

Study of Hemoglobin Disorders by HPLC At Tertiary Care Centre - 2 Year Analysis

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Abstract

Background: The inherited disorders of blood include haemoglobinopathies as one of the major public health problems in India. This study indicates type of hemoglobinopathies in a tertiary care hospital over a period of 2 years **Methods:** A total of 269 cases between January 2017 to December 2018 were taken up for retrospective analysis and age of the patient ranged from 1 year to 63 years. Haemoglobin and Red Blood Cell indices were measured. Peripheral blood smears examination and reticulocyte count was done in all the cases along with sickling test in suspected cases of sickle cell anaemia. All these samples were analyzed for haemoglobin disorders by HPLC. **Results:** Out of these 269 cases, 171(63.6%) cases displayed abnormal hemoglobin pattern on HPLC of which 72 cases were males (42.1) and 99 cases were females (57.8). Most common hemoglobinopathy observed was β Thalassemia trait 70 (26%) followed by Sickle cell trait 64 (23.8%), Sickle Homozygous 22 (8.2%), Sickle thalassemia 4 (1.5%) and raised HbF 11 (4.1%). **Conclusion:** Screening of all anaemic patients should be done for hemoglobinopathies and thus HPLC remains an accurate and reliable method for quantification of hemoglobin variants in screening of large population.