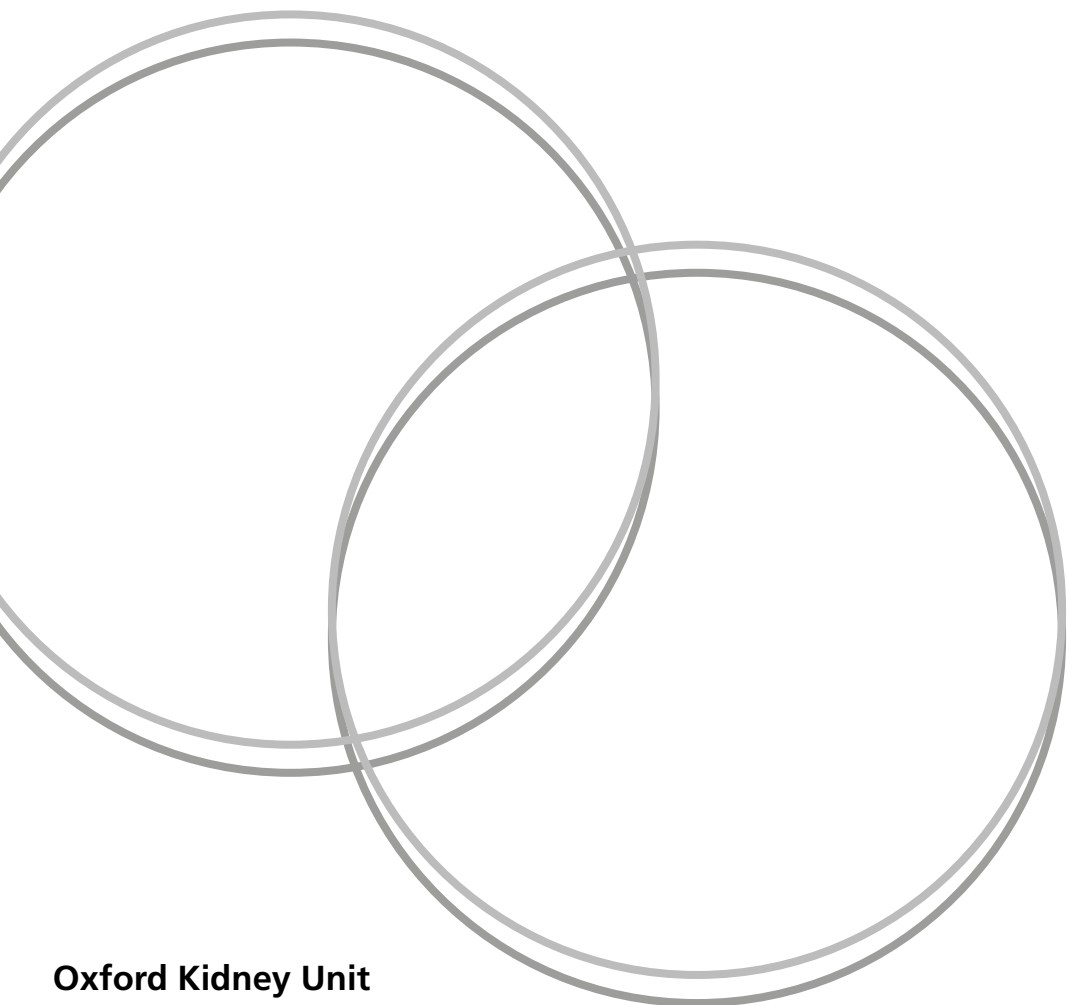




Oxford University Hospitals
NHS Foundation Trust

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 of these proteins is called ferritin. A low ferritin level usually indicates a low iron level.

Your kidney doctor or nurse will check your iron level by taking a small blood sample, to measure the amount of ferritin that is in your blood. If your ferritin is below 200µg/L (micrograms per litre) 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 to keep you company, if you wish.

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 ferritin level. Your nurse will let you know what the level is 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.

It can take between 30 minutes and 2 hours 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.

If you are on haemodialysis, the iron injection is given during your dialysis treatment. It takes 6 minutes to go into the machine, so you won't need to stay in the unit any longer than your usual time.

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 extremely rare (serious reactions are estimated to be less than 1 in 1 million doses). 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.

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. We will measure your red blood cell count and ferritin level by taking a small amount of blood four weeks after the treatment (this can be taken at your GP surgery, local Renal Unit (during your routine clinic appointment), 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)	<ul style="list-style-type: none">• Changes in your taste whilst you are receiving the injection	You may wish to suck on a mint or boiled sweet.
Uncommon (about 1 in 100 people)	<ul style="list-style-type: none">• Feeling sick (nausea)• Abdominal pain• Headache• Hives (an itchy red rash)• Slightly low blood pressure	Your treatment will be stopped for a short period and then restarted at a slower rate. If the side effects continue, you may need a different type of iron.
Rare (about 1 in 1,000 people)	<ul style="list-style-type: none">• Palpitations (a more noticeable or faster than normal heart beat)• Very low blood pressure• Dizziness and feeling faint	Your nurse will stop giving you the iron and will ask a doctor to see you urgently. You will be prescribed some medications to ease the symptoms. We may suggest another type of iron treatment instead.
Very rare (less than 1 in a million people)	<ul style="list-style-type: none">• Swelling of your face (an anaphylactic reaction)• Difficulty breathing	Your nurse will stop the injection and give you 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 a peritoneal dialysis patient:

Please contact your local peritoneal dialysis nurse.

If you are not on dialysis:

Please contact your local Anaemia Team:

Stoke Mandeville 01865 228 921

High Wycombe 01865 226 657

Swindon 01793 605 291

Milton Keynes 01908 996 489

Banbury 01865 225 210

Oxford 01865 225 210 or 226 657

If you have any questions about your appointment for an iron injection in Oxford, please call the Renal Day Case Unit:

Tel: **01865 226 106**

(8.30am to 6.30pm, Monday to Friday)

Further information

GOV.UK

This website also has further information about intravenous iron.
Website: www.gov.uk/drug-safety-update/intravenous-iron-and-serious-hypersensitivity-reactions-strengthened-recommendations

National Kidney Foundation

This website has information about iron deficiency anaemia.
Website: www.kidney.org/atoz/content/ironDialysis

Oxford Kidney Unit

This website has information about the Oxford Kidney Unit for patients and their relatives.
Website: www.ouh.nhs.uk/OKU

Kidney Care UK

This website provides information and support to kidney patients and their family.
Website: www.kidneycareuk.org/about-kidney-health/conditions/anaemia/

If you need an interpreter or would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.

Making a difference across our hospitals

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www.ouh.nhs.uk/information



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