Journal of Hematology & Thromboembolic Diseases

OPEN ACCESS Freely available online

Short Communication

Complications in Thalassemia and its Treatment

Zahra Elizabeth*

Department of Hematology, University of Mashhad Medical Science, Mashhad, Iran

ABOUT THE STUDY

Thalassemia is a genetically transmitted blood illness that develops when the body doesn't produce enough haemoglobin, a crucial component of red blood cells. There are fewer healthy red blood cells moving through the bloodstream when haemoglobin levels are low because the body's red blood cells don't work correctly and live for shorter periods of time [1].

All of the body's cells are supplied with oxygen *via* red blood cells. The food that cells use to function is oxygen. Because not enough healthy red blood cells are present, not enough oxygen is given to the body's other cells, which can leave one feeling exhausted, frail, or out of breath. The medical term for this is anaemia. Anemia in people with thalassemia can range from mild to severe. Organ damage and death can result from severe anaemia.

Complications of thalassemia

Beta thalassemia, a blood condition, can have side effects on the heart, bones, and growth in children. Many of these issues can be avoided with treatment for anyone. Hemoglobin production in the body is decreased by beta thalassemia. Red blood cells provide oxygen to human body organs and tissues with the help of haemoglobin. Anyone may get anaemia, which makes you exhausted and breathless, if you or they don't have enough haemoglobin in their blood [2]. The majority of beta thalassemia problems are brought on by low oxygen and excess iron. Human body needs iron to transport oxygen and maintain the health of muscles. Human intestines absorb more iron than usual if you have beta thalassemia. Iron is also present in the blood transfusions person receive to treat the illness. Human heart, liver, and the glands that produce hormones become overloaded with additional iron, which destroys these organs.

Depending on the type of beta thalassemia you or your child has experience several difficulties. A moderate condition known as "beta thalassemia minor" typically has no symptoms. In addition to weak bones and an enlarged spleen, "beta thalassemia intermedia" anaemia slows down children's growth [3]. The most severe kind, known as "beta thalassemia major," can lead to a variety of issues, including poor growth in children, an enlarged spleen, issues with the heart and liver, as well as bone damage. If you are the parent of a kid who has beta thalassemia difficulties, reach out to your friends and family to seek any emotional support you might require as you help your child manage their symptoms. Speak with your doctor if you notice that you are becoming agitated or anxious.

Management of thalassemia

The degree of severity determines how to treat the genetic blood condition thalassemia. The only treatment required for mild types of the illness is frequently advice and counselling. Treatment options for more severe forms may include blood transfusions, chelation therapy to reverse iron overload using medications like deferoxamine, deferiprone, or deferasirox, medication with the antioxidant indicaxanthin to prevent haemoglobin breakdown, or a bone marrow transplant using stem cells from a compatible donor or the patient's mother. The removal of the spleen (splenectomy) may theoretically assist those with thalassemia major or intermedia require fewer blood transfusions, although there is presently no conclusive data from clinical trials about its effects. As a preventive measure, population screening has had some success [4].

CONCLUSION

Since they exhibit significant anaemia symptoms at a young age, people with moderate and severe forms of thalassemia typically learn about their condition in childhood. People with less severe forms of thalassemia might only learn they have it when they experience anaemia symptoms, a doctor discovers anaemia through routine blood work, or when a test is ordered for another reason. Thalassemias are inherited conditions that can run in families. Some people learn they have thalassemia because they have family members who also have the disease. People who have ancestors from specific regions of the world are more likely to have thalassemia. People from Mediterranean nations like Greece and Turkey, as well as those from Asia, Africa, and the Middle East, are more likely to have thalassemia-related traits. If you have anaemia and relatives who are from these regions, your doctor may perform further blood work to determine whether you have thalassemia.

Correspondence to: Zahra Elizabeth, Department of Hematology, University of Mashhad Medical Science, Mashhad, Iran, E-mail: ezara@gmail.com

Received: 22-Aug-2022, Manuscript No. JHTD-22-19324; **Editor assigned:** 26-Aug-2022, Pre Qc No. JHTD-22-19324 (PQ); **Reviewed:** 09-Sep-2022, Qc No. JHTD-22-19324; **Revised:** 14-Sep-2022, Manuscript No. JHTD-22-19324 (R); **Published:** 21-Sep-2022, DOI: 10.35248/ 2329-8790.22.10.496.

Citation: Elizabeth Z (2022) Complications in Thalassemia and its Treatment. J Hematol Thrombo Dis.10.496.

REFERENCES

1. de Sanctis V, Eleftheriou A, Malaventura C. Prevalence of endocrine complications and short stature in patients with thalassaemia major: a multicenter study by the Thalassaemia International Federation (TIF). Pediatr Endocrinol Rev. 2004;2:249-55.
2. Skordis N, Michaelidou M, Savva SC, Ioannou Y, Rousounides A, Kleanthous M, et al. The impact of genotype on endocrine complications in thalassaemia major. Eur J Haematol. 2006;77(2): 150-6.
3. Jyothshna P, Kumar AB. Awareness on thalasemia prevention and its treatment in community practice-a brief review. World J Pharm Res. 2017;6:280.
4. Wood JC, Origa R, Agus A, Matta G, Coates TD, Galanello R. Onset of cardiac iron loading in pediatric patients with thalassemia major. Haematologica. 2008;93(6):917-20.