



NATIONAL  
RENAL CARE



PATIENT TUTORIAL  
ANAEMIA



Anaemia and chronic kidney disease

Anaemia usually starts in early stages of chronic renal failure (even before you start dialysis therapy) and worsen as kidney function decrease. This is a condition whereby the body do not produce enough red blood cells to carry oxygen to your tissues. The reason for reduced red cell production is that the hormone responsible for red cell formation cannot be produced by your failing kidneys anymore. The further your kidneys deteriorate the less of this hormone is being produced

This hormone is called Erythropoietin (EPO)



Is anaemia treatable and if so how?

Yes, definitely

We treat anaemia by supplementing your blood iron stores and administering subcutaneous (under the skin) or intravenous (into your blood stream) injections containing this erythropoietin

Can anaemia not be treated with a blood transfusion?

Anaemia used to be treated with giving a patient donor blood but since erythropoietin is available (1980's) we prefer to treat patients with iron replacement and synthetic erythropoietin injections

Why is the injection better, is it not more painful than a blood transfusion?

The injection is much better and only injected under your skin with a small needle whilst the iron infusion is given into your blood stream during the last part of your dialysis treatment

What are the advantages of erythropoietin and iron replacement in relation to a blood transfusion?

Every time you get donor blood you also receive all the antibodies of the donor and after several transfusions you will have so many antibodies that when you do get transplanted these antibodies will reject your transplanted kidney

How will I know that I have anaemia?

Your haemoglobin (Hb) blood level will be low

What should this level be?

It should be between 10-12 g/dl

How do you know that this Hb level will be sufficient for me?

This level is the suggested level by international guidelines. The authors of these guidelines have studied huge numbers of kidney disease patients in order to establish the optimal level

What are the symptoms of a low Hb?

Due to lower oxygen transport through your body you may experience the following:

- Weakness
- Feel tired/fatigued
- Be short of breath
- Experience dizziness
- Have a rapid heart beat
- Have pale skin and gums
- Will not be able to think clearly

Are there any other medication that I have to take with my EPO injection and iron supplementation?

Yes, you will have to take your vitamin supplements such as vitamin C, folic acid and vitamin B



How often will I have to get EPO and iron?

Your blood will be tested for Hb and iron levels and your iron and EPO dosages will be prescribed by your doctor according to these blood levels  
How often will you have to test my blood?

Initially we will test your Hb every two weeks and iron stores monthly and when your levels are within range we will test your Hb monthly and iron levels three monthly