



...chronic fatigue...  
joint pain...diabetes...  
irregular heartbeat...

...you might be  
suffering from too much  
iron in your blood...  
**haemochromatosis**

# Haemochromatosis

Iron is the second most common mineral on earth. It is essential to all plant, animal and human life. Normally, our bodies maintain a fine balance between our daily need for iron and the amount absorbed from our food.

People with Haemochromatosis have a fault in this balancing process. Over a number of years they absorb and accumulate too much iron, leading to a condition called 'iron overload'. If undetected and untreated, this stored iron can cause organ or tissue damage and can be fatal.

## Who is at risk?

Haemochromatosis is a hereditary disorder. It is one of the most common genetic disorders, particularly in Celtic people. It will develop only in an individual whose mother and father both carry a defective gene. In Europe as a whole between 1 in 300 and 1 in 400 people have the potential to develop iron overload. In Ireland, by contrast, recent results show that the proportion of the population with susceptibility to iron overload is the highest in the world: 1 in 83 have the two genes and are predisposed to develop iron overload. One in 5 Irish people are carriers of the gene.

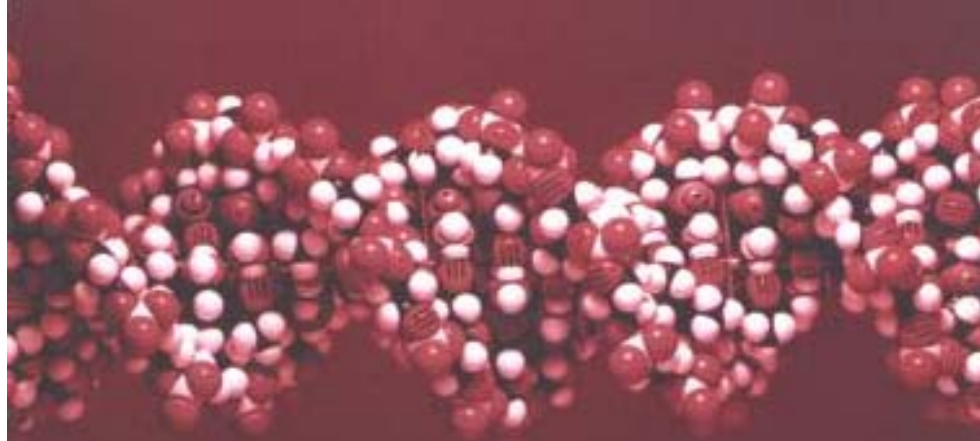
Iron build-up can take many years. Men will usually begin showing symptoms earlier than women. This is because women lose blood through menstruation and child-birth. In some cases iron build-up can start early and some people may require treatment in their teens. However, some people with iron overload have no clinical symptoms.

## What are the signs and symptoms?

The most common symptoms noticed by people with iron overload are:

- Chronic fatigue – tiredness, lethargy
- Joint pain – generalised aches and pains
- Abdominal pain – vague and non-specific
- Sexual dysfunction – loss of sex drive





Haemochromatosis is one of the most common genetic disorders, particularly in Celtic people.

### **Other signs that your GP can test for include:**

- Irregular heart beat
- Diabetes
- Hormonal changes
- Enlarged liver
- Joint damage

The symptoms mentioned above can also form part of other medical illnesses and only a doctor should make a diagnosis of Haemochromatosis.

### **How is a diagnosis made?**

A simple blood test to check your iron status can confirm or rule out iron overload. The blood test will measure:

- Transferrin Saturation - this is the ratio of Serum Iron to Total Iron Binding Capacity
- Serum Ferritin (an iron-storage protein; a raised level of this protein may indicate iron overload)
- A genetic test for the known mutations will confirm the diagnosis.

Close relatives i.e. siblings or offspring of someone with Haemochromatosis should discuss testing for the condition with their GP or hospital specialist.



## Can Haemochromatosis be treated?

The treatment is simple and effective. If the condition is detected early before any organ damage occurs, the person will have a normal life expectancy. The earlier iron overload is discovered the less likely the possibility of complications.

If damage has already begun then treatment can prevent further damage but the outlook for the patient depends on how serious the damage is. The treatment for lowering stored iron may be called Phlebotomy or Venesection and is the same procedure as that used for giving a blood donation. It's the safest and most effective way to reduce stored iron levels.

The aim of treatment is to reduce the stored iron (ferritin) in body tissues to the lower end of the normal range, while avoiding anaemia.

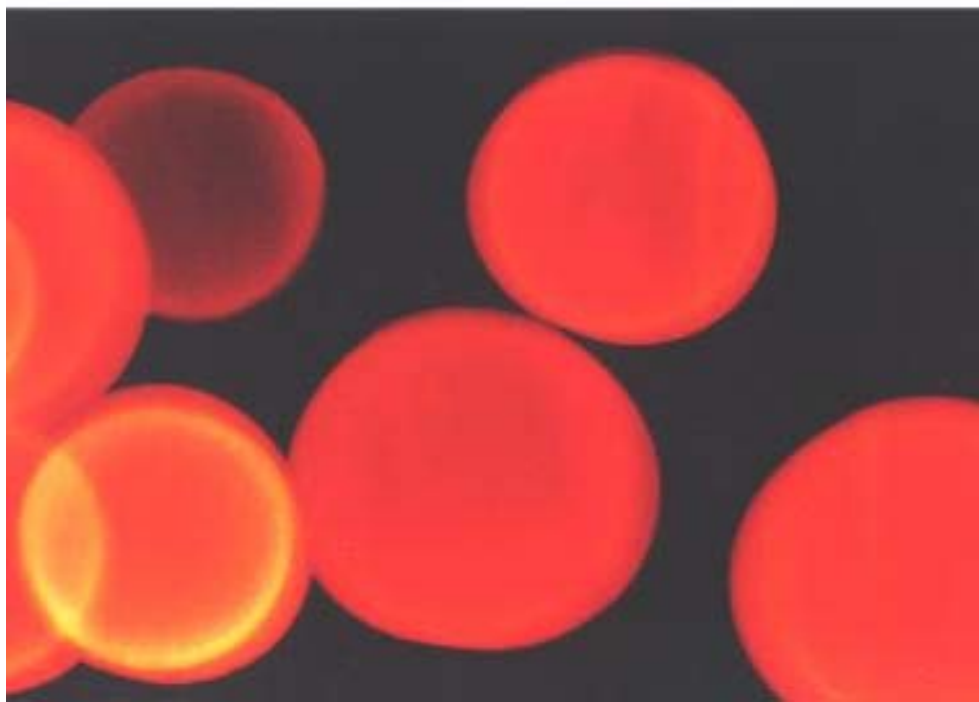
Initially, the treatment can mean weekly or twice weekly phlebotomy to rapidly reduce the ferritin levels. After a normal level has been achieved, maintenance may only require three or four sessions per year for the remainder of life. The sooner the iron levels are normalised the better the prospects are for the patient.

One of the most common symptoms of Haemochromatosis is joint pain.



## Some more facts:

- The first case of iron overload was described medically in 1865. The condition was only recognised in its later stages, when the patient had bronze skin. It was known in the early days as bronze diabetes.
- It wasn't called Haemochromatosis until about 1889. The word is pronounced 'hee mo kro mah tosis' where haemo refers to blood, chromat is colour and osis is a condition.
- In one study, over 95% of sufferers had never heard of Haemochromatosis before being diagnosed.
- A man will have about 4 grams of iron in his body, a woman about 3.5 grams. A woman will absorb about 2 mg. of iron daily from her food, while a man will absorb about 1 mg.
- Tobacco smoke contains iron and is absorbed directly into the blood.
- Vitamin C, iron supplements, iron-fortified foods and alcohol can all speed up the intake of iron in the body.
- One of the major genes linked to hereditary Haemochromatosis was identified in 1996 and is known as C282Y. Other genes are known to be involved in iron absorption and research is ongoing in this area.



## The I.H.A.

The Irish Haemochromatosis Association is a support group for Haemochromatosis patients and their families.

Our main aim is to educate the general public and members of the medical profession about this common genetic condition.

With nearly 1% of the Irish population predisposed to getting Haemochromatosis, we aim to promote awareness and provide information to prevent unnecessary suffering.

We welcome those who have a personal or professional interest in Haemochromatosis to join the I.H.A. and help promote our goals.

**For more information you can contact us at:**

### **Irish Haemochromatosis Association**

The Carmichael Centre,  
North Brunswick Street, Dublin 7.

e-mail: [info@haemochromatosis-ir.com](mailto:info@haemochromatosis-ir.com)

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Registered Charity: **No.CHY14876**



**Irish Haemochromatosis  
Association**

*Iron Overload*

This leaflet is for information only and cannot be used for self-diagnosis. If you have any worries about your health always contact your G.P. or Hospital Specialist.