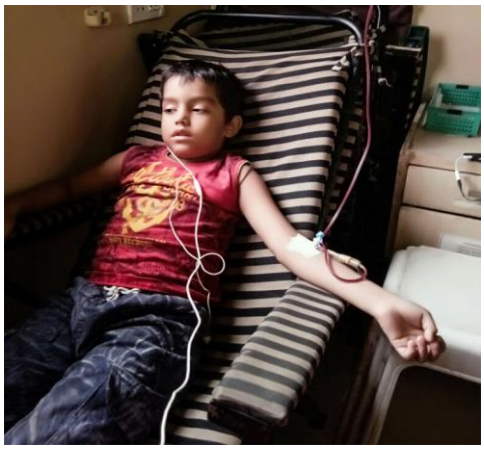
Thalassaemia

Basics:

Blood, whenever we hear this word what comes in our mind, a red liquid or a severely injured part of a body or whatever. But this red fluid is more than a life elixir & is more than what everyone thinks. As we need oxygen for our survival, so we need blood for our existence. The essential fluid which flows from one part to another in our body is balanced by its four components these are Plasma, RBC (red blood cells) , WBC (white blood cells) and Platelets. Each of the above have their different functions in the body.

RBC present in the blood carries oxygen to different part of the body so they can function properly. But what if a human body could not produce healthy & quality RBCs, The answer to this question is simple there will be not enough oxygen delivered to the different cells of the body , which will cause a person to feel tired, week & breathlessness. This condition is called Thalassaemia.

Symptoms of Thalassaemia:

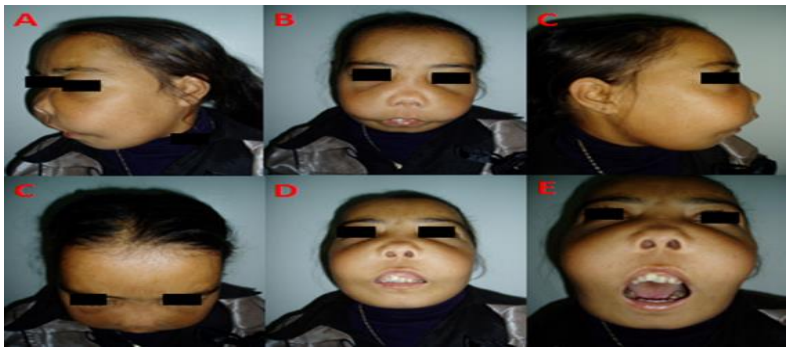


How do I know if I have thalassaemia? Some human beings shows signs of thalassaemia at the time of their birth however some human beings start showing their symptoms in some early years of their life.

There are several types of thalassaemia, Depending on the severity of the condition thalassaemia signs & conditions may include.

1. Fatigue
2. Weakness
3. Slow growth
4. Swelling
5. Dark urine
6. Facial born deformation



Causes of Thalassaemia:

Mutations in the DNA of cells that creates haemoglobin is the cause of thalassaemia. These mutations are passed by parents to their children. If both the parents of the child has thalassaemia then there are 25% chances of the child being suffering from the same disease.

After-Effects:

1. The risk of getting infected with a virus or bacteria increases if a person is already suffering from thalassaemia.
2. Persons with thalassaemia have more iron in their body, which result in the increased risks of heart problem, liver damage and digestive system.
3. Thalassaemia can effect child growth & can also delay puberty.
4. The spleen which helps your body to fight infection & for filtration of unwanted & damaged blood cells become enlarged in size as there is a destruction of large number of RBCs.
5. It can also cause your bone marrow to become bigger in size which can cause your bones to become larger in size & they will look abnormal.

Prevention of Thalassaemia:

As thalassaemia mainly transfers from parents to their child so it become very hard

to prevent however,
There is a form of assisted reproductive technology diagnosis, which screens an embryo in its early stages for genetic mutations combined with in vitro fertilization. This might help parents who have thalassemia or who are carriers of a defective hemoglobin gene have healthy babies.

The procedure involves retrieving mature eggs and fertilizing them with sperm in a dish in a laboratory. The embryos are tested for the defective genes, and only those without genetic defects are implanted into the uterus.