

Abstract

Introduction : Absence of regular blood transfusions in patients with intermediate thalassemia lead to a higher probability of pulmonary hypertension in compare with patients suffering major thalassemia. Assessment of pulmonary hypertension related factors in this patients could help us to find new treatments to prevent complications.

Material and Methoda This is a case-control study. Patients with thalassemia refer to Ardabil Bu-Ali hospital and categorized in two groups by their kind of thalassemia. Patients with intermediate thalassemia were case and patients with major thalassemia were control group. Echocardiography, CBC and ferritin analysis were done on both groups and data analyses with SPSS software. Mean pulmonary pressure over than ۲۵ mmHg known as pulmonary hypertension and all the tests at $p < ۰,۰۵$ was considered significant..

Results: ۷۲ patients participated in this study. Mean age was ۱۸,۷ with a standard deviation of ۷,۷ years . ۲۹ patients (۴۰٪) intermediate and ۴۳ (۵۹٪) were major thalassemia . ۱۲ patients (۴۱,۴٪) in intermediate group and ۵ patients (۱۴,۷٪) in major thalassemia group have pulmonary hypertension that differences was significant with $p = ۰,۰۱۷$. pulmonary hypertension in patients with intermediate thalassemia was significantly higher with $p = ۰,۰۴۷$ in males. Pulmonary hypertension in patients with low hemoglobin and high NRBC was higher, but statistically not significant.

Conclusions: Pulmonary hypertension in patients with thalassemia cholelithiasis treated with hydroxyurea in thalassemia major more than the regular blood transfusions starting early symptoms of pulmonary hypertension are recommended, especially in males.

Keywords: Intermediate thalassemia/ pulmonary hypertension / hydroxyurea