

Intravenous (IV) iron infusions

Why iron given by a drip into a vein is sometimes needed...

This leaflet answers some common questions about IV iron infusions. It does not contain all available information and does not take the place of talking to your doctor about why IV iron has been recommended in your particular case.

What is an IV iron infusion?

“Intravenous” or “IV” means giving something directly into the blood stream of the body through a vein. A needle placed into a vein (usually in the back of the hand or arm) is attached to a drip that contains iron mixed with saline (a sterile salt water solution). This fluid is slowly “dripped” (infused) into the vein and mixes with the blood in your body.

Why is iron important?

Iron is essential for the body to make haemoglobin (Hb), a pigment that makes red blood cells red. When the amount of iron in the body gets too low, the haemoglobin level falls below normal. This is known as “iron deficiency anaemia”.

Haemoglobin is very important as it carries oxygen from the lungs to the rest of the body. If your haemoglobin or iron levels are low this may make you feel tired and not able to carry out your normal routine.

Why might I need IV iron?

The most common way to treat iron deficiency anaemia is to take iron by mouth as a tablet or liquid. This works well for most people and is usually tried first.

IV iron might be needed if you are:

- Unable to tolerate iron taken by mouth
- Unable to absorb iron through the gut
- Unable to absorb enough iron due to the amount of blood the body is losing
- In need of a rapid increase in iron levels to help avoid important complications or a blood transfusion (such as, before or after major surgery, significant anaemia late in pregnancy or after delivery)
- Not responding to iron tablets (such as due to chronic health problems)
- Have chronic kidney or heart failure

Risks & benefits of IV iron

Your doctor will explain the risks, benefits & available alternatives to IV iron in your particular case. The most significant risk of IV iron is a small chance of having an allergic reaction which can, in rare cases, be life threatening. IV iron is prescribed for iron deficiency anaemia when oral iron is not tolerated, effective or likely to work quickly enough & the benefits of IV iron outweigh the risks in your particular case. If there is a chance you could be pregnant, inform your doctor, as IV iron should be avoided in the first trimester in pregnancy.

Alternatives to IV iron

- > **ORAL IRON:** If you are able to tolerate and absorb iron taken by mouth this is the first option that should be tried (unless a more rapid increase in your Hb level is needed). If you get stomach (tummy) upset with iron tablets, a lower dose of iron as syrup can be tried and increased slowly as tolerated or iron tablets can be taken 2 or 3 times a week instead of daily– discuss this with your doctor as it is important that the right amount of iron is given. Many iron tablets claim to be gentle on the stomach but don't have enough iron in them to treat anaemia.
- > **IM IRON:** Injection of iron into muscle (IM) is not recommended as it is painful & can cause permanent skin scarring & discolouration.
- > **BLOOD TRANSFUSION:** Transfusion can be life saving when severe anaemia or bleeding is present. It carries greater risks than IV iron & should be avoided unless an immediate increase in Hb level is needed (when benefits outweigh risks).
- > **DIET:** Once a person has already become low in iron and anaemic it is difficult to get enough iron back into the body even with a diet that is high in iron.



Intravenous (IV) Iron Infusions (continued)

Before you have IV iron

Tell your doctor if you:

- > Are pregnant or trying to get pregnant
- > Have a history of asthma, eczema or other allergies
- > Have had a reaction to any type of iron injection or infusion in the past
- > Have a history of high iron levels, haemochromatosis or liver problems
- > Are on any medications (including over the counter or herbal supplements)

How much iron is needed?

Your doctor will calculate how much iron is needed to return Hb levels to normal & also to have some iron stored in reserve for the future. When all the iron needed by the body is given in a single infusion (one treatment) this is called a "total dose" infusion.

Sometimes a "total dose" is needed but in other cases just giving smaller amounts of IV iron can help increase Hb levels enough to improve symptoms and help avoid a blood transfusion. The rest of the iron can then be given back to the body slowly over the coming months with iron tablets.

The iron will take a few weeks to have its full effect and your doctor will check your Hb level to see how you are responding.

Types of IV iron in Australia

- Iron polymaltose* (Ferrosig or Ferrum H) can be given in a single large dose ('total dose' infusion) or less over a number of hours.
- Iron sucrose* (Venofer) cannot be given in a large dose but may be given as a series of small doses taking about 1/2 an hour and repeated over a period of days or weeks.
- Iron carboxymaltose* (Ferinject) can be given as medium dose over about 15 minutes. It may need repeating on another occasion.

Side effects of IV iron

Patients receiving iron infusions can experience side effects including:

- > Temporary changes in taste (eg metallic)
- > Headache, feeling sick or vomiting
- > Muscle and joint pain
- > Shortness of breath
- > Itchiness, rash
- > Changes to blood pressure or pulse
- > Burning and swelling at injection site
- > Severe side effects are rare. You will be closely monitored for any signs of these side effects by nursing staff.

Day of the iron infusion

- > Have your breakfast/lunch. You do not need to fast for an iron infusion.
- > Take all of your regular medications
- > You can drive home after the infusion and resume usual activities (unless there is an unexpected reaction)
- > The iron will be given through a small IV drip which will be put in your arm
- > If you experience any side effects, inform your nurse immediately

After the iron infusion

Sometimes side effects can start 1 to 2 days after the infusion and include headache, mild fever, joint and muscle aches. These generally settle down by themselves over the next few days. They are more common with 'total dose' infusions of iron polymaltose. If they are worrying you or interfere with your daily activities contact your doctor or infusion centre for advice. **If you have chest pain, difficulty breathing, dizziness or neck/mouth swelling SEEK URGENT MEDICAL ATTENTION / CALL AN AMBULANCE (000).**

Iron tablets should be stopped for a week after an iron infusion because the iron in them will not be absorbed by the body. If you are having more than one iron infusion then stop the iron tablets during the course of treatment as well. They are often not needed after IV iron infusions (especially after a 'total dose' is given): Check with your doctor if & when iron tablets are needed.

Hospital contact details:

Appointment date:

Time:

Location:

Blood test date(s):

For more information:

Talk to your doctor

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Anaemia resources for doctors including iron dosing chart: www.health.sa.gov.au/bloodsafe under toolbox