

What is Thalassemia?

Thalassemia is an inherited blood disorder where the body produces an insufficient amount of haemoglobin, the protein in red blood cells that carries oxygen. This can result in anaemia, a condition where there's a shortage of healthy red blood cells and haemoglobin. This hereditary blood disorder is most commonly found in people of Mediterranean, Middle Eastern, South Asian and African descent. At its worst, this disorder can lead to severe anaemia, organ damage and other lifethreatening complications.

Because of the severity and implications of its lifelong impact, screening for Thalassemia is vital.

Types of Thalassemia

There can be two main types of Thalassemia-alpha and beta. Each of these vary in severity from mild (Thalassemia trait or minor) to severe (Thalassemia major). People with Thalassemia minor usually do not have symptoms but are carriers of the gene. If two carriers conceive a child, there is a 25% chance the child will inherit Thalassemia major, a condition that requires regular blood transfusions and medical care lifelong.

The significance of Thalassemia Screening

Thalassemia screening is a preventive health measure that helps identify carriers of the gene, especially among high-risk populations. This screening is crucial as early detection through screening allows individuals and couples to make informed decisions about family planning as it is an inherited condition. Additionally, prenatal screening can determine whether a foetus is affected by the condition. This gives would-be parents the opportunity to prepare for or prevent the birth of a child with severe Thalassemia.

Screening is especially crucial in countries where consanguineous marriages (marriage between close relatives) are common, as the chances of both partners being carriers are significantly higher in such cases.

The advantages of screening

This disorder is one that takes a toll on patients and their families in a number of ways. Managing Thalassemia major requires frequent blood transfusions, iron chelation therapy and regular monitoring. The financial and emotional cost for families is immense.



This is where screening can make a significant difference as it is a cost-effective strategy capable of preventing new cases of severe Thalassemia, reducing both healthcare expenses and human suffering.

Role of Education and Awareness

Many people are still not aware of the implications or severity of Thalassemia as a disease. Hence raising awareness about Thalassemia and the benefits of screening is essential. Only in this way can the disease be prevented. Schools, colleges, and community centres can serve as platforms for education campaigns. Governments and healthcare authorities also ideally need implement mandatory screening policies, particularly for couples planning to marry or start a family.

An effective preventive mechanism

Thalassemia screening is the key to prevention of this disorder. It is a powerful tool in the fight against inherited blood disorders. It serves to educate individuals, reduce the incidence of severe disease and save lives. As medical science continues to advance, the emphasis on prevention is on the rise. By encouraging widespread Thalassemia screening, a future can be envisaged wherein fewer families are burdened by this preventable condition. Apart from being a medical necessity, thalassemia screening is also a social responsibility.

