Diabetes in Patients with \(\beta\)-thalassemia or other Hemoglobinopathies - Analysis from the DPV Database.

Background: Diabetes mellitus is a common endocrinopathy in patients with thalassemia major, but the occurrence of hemoglobinopathies is rare in Germany and Western Europe. The longitudinal German-Austrian DPV (Diabetes Patienten Verlaufsdocumentation) registry allows a comprehensive characterization of this group of patients. Patients/methods: Patients from the DPV-registry aged 90% of 65 patients with other hemoglobinopathies receive insulin treatment. In the majority of patients with thalassemia major, hemosiderosis is documented. Patients with thalassemia major developed diabetes at a median age of 14.6 [IQR 8.4-18.0] years (9.0 years [5.3-12.5] in T1D; 18.7 years [14.2-25.6] in TD2; both \(p<0.01\)). They show high HbA1c/fructosamine levels and frequent hypoglycemia, reflecting poor metabolic control. Conclusion: Diabetes in thalassemia major is probably caused by hemosiderosis due to polytransfusion, while patients with SCD/thalassemia minor are most likely affected by T1D. The high rate of hypoglycemia in patients with \(\beta\)-thalassemia major may be caused by liver fibrosis and a lack of hepatic glycogen stores.