"Possibly Carrying Alpha Thalassaemia"

Your blood test has shown you may Possibly carry alpha thalassaemia

As we are not sure if are a carrier of alpha thalassaemia, we have written this leaflet as if you are an alpha thalassaemia carrier.

What is alpha thalassaemia?

Alpha thalassaemia is one of a range of variations in the blood that affects haemoglobin.

Haemoglobin is the substance in red blood cells that carries oxygen from the lungs to all parts of the body.

Carriers of alpha thalassaemia have smaller red blood cells, and a larger number of them, than other people.

- An alpha thalassaemia carrier is a healthy person.
- Carrying alpha thalassaemia does not weaken people physically or mentally.
- Carriers of alpha thalassaemia can eat what they want and do any kind of work they choose.
- They do not need any medical treatment because they carry alpha thalassaemia.
- A carrier has inherited alpha thalassaemia from their parents, and could pass it on to their own children. This is why they are called a "carrier" of alpha thalassaemia.

Carrying alpha thalassaemia is extremely common across the world, particularly in people with African, Chinese, Asian, Middle Eastern and Mediterranean ancestry

Can carrying alpha thalassaemia cause any health problems?

Carrying alpha thalassaemia does not cause any health problems.

However, if a blood test taken for another reason shows you have small red blood cells, a doctor who does not know you possibly carry alpha thalassaemia could think you are short of iron. The doctor could prescribe iron medicines, and in the long run, this could do more harm than good. People who possibly carry alpha thalassaemia need a special blood test (*serum iron* or *serum ferritin* measurement) to diagnose iron deficiency. They should take iron medicines only if this test shows they are short of iron. If you are having blood tests you should inform your doctor that you possibly carry alpha thalassaemia.

Why is it important to know you Possibly carry alpha thalassaemia?

It could be important for the health of your children. Occasionally a person who "possibly carries alpha thalassaemia" carries *alpha zero thalassaemia*, or a rare form of *beta thalassaemia*. Such people can sometimes have a child with a serious inherited anaemia. The risk is very small, but it is important to be aware. If you are of South East Asian descent, particularly; Thai, Laotian, Cambodian, Vietnamese, Myanmarese /Burmese, Malaysian, Singaporean, Indonesian, Filipino, Chinese, Taiwanese or from Hong Kong, or if you are of Cypriot, Greek, Turkish or Sardinian descent and require further information, please ask your GP to refer you to the All Wales Medical Genomics Service, so that an appointment can be arranged to discuss this further.

A person who carries this type of thalassaemia can only have a child with an inherited anaemia if their partner also carries a haemoglobin disorder.

What should you do if you are thinking of having children?

Tell your partner that you possibly carry alpha thalassaemia, and ask him or her to have a blood test "for haemoglobin disorders". Ideally your partner should have this test before you start a pregnancy. Your general practitioner (GP) can arrange it.

If your partner does not carry a haemoglobin disorder, you have the same chance of a healthy family as other couples do.

What should you do if your partner also carries a haemoglobin disorder?

Show this leaflet to your GP.

Ask for an appointment to discuss your situation with a local Genetic Counsellor

Visit: https://medicalgenomicswales.co.uk/

Sickle cell and thalassaemia services telephone: 02920 471055