Chapter 2

Objective

In homozygous B-thalassemia,it was shown that systolic function was well preserved until very late in the course of heart failure. In B-thal/HbE patients, there are many entity different from homozygous B-thalassemia such as more frequent arterial thromboembolism, less cardiac iron deposits, more variable severity. This study aims to test the hypothesis that cardiac contractility (systolic function) in B-thal/HbE patients are also well preserved as in homozygous B-thalassemia. If this is so, dyspnea in B-thal/HbE can be ascribed to other factors such as anemia, chronic pulmonary arterial thromboembolism, pulmonary hypertension and diastolic dysfunction etc.

Ejection fraction (EF) and percent fractional shortening (%FS), a study of cardiac contractility, is compared between 1 : patients versus controls, 2 : severely affected patients (hemoglobin less than 7 gram per decilitre) versus mildly affected patients (hemoglobin more than 7 gram per decilitre) 3 : rarely transfused patients (0-9 units), occasionally transfused patients (10-80 units) and frequently transfused patients (more than 80 units) and 4 : splenectomized versus nonsplenectomized cases.