

# HEMOGLOBIN VARIANTS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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**Abstract.** Measurement of HbA1c levels in diabetic patients is an established procedure for evaluating long-term control of diabetes. Despite its usefulness, conditions that effect hemoglobin concentration, such as hemoglobinopathies give rise to inappropriate HbA1c values. Since information about hemoglobinopathies in the diabetic population in Sri Lanka is limited, a prospective cross-sectional study was carried out among 2,695 diabetic subjects attending the diabetic clinic at Nawaloka Hospital, Sri Lanka. Hemoglobin type and HbA1c were measured by the HPLC method. The results reveal among 2,695 diabetic subjects, 53 (2%) had abnormal hemoglobin types (HbF and HbS). HbA1c concentrations in diabetic patients without Hb abnormalities show a higher correlation with fasting blood glucose than those with hemoglobin abnormalities. This study emphasizes that patients with inappropriate HbA1c values should be investigated for hemoglobinopathies.

**Key words:** hemoglobin variants, glycosylated hemoglobin, type 2 diabetes mellitus

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