IVIG Patient Information

What is intravenous immunoglobulin? If in doubt ask.

Your doctor will have told you that you need to be given a medicine called intravenous immunoglobulin to help you recover from your illness.

Intravenous immunoglobulin, or IVIG for short, may sound daunting, but don't worry. It's simply a preparation of purified natural human blood plasma components that you already have throughout your body.

Intravenous means that it goes directly into your veins, whilst immunoglobulin is another word for antibody. You may already know that antibodies help your body fight infection.
So intravenous immunoglobulin is a medicine that is injected into your veins, either to help you fight infection or to help your circulation work properly, depending on your illness.

How does intravenous immunoglobulin work?

Primary antibody deficiency

Primary antibody deficiency, or PAD for short, is a hereditary disease, which results in either a shortage of or a total lack of antibodies. This means that the body cannot fight infection as well as it should.
By taking intravenous immunoglobulin, you are boosting the amount of antibodies in your circulation to a level that can fight infection successfully. This level of antibodies needs to be topped-up every so often using Intravenous immunoglobulin to keep this protection going.

Secondary antibody deficiency

Secondary antibody deficiency is a shortage of or a total lack of antibodies as a result of the effects of another illness. So this disease is not hereditary but is an acquired disease.
The effects though are the same as in PAD, that is, your body cannot fight infection as well as it should.
Again, intravenous immunoglobulin is needed to boost antibody levels so that they can fight infection effectively. Regular doses of intravenous immunoglobulin are needed to keep these antibody levels high enough to fight infection.

Idiopathic Thrombocytopenia Purpura

Idiopathic Thrombocytopenia Purpura, or ITP for short, is a disease which results in a shortage of platelets, which help your body heal cuts and wounds.
By giving intravenous immunoglobulin, the white blood cells in the spleen, which normally break platelets down as they reach the end of their useful life, are blocked; this means that platelet levels dramatically increase. Repeated doses of intravenous immunoglobulin are needed to maintain this white blood cell blocking action and to keep platelet levels up.

Kawasaki disease

Kawasaki disease is thought to be an infectious disease (though this is not yet proven), mainly appearing in children. This disease results in inflammation of the blood vessels and other tissues, such as heart muscle.
Although intravenous immunoglobulin is known to be very effective in treating Kawasaki disease, the way that it works is

Chronic Lymphocytic Leukemia

Chronic lymphocytic leukemia, or CLL for short, is a disease, which causes the cells, which make antibodies (called B·cells) to not work properly. This means that the body does not make enough antibodies to fight infection.

By giving intravenous immunoglobulin, the levels of antibodies are increased enough to keep infection at bay. As in the other diseases mentioned above, doses of intravenous immunoglobulin must be repeated to keep these antibody levels in sufficient numbers.

Intravenous Immunoglobulin preparations

There are many different preparations available for treatment, some manufactured in the UK, others manufactured abroad.

Whichever preparation is used, they are all essentially the same; antibodies purified from plasma supplied by blood donors.

Bottles of intravenous immunoglobulin either come in liquid form or as a solid freeze-dried powder that is then made into liquid with the addition of purified water.

The amount of intravenous immunoglobulin in each bottle is measured in grams, and the amount needed for successful treatment is expressed in grams/kg.

Once your doctor or nurse has worked out how much you need, the intravenous immunoglobulin will be given to you through a drip into your arm. This will either happen at the hospital, or in certain circumstances, you will be shown how to do it yourself at home.

Who needs intravenous immunoglobulin?

Intravenous immunoglobulin has been used to treat all sorts of illnesses for the last 20 years, and new uses are being found all the time. Illnesses in which treatment using intravenous immunoglobulin is common include:

Primary antibody deficiency - PAD (a hereditary illness which results in a partial or complete lack of antibodies)

Secondary antibody deficiency- (an illness caused by a previous illness which results in a partial or complete lack of antibodies)

Idiopathic Thrombocytopenic Purpura - ITP (a shortage of the blood platelets which help your body heal cuts and abrasions)

Kawasaki disease (a possibly infectious inflammation of the blood vessels in children) Chronic lymphocytic leukemia – CLI (a disease which results in fewer antibodies being made)