

Beta-thalassaemia - trait or carrier: is a disorder of haemoglobin, a major component of the red blood cells. Haemoglobin is produced at a reduced rate. It is a benign disease. It should be distinguished from an iron deficiency.

What causes the disease and how common is it?

This is a genetic disease. It is linked to a decreased expression of one of the β -globin genes, encoding the β -globin chains, one of the components of haemoglobin (Hb). It is a frequent disorder in people originating from West-Africa, Asia and the Mediterranean Basin. This is due to the fact that these areas were or are still infected with malaria and α -thalassaemia confers a relative protection against malaria.

What are the most frequent symptoms if I have the disease?

Most people with β -thalassaemia trait also called carriers, have no symptoms and a normal life expectancy. At the examination of their blood, one can see that the red blood cells are smaller, paler and reduced in number (anaemia). It should be distinguished from an iron deficiency.

Which treatment must I follow if I have the disease?

No particular treatment is requested.

What is the risk of passing the condition on to my children?

Two people who carry each one copy of the mutated gene (β -thalassaemia trait) have a 25 percent risk of having a child affected by a more severe disorder (β -thalassaemia major or Cooley anaemia) at each pregnancy. The risk of having a child who is a healthy carrier of the disorder is 50 percent at each pregnancy, and the risk that a child will not have the disorder and will not be a carrier is 25 percent. Ask for genetic counseling to get a complete explanation.