

GROWTH STATUS OF BETA THALASSAEMIA MAJOR PATIENTS

AMDS Karunaratna¹, JGS Ranasinghe², RM Mudiyanse³

¹Department of Basic Sciences, Faculty of Allied Health Sciences,
General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

²Department of Biochemistry, Faculty of Medicine,
University of Peradeniya, Peradeniya, Sri Lanka

³Department of Paediatrics, Faculty of Medicine,
University of Peradeniya, Peradeniya, Sri Lanka

¹*dilmck@yahoo.com*

Beta thalassaemia major is the commonest hereditary haemoglobinopathy which poses a major health burden in Sri-Lanka. Growth failure caused by compound factors such as chronic anaemia, iron overload and toxicity of iron chelators is common among thalassaemia patients. This study evaluates the growth status of beta thalassaemia major patients treated in one of the thalassaemia centres in Sri Lanka and correlate with blood transfusion therapy, iron chelation therapy and iron overload. A total of forty beta thalassaemia major patients aged >2 years were recruited. The patients were interviewed for the socio-demographic variables and their medical histories were obtained. Serum ferritin concentration, height, weight and mid upper arm circumference (MUAC) were measured. The mean z-score for height, sitting height index and BMI of the patients were -2.3 ± 1.06 , 5.0 ± 2.7 and -1.32 ± 1.28 respectively. Prevalence of stunting

(50%) and wasting (35%) were significantly high in the patient group when compared to normal population (13.1% and 26.7%). The majority of the patients (67.5%) were with MUAC less than 5th percentile. Age of the patients, the period under blood transfusion therapy and blood transfusion volume (ml/kg/year) had a significant negative correlation with the z-score for height. Iron overload, iron chelation therapy and mean pre transfusion haemoglobin levels had no significant correlation with growth parameters. Growth failure is common among the studied group of patients and it is associated with the progression of the disease. Close monitoring of the growth status is mandatory for the proper management of the beta thalassaemia major patients.

Keywords: Beta Thalassemia, Growth