwer Inc./Ing.

AMPATH National Laboratory Services
www.ampath.co.za

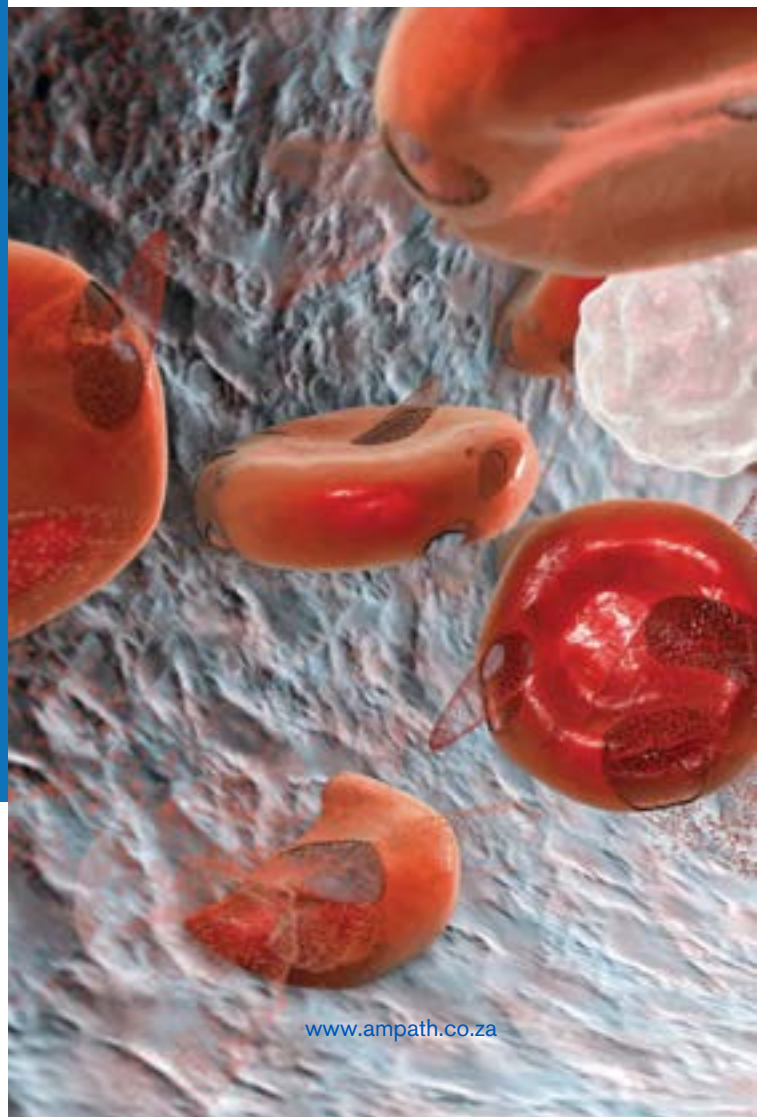
App Store Google Play

ITEM CODE: 022103 - June 2018 (SB029)

PATHOLOGISTS · PATOLOE
Drs Du Buisson, Kramer, Swart, Bouwer Inc./Ing.
AMPATH

Your consulting pathologists

ANAEMIA

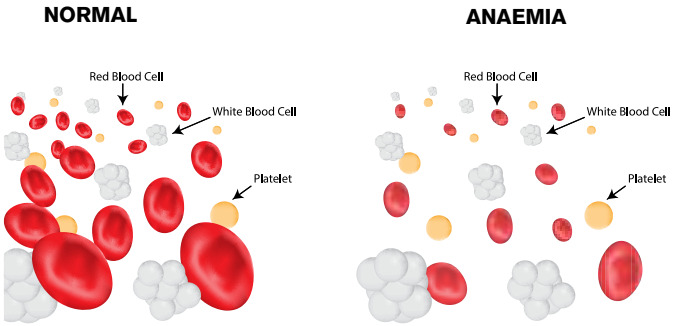


www.ampath.co.za

ANAEMIA

WHAT IS ANAEMIA?

Anaemia is a condition where there are insufficient healthy red blood cells in the body. Anaemia may be temporary or long term and can range from mild to severe. Worldwide, the most common cause of anaemia is iron deficiency, an essential nutrient required by the body to make haemoglobin. Red blood cells contain haemoglobin which is the transport molecule for oxygen and carbon dioxide. Without sufficient haemoglobin, the blood stream cannot carry sufficient oxygen to the tissues and organs.



TYPES OF BLOOD CELLS

Three types of blood cells are produced in the bone marrow: red blood cells, white blood cells and platelets. All three cell types perform vital functions within the human body.

Red blood cells:
- Responsible for carrying inhaled oxygen from the lungs to all tissues
- Responsible for returning carbon dioxide from the tissues to the lungs to be exhaled

White blood cells:
- Form part of the immune system
- Play a role in fighting off infections
- Protect the body from foreign agents that may cause disease

Platelets:
- Involved in the initial stages of blood clot formation
- When a blood vessel is damaged, platelets form a plug to seal off the vessel and stop the bleeding

TYPES OF ANAEMIA

There are three main ways in which a person can develop anaemia:

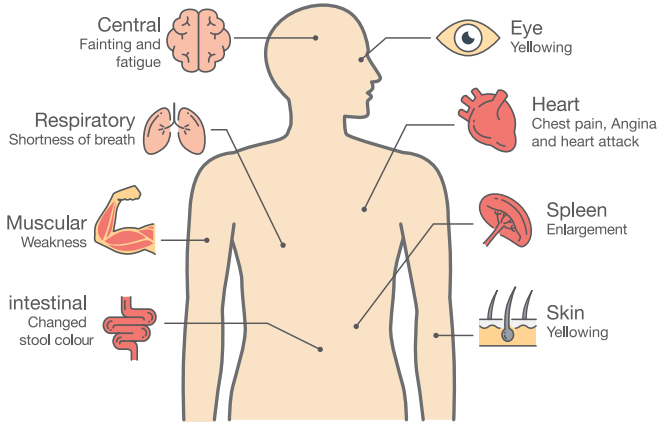
1. The bone marrow fails to produce red blood cells because of:
   - Iron deficiency (most common cause worldwide)
   - Folic acid or vitamin B 12 deficiency
   - Chronic illness
   - Medication and drugs/toxins
   - Malignancies e.g. leukaemia
2. There is an excessive loss of circulating red blood cells because of:
   - Heavy menstruation
   - Bleeding in the digestive tract (e.g. peptic ulcer)
   - Bleeding in the urinary tract (e.g. infection or kidney stones)
   - Recent surgery or trauma
3. There is increased destruction of red blood cells by the body because of:
   Inherited red cell abnormalities
   - sickle cell anaemia
   - thalassaemia
   - enzyme deficiencies

   Acquired/non-inherited causes
   - Auto-immune disease
   - Infections
   - Drugs/toxins

WHO IS AT RISK OF GETTING ANAEMIA?

- Infants and elderly
- Menstruating, pregnant and breastfeeding females
- Insufficient diet
- Vegans/vegetarians
- People with intestinal disorders (e.g. Crohn's and coeliac disease)
- People with chronic illness (e.g. cancer, chronic kidney disease)

WHAT ARE THE SYMPTOMS OF ANAEMIA?



Brain: fatigue, dizziness, fainting

Heart: palpitations, low blood pressure, rapid heart rate, chest pain

Skin: paleness, coldness, yellowing

Lungs: shortness of breath

Muscles: weakness

Nerves: pins and needles

WHEN SHOULD I SEE MY DOCTOR?

The effects of anaemia are manifested in all systems of the body and as a result a variety of symptoms may be experienced, as shown in the diagram.

The most common complaint by an anaemic person is fatigue however there are many other reasons to feel tired. The symptoms experienced often correlate with the severity of the anaemia. In mild cases, the patient often has no manifestations and as a result may go undiagnosed.

If you experience any of the symptoms listed in red above, consider seeking the opinion of your medical practitioner for examination and further investigation.

Regular blood donors may be informed that they have anaemia when they attempt to donate blood and they should then seek medical advice immediately.