Complications in adult thalassemia patients due to iron overload

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Abstract

Thalassemia is a genetic disease caused by disruption of globin chain synthesis causing fragile red blood cells. Continuous blood transfusion every month is needed to prevent severe anemia on thalassemia patient. However, transfusions can also cause excessive iron in the blood, which can accumulate in the body tissues and interfere with the metabolism and causing tissue and organ damage. The objectives of this study were to document progress and surveillance cardiovascular and liver complications in thalassemia patients due to iron excess. This cross sectional study had research subjects of thalassemia patients who were treated at outpatient Department of Hematology Medical Oncology Hasan Sadikin General Hospital Bandung in the last 5 years, which included 62 patients. The results showed from the liver function examination, the increase of SGOT and SGPT levels occurred in 50 and 42 patients, respectively. For cardiac function examination, the most commonly found ECG abnormality was ST-T wave changes in 20 patients and in echocardiography examination was diastolic dysfunction in 15 patients.

Keywords: Thalassemia; iron overload; ferritin

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