

Anaesthetics

Iron deficiency anaemia and surgery

What is anaemia?

Anaemia is the result of either not having enough red blood cells to deliver oxygen around the body or having red blood cells that are unable to carry enough oxygen. Red blood cells contain a special protein called haemoglobin (Hb) which carries the oxygen around the body. Anaemia is identified by a low level of haemoglobin. The most common form of anaemia is due to a lack of iron, either because of low levels of iron stored in the body, or the body's inability to use the stored iron.

Why is anaemia important when having surgery?

Anaemic patients having surgery are more likely to need a blood transfusion, in some cases stay longer in hospital and can have a more difficult recovery period than patients who were not anaemic before their operation. In accordance with NICE guidance UHCW are screening surgical patients for iron deficient anaemia and offering treatment.

What can you do to help?

If your pre-operative assessment has diagnosed you with iron deficiency anaemia that was not known about before, please make an appointment with your GP. Anaemia can sometimes reflect underlying health problems that your GP may need to investigate.

Improving your diet to increase the amount of iron you take in can help. A good balanced diet is very important to make sure that your body gets enough iron.



Patient Information

Iron rich foods include:

- red meat, fish and poultry
- vegetarian options such as pulses (eg lentils) and green leafy vegetables.
- fortified cereals,

It is also important that your diet contains enough vitamin C, as this helps your gut absorb iron more efficiently. Good sources of vitamin C are oranges, broccoli and peppers. . **Please refer to the dietetics patient information leaflet for more information.** For patients having surgery, diet changes alone are unlikely to be sufficient and iron replacement is advised.

What iron treatment will be offered?

The pre-operative assessment service will have performed some blood tests and determined the most appropriate method of iron replacement.

Where we have enough time before your operation, we advise taking oral iron tablets for 4-6 weeks, followed by a blood test to re-check your haemoglobin levels. The pre-operative assessment service will send you a pack containing information on improving iron in your diet and a repeat blood test form.

You can get the repeat blood test taken at UHCW, Rugby St Cross, or any other community walk in centres/clinics/pharmacies that provide blood tests for UHCW. Please visit online at www.uhcw.nhs.uk/bloodtests for locations where you can book your blood test in Coventry and Warwickshire

If you are responding well to the iron tablets, these will continue for another 6 weeks (3 months in total) to replenish your body's iron stores. Patients who do not respond to iron tablets, or who have insufficient time before their operation, may be sent an appointment to attend a clinic at UHCW to have an iron infusion given through the veins.

For the vast majority of patients, treatment with iron will not delay your surgery. **Taking your iron tablets and having a blood test at 6 weeks will allow us to add you to the waiting list without delay.**

Treatment with oral iron tablets

We request that you purchase some iron tablets from your local pharmacy. The cost of a 3 month supply of ferrous sulphate is the same or less than the prescription charge. Take this leaflet and show it to the pharmacist. They will provide you with the tablets over the counter. Should you require a prescription, please request this from your GP.

Iron tablet option 1: **Ferrous sulphate 200mg or**
Iron tablet option 2: **Ferrous fumerate 210mg**
Frequency: **Once daily, for around 3 months.**

Aim to take your tablets roughly the same time every day, generally first thing in the morning. Iron tablets are best absorbed on an empty stomach usually one hour before eating or any other medication. Take your tablets with a glass of orange juice, as vitamin C in the juice helps your body absorb iron more efficiently and makes the treatment more effective.

Antacid medications (such as omeprazole, lansoprazole), tea, coffee, wheat and dairy products all reduce the absorption of iron and should not be taken at the same time. They can be consumed 1-2 hours after taking your iron.

If you are advised to complete the full 3 month course of oral iron it is important to do so, as iron stores can take time to replenish.

Side effects of iron tablets

Nausea (sickness), constipation, diarrhoea and stomach discomfort are the commonest side effects of iron tablets. **If side effects persist we suggest taking a tablet every other day, rather than stopping treatment completely.** Taking iron on Monday, Wednesday and Friday is another option. Stomach discomfort may be reduced by taking tablets one hour after food. If alternate days dosing does not manage the side effects, try over the counter iron tablets (14mg elemental iron), rather than stopping treatment altogether. You may also notice that your stools become dark whilst taking iron tablets, this will stop once treatment is completed.

Patient Information

Treatment with iron supplements through the veins

Patients receiving an iron infusion through the veins will attend a clinic at UHCW. The appointment will take around an hour and full instructions will be provided on the day. A tube (cannula) will be inserted into a vein and the iron infusion will run over 20-30 minutes. Intravenous iron is generally very safe and well tolerated but a small number of cases may be associated with complications such as allergic reactions and infections. Some patients may feel a little flushed and light headed at the start of the infusion. The next day you may have some mild flu like symptoms, with joint aches and a temperature. Treatment usually requires two visits, one week apart. It is also important to note that iron given by the veins may not treat your anaemia any faster than iron taken orally.

Clinic Contact details

If you need to contact us for extra information, or you have a problem, you can call 024 7696 6352. If you need to write to us our address is:

Coventry:

Pre-Op Assessment Service

Outpatients Department

University Hospital (UHCW), Coventry CV2 2DX

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 6352 we will do our best to meet your needs.

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