Intravenous Immunoglobulin in Neurological disorders

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What is Intravenous Immunoglobulin (IVIg)?

Intravenous immunoglobulin (IVIg) is a blood product that combines antibodies from multiple blood donors.

IVIg is used for the management of specific inflammatory and auto-immune mediated neuromuscular disorders.

Although not all IVIg is licenced in neurological conditions, there is convincing evidence that it is an effective treatment in many conditions. These include Chronic Inflammatory Demyelinating Polyneuropathy (CIDP), Multifocal Motor Neuropathy (MMN) and Guillain–Barré Syndrome (GBS). These conditions are known as Autoimmune diseases.

The way that IVIg works in these conditions is not fully understood but it thought to dampen down the inflammatory response that is present in these conditions caused by the body’s immune system. This lessens the effect of the body’s immune system attacking your nerves or muscles and may help to reduce the symptoms of your illness.

What are the risks?

You will be asked to give written consent, prior to the treatment and will be given the opportunity to ask any questions. If at any time you decide that you do not wish to receive IVIg treatment, then please inform the Advanced Nurse Practitioner or your Consultant Neurologist, via the secretary.

There is an extremely small risk that blood-borne infections may be passed on during the infusion. The donors have been screened to make sure that they are all negative for Hepatitis A, B, C and HIV. Although stringent steps are taken to avoid virus transmission, the risk of blood-borne infection is not completely
eliminated. No recipients of IVIg are known to have contracted HIV or Creutzfeldt–Jakob disease (vCJD).

A sample of your blood will be stored in the laboratory so that future blood samples can be cross referenced against it. If you were to develop a problem with your treatment at any stage, the Neurologist would be able to check when this happened and which product was involved.

**How will I receive the Immunoglobulin?**

IVIg is given through an intravenous (IV) infusion at a rate, dose and time which is individualised for each patient.

Your IVIg will be transfused into a vein using a small cannula, usually in your arm or hand for between 1-5 days. The infusion may take many hours as the medication has to be given slowly. You will be observed closely and your blood pressure, pulse, breathing rate and temperature checked regularly. Depending on your condition, you may need to stay in hospital for up to 5 days or you may need to attend as a day patient. If attending as a day patient, you will need to stay for 30 minutes following the infusion. You will normally be allowed home once your observations have been recorded and are within normal limits.

In GBS, mostly patients will just require a single 5 day course of Immunoglobulin treatment. Other conditions such as CIDP or MMN will need repeated longer term courses of Immunoglobulin for the management of the condition.

If the treatment is successful, it may need to be repeated several times or given as a regular treatment every month. IVIg can be given at home, if a patient requires this regularly and may be option for patients who struggle with the time demands of hospital based IV treatments.
Will I need any additional tests?

Whilst receiving this treatment, you will have regular monitoring in the form of blood tests and your general health will be fully assessed.

If you are due to have an infusion and you begin to feel unwell, please contact the Advanced Nurse Practitioner or Consultant Neurologist, via the secretary. If you are found to have an infection or are being treated with antibiotics, your treatment may need to be delayed until the infection has been treated and in some cases, treatment may be omitted. The risk of side effects or reactions is increased, if there is an infection present.

Are there any side effects?

As with all medications, there is a small chance of side effects. However, immunoglobulin has a good safety record.

Mild reactions may occur within the first 30 minutes of the start of the infusion and include headache, chills, back pain or muscular aches. These can be treated by stopping or slowing the rate of immunoglobulin treatment or controlled via medication.

Severe allergic reactions are very rare. These typically happen within seconds or minutes of the beginning of the infusion. Rarely, there can be serious side effects which include allergic reactions, kidney problems or more severe headaches.

IVIg does thicken the blood slightly so can very rarely be associated with conditions caused by increased clotting of the blood such as heart attacks, strokes or blood clots.

To avoid these risks the infusion is given by appropriately trained staff, under the supervision of your Consultant Neurologist.
Your vital signs will be monitored throughout the infusion and close observation will be kept to look for any signs/symptoms of a reaction. If you are receiving IVIg longer term, your overall health will be monitored closely with regular blood tests and assessments prior to treatment by the Advanced Nurse Practitioner.

**How long does it take to work?**

IVIg may take between 2-12 weeks to be effective and its response is different in each patient.

**Does it affect vaccinations?**

IVIg may interfere with the immune response following any vaccines and this can make vaccines less effective.

Therefore it is best to avoid vaccines for at least 6 weeks or longer after receiving IVIg treatment.

**More Information**

If you require any further information about IVIg or if you have any concerns regarding your treatment, then you should discuss these with your Consultant Neurologist or the Advanced Nurse Practitioner.
References


NHS Constitution. Information on your rights and responsibilities. Available at www.nhs.uk/aboutnhs/constitution
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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