Alpha-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 or two of the four α-globin genes, encoding the α-globin chains, one of the components of haemoglobin (Hb).
It is a frequent disorder in people originating from West- and North-Africa, Middle-East, India, 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 α-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 and paler. 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?

If each member of a couple has the anomaly (α-thalassaemia trait), the risk of having a child affected (α-thalassaemia trait) or affected by a more severe disorder (see “Haemoglobin H disease”) at each pregnancy is very complex. Ask for genetic counselling to get a complete explanation.

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