Conference Abstract

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Impact of Haemoglobin F Augmentation Therapy on Quality of Life and Haematological and Biochemical Parameters in Beta Thalassaemia Major Patients in a Multicentre Study from Karachi, Pakistan

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Introduction: Thalassaemia is one of the most common hereditary blood disorders worldwide, particularly in developing countries including Pakistan. The main treatment for beta thalassaemia major is regular blood transfusions which lead to multiple complications such as infections, hemolytic reactions, iron overload leading to multi-organ failure, as well as economic implications including expenses of medications and travelling to thalassaemia centres. These factors greatly affect the quality of life of these patients and their families and their care takers. Haemoglobin F augmentation therapy over the past 20 years has proved beneficial in treatment of thalassaemia major and results in a decrease in transfusion dependency. This study aimed to determine the impact of haemoglobin F augmenting agents on the quality of life and haematological and biochemical parameters in beta thalassaemia major patients.

Methodology: A cross-sectional study is being conducted on 170 randomly selected patients of beta thalassaemia major at Saylani Thalassaemia Center from March to October 2024. The ethical approval was obtained from Baqai Medical University, Karachi. The Quality-of-life parameters were assessed by World Health Organization Quality of Life brief (WHOQOL-BREF) questionnaire and haematological and biochemical parameters were measured by laboratory analysis. The data obtained from these assessments were statistically analyzed.

Results: Initial data in about 50 patients showed that 60% of patients displayed a decrease in frequency of blood transfusions with Haemoglobin F augmentation agents. whereas 40% of patients showed no change in frequency. The overall quality of life and overall health improvement was reported in 64 % of patients. 90% of patients found that their life has become meaningful. 54% of patients felt improved energy levels in daily life activities. Negative feelings and depression were reported in only 6% of patients. There was a 60% reduction of visits to a thalassaemia center by the study cohort. Haemoglobin mean values were above 8 gm/dl in 78% of patients and mean Ferritin levels also decreased to a level of less than 1000 ng/ml in 9%.

Conclusion: The haemoglobin F augmentation agents markedly improve overall quality of life in patients with transfusion dependent thalassaemia.

Disclosure

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