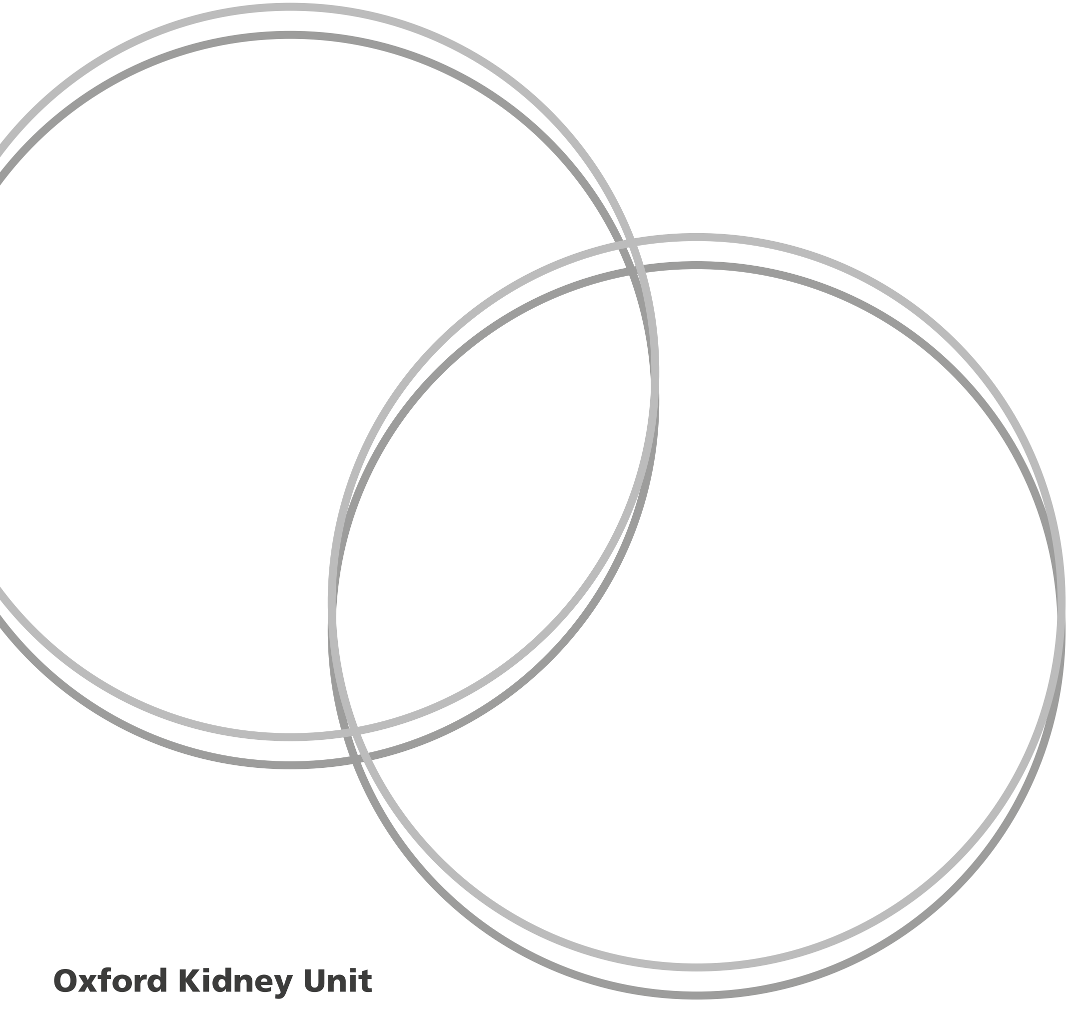
NHS
Oxford University Hospitals
NHS Foundation Trust

Iron treatment for people with Chronic Kidney Disease (CKD)

Information for patients



Oxford Kidney Unit

If you have chronic kidney disease or are receiving peritoneal dialysis (PD) or hospital dialysis (HD) and need intravenous iron then this leaflet is for you. If you are on home haemodialysis there is another leaflet that you will need to read, which will provide you with more information about receiving intravenous iron at home.

Why do I need iron?

Iron is an essential mineral for your body. It is needed for the production of haemoglobin, which is a vital ingredient in red blood cells. Haemoglobin is very important, as it carries oxygen from your lungs to the rest of your body. Your body absorbs iron from your food. As you have kidney disease, your body may not be able to absorb enough iron from your food. If you don't have enough iron in your body, you may not make enough red blood cells. This is known as 'iron deficiency anaemia'.

What happens if I have low iron levels?

If your iron level is low you may experience the following symptoms:

- tiredness
- weakness
- shortness of breath
- disturbed sleep
- mood swings
- itching
- restless legs
- loss of your sex drive.

How is my iron level measured?

Your body stores iron by attaching it to proteins. The most important proteins are called ferritin and transferrin. A low ferritin or transferrin saturation level (TSAT) may indicate iron deficiency.

Your kidney doctor or nurse will check your iron level by taking a small blood sample, to measure the amount of ferritin and TSAT that is in your blood. If your ferritin is less than 200ug/L or TSAT is less than 20%, you may need some extra iron.

If you are receiving hospital haemodialysis, you will need a lot more iron (250-500µg/L (micrograms per litre). This is because some of your red cells are ‘lost’ naturally during the dialysis treatment.

How are low iron levels treated?

One of our nurses will phone you to arrange an appointment for the iron treatment. They will let you know which type of iron is best for you, how long each treatment will take and how many treatments you will need. The iron treatment can be given in your local Renal Unit, Haemodialysis Unit, the Renal Day Case Unit or the Peritoneal Dialysis (PD) Unit.

Iron can be given as tablets, but these can cause constipation and are often poorly absorbed when you have kidney disease. People with chronic kidney disease will usually need intravenous iron (IV iron). This is a liquid solution which contains iron and is given as an injection into a vein. It can be given either through a butterfly needle (a small needle) or a cannula (a small plastic tube).

You can sit in a chair or lie on a bed when you have the treatment. You can stay in your own clothes and you can have a friend or family member there if necessary.

If you are on haemodialysis, you may need iron injections regularly. These can be given through the dialysis machine during your treatments. How often you need the injections will depend on your iron levels. Your nurse will let you know what the levels are and how much iron you need.

Before you have the iron, your nurse will ask you some questions and check your blood pressure, pulse, temperature and weight. They will also ask you about any allergies you may have and which medicines you are taking, including over the counter or herbal remedies.

If you are a woman aged 18 to 55 years, you may also be asked the date of your last period and if you may be pregnant. This is because intravenous iron should not be given during the first 12 weeks of pregnancy.

It can take between 15 to 30 minutes to have the iron treatment, as different iron preparations have to be given over different lengths of time. The type of iron you have depends on whether you have any allergies.

Once the iron treatment has finished, your nurse will remove the needle and take your blood pressure, pulse and temperature. You will need to stay in the unit for a further 30 minutes after your iron treatment has finished. This is to make sure that you do not have a reaction to the iron solution.

Are there any risks?

There has been an alert from the MHRA (Medicines and Healthcare Products Regulatory Agency) about the use of intravenous iron. The MHRA are a Department of Health body that advises about the safe use of medicines and other healthcare products.

The MHRA were concerned about the risk of a severe allergic reaction (called anaphylaxis) which can happen when IV iron is being given. This is rare, however if the reaction is severe it could be life threatening.

If you have chronic kidney disease and are not on dialysis, you come in for hospital haemodialysis or you are on peritoneal dialysis, you will have your intravenous iron administered in hospital. This is so we can monitor you closely while you receive your IV iron, and will be able to react quickly if you have any signs of an allergic reaction.

Let the nurse know if the injection feels sore or uncomfortable. If the nurse is also suspicious that iron may be leaking outside of the vein they will stop the treatment immediately and may need to move the needle to a different vein.

If any of the iron leaks into the surrounding tissues under your skin (extravasation), you may get a brownish staining around the area where the needle was inserted. The staining could last a long time or be permanent.

How quickly will the iron treatment work?

It can take a couple of weeks before your red blood cell count (haemoglobin) and ferritin start to increase, and for any symptoms related to low iron levels to get better. If you are on oral iron medication, do not re-start the tablets for at least 5 days after the administration of intravenous iron. We will measure your red blood cell count and ferritin level by taking a small amount of blood four to six weeks after the treatment (this can be taken at your GP surgery, Renal Unit, or sometimes during a home visit). We may need to give you another iron treatment if the level is still low.

If you are on hospital haemodialysis, your nurse will measure your ferritin level with your routine bloods and let you know if the iron dose needs to change.

Are there any side effects?

Most people do not experience any problems; however there are some side effects you should be aware of:

	Symptoms	Treatment
Common (about 1 in 10 people)	• Headache • dizziness • flushing • high blood pressure • feeling sick (nausea).	Your treatment will be stopped for a short period and then restarted at a slower rate. If the side effects continue, the infusion will be discontinued.
Uncommon (about 1 in 100 people)	• Change in taste sensation • low blood pressure • vomiting • tingling sensation • constipation or diarrhoea • rash • fatigue • high temperature.	Your nurse will stop the treatment and will ask a doctor to see you. You will be prescribed some medication to ease the symptoms. We may suggest another type of iron treatment instead.
Rare (about 1 in 1,000 people)	• Flu-like illness (may occur a few hours to several days after the treatment) • swelling of the face • difficulty breathing • fainting.	Your nurse will stop the iron infusion and give you emergency treatment for anaphylaxis.

Who can I speak to for more information?

If you are a home or hospital haemodialysis patient:

Please speak to your dialysis nurse at your local Haemodialysis Unit.

If you are on peritoneal dialysis treatment:

Please contact your local peritoneal dialysis nurse.

If you are not on dialysis:

Please contact your local Anaemia Team
Monday to Friday 8am to 5pm (closed on Bank holidays)

Stoke Mandeville:	**01865 225 348**
High Wycombe:	**01865 225 348**
Swindon:	**01793 605 291**
Milton Keynes:	**01908 996 489**
Banbury:	**01865 225 349**
Oxford:	**01865 228 921**

If we are not available please telephone:

Mobile: **07385 933 254** (only during working hours 8am to 5pm).

Useful links

Oxford Kidney Unit

Lots of information about the Oxford Kidney Unit for patients and carers.

Website: www.ouh.nhs.uk/oku

Kidney Patient Guide

Information for patients with kidney failure and those who care for them.

Website: www.kidneypatientguide.org.uk

Kidney Care UK

A charity which has lots of practical support and information for people with kidney disease.

Website: https://kidneycareuk.org

Six Counties Kidney Patients Association

The SCKPA is run for patients by patients or family members. They offer support to people suffering from kidney disease or who are on dialysis. They work closely with the Oxford Kidney Unit and have branches in Oxfordshire, Northamptonshire, Buckinghamshire, and Milton Keynes, and parts of Wiltshire, Gloucestershire and Berkshire.

Website: www.sckpa.org.uk

National Kidney Federation

A charity which has lots of practical support and information for people with kidney disease.

Website: www.kidney.org.uk

OUH Patient Portal
Health for Me

Please ask a member of the kidney team to sign you up to the patient portal.

Website: www.ouh.nhs.uk/patient-guide/patient-portal

Further information

If you would like an interpreter, please speak to the department where you are being seen.
Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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www.ouh.nhs.uk/information

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