Intravenous iron treatment at home

Information for patients on haemodialysis

Oxford Kidney Unit
If you are a home haemodialysis patient and you need to have intravenous (IV) iron treatment, then this leaflet is for you. This leaflet will help you to decide whether to have your iron treatment in hospital or 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 normally 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 do not 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 are my iron levels 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 low iron levels.

Your kidney doctor or nurse will check your iron levels by taking a small blood sample to measure the amount of ferritin that is in your blood. If your ferritin is below 500μg/L (micrograms per litre) you may need some extra iron.

How are low iron levels treated?

Iron can be given as tablets, but these can cause constipation and are not absorbed very well when you are on dialysis. Most dialysis patients will need intravenous (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), a cannula (a small plastic tube), or while you are on the haemodialysis machine.

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.

For this reason it is important that you understand the potential risk if you are going to have this treatment at home. If you decide to have your treatment at home you will be asked to sign a consent form to confirm that you understand this risk.
Where should I have my iron treatment?

You will be asked to decide whether you want to have your IV iron in hospital or at home:

Option 1: IV iron treatment at home

You could opt to give yourself an IV iron product called Venofer during your dialysis at home. This usually needs to be given once every two weeks. Your dialysis nurse will teach you how to give yourself Venofer, by putting it into the venous chamber of your dialysis machine in the last hour of your dialysis treatment. You will need to have had a minimum of 2 or more doses in the hospital with no complications before you can administer iron at home.

Before starting this treatment you would need training on how to use an EpiPen, in the very unlikely event that you have a serious allergic reaction to the treatment. An EpiPen contains adrenalin, which is the emergency treatment for a severe allergic reaction.

If you choose to have your IV iron treatment at home you would need to sign a consent form to confirm you understand the risks and are prepared to use the EpiPen.

Option 2: IV iron treatment in hospital, administered by a nurse

You could opt to have an IV iron product called Ferinject when you come to your routine clinic appointment with your kidney doctor.

The IV iron is injected into a vein in the back of your hand, either through a butterfly needle (a small needle) or a cannula (a small plastic tube). It can also be given through your dialysis line or fistula (although you will not actually have dialysis at that appointment).

It takes about 20 minutes for the dose of iron to be given, but you will need to be in the department (Renal Day Case Unit or your local Haemodialysis Unit) for 30 minutes after administration, in case you have a reaction to the intravenous iron.

Your home dialysis nurse could organise for you to have this treatment alongside your regular visits. You are likely to need it twice or three times a year.
Are there any side effects?

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

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>What should I do?</th>
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<tbody>
<tr>
<td><strong>Common</strong> (about 1 in 10 people)</td>
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<td>• Changes in your taste whilst you are receiving the injection</td>
<td>You may wish to suck on a mint or boiled sweet.</td>
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<tr>
<td><strong>Uncommon</strong> (about 1 in 100 people)</td>
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| • Feeling sick (nausea)  
• Abdominal pain  
• Headache  
• Hives (an itchy red rash)  
• Slightly low blood pressure | Stop giving the injection and let your kidney doctor or dialysis nurse know, once you have finished dialysis. |
| **Rare** (about 1 in 1,000 people) | | |
| • Palpitations (a more noticeable or faster than normal heartbeat)  
• Very low blood pressure  
• Dizziness and feeling faint | Stop giving the injection and give fluid if your blood pressure is low. |
| **Very rare** (less than 1 in a million people) | | |
| • Swelling of your face (an anaphylactic reaction)  
• Difficulty breathing | Treat yourself with your EpiPen and call 999. Use the EpiPen again if your symptoms have not improved after 5 minutes. |
Who can I speak to for more information?

Your local Haemodialysis Unit or kidney doctor will be happy to answer any questions you might have.

**Useful telephone numbers for the Haemodialysis Units:**

- Stoke Mandeville: 01296 316 997
- High Wycombe: 01494 426 347
- Swindon: 01793 605 286
- Milton Keynes: 01908 996 494
- Banbury: 01295 229 811
- Oxford: 01865 225 695

**If you have an appointment to have an iron injection in Oxford, please call the Renal Day Case Unit:**

Tel: 01865 226 106
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 for 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.