melbourne haematology

fact sheet

What is Neutropenia?

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Neutropenia is the medical term for a decrease in the number of white blood cells called neutrophils.

What are neutrophils?

There are three groups of cells that circulate in the blood stream: red cells (haemoglobin), platelets (which help with blood clotting), and white cells. Neutrophils are a particular type of white cell, and a very important part of the immune system, protecting the body against bacterial infections.

What is the normal number of neutrophils?

The number of circulating neutrophils varies a little with age, but the usual normal range is 1.5–8.0 x 10^9/l (1.5–8 million neutrophils per millilitre of blood).

What does low neutrophils mean?

Neutrophils are particularly important in fighting bacterial infections. Bacteria cause many different types of infection (e.g. some ear infections, skin and wound infections) which are sometimes serious (e.g. blood infections), and are treated with antibiotics — unlike viral infections (e.g. flu-like illnesses, the common cold), which don't need antibiotic treatment. Because you have low neutrophils, you may be more susceptible to bacterial infections.

Why do I have low neutrophils?

There are a number of reasons why people have low neutrophils. Some people are born with low neutrophils; others develop conditions that cause it — including immune problems, exposure to some drugs, and some viral infections. There are also a number of other, rarer causes.

What tests are needed to find out why I have got neutropenia?

The blood tests required will depend on how long you've had low neutrophils. Sometimes only one or two tests are needed; other times many blood tests, and even a bone marrow test, may be required.

What do I need to do about the neutropenia?

The major concern with neutropenia is the risk of developing a serious bacterial infection. It can sometimes be difficult to tell whether you have a bacterial infection (needing antibiotics) or a viral infection (which doesn't).

If you develop a high fever (usually above 38.5°C), you should be seen by your local doctor for examination and blood tests.

Do I need to stay away from other people with infections?

Most infections passed between people are viral (e.g. the common cold). Most serious bacterial infections are not easily transferred from person to person. Generally you do not need to isolate yourself from others.

How long will I have neutropenia?

This depends on the cause. Although some causes of neutropenia do not resolve, most improve over a couple of months, or sometimes years. Other causes can take many years to improve.

References

1. James RM, Kinsey SE. The investigation and management of chronic neutropenia in children. Archives of Disease in Childhood. 2006 Oct;91(10):852-858.

Further Questions?

The information presented in this fact sheet is intended as a general guide only.

Patients should seek further advice and information about **What is Neutropenia?** and their individual condition from their treating haematologist or doctor.

For additional information about blood disorders and their treatment, or to contact one of our specialist haematologists, visit the Melbourne Haematology website:

www.melbournehaematology.com.au