CHAPTER V

CONCLUSION AND RECOMMENTATION

Transfusion-dependent β-thalassemia patients had insufficient growth and development (height, weight and body mass index lower than controls). These patients had an excess irons from the secondary iron overload as indicated by the highly increase of serum ferritin levels. And all lipid markers including TC, HDL-C and LDL-C were lower in β-thalassemia patients. An excess iron may catalyze Fenton and Harber-Weiss reactions to progression of oxidative stress. And caused increasing in lipid peroxidation at tissues and others organ such as: liver, pancreas, and heart especially at the beta cell area. This procedure might cause deterioration of beta cell and lack of insulin hormone at the end stage complication that could make unusual of glucose metabolism which may cause diabetes from β cells dysfunction. This study found that our transfusion- dependent β-thalassemia patients had increased insulin levels (hyperinsulinemia) and had trend may cause an impaired glucose tolerance or developed to diabetes in the future. The period should be extended and find out the suitable time, 6 months period still found at 0.5, 1.0 Hr that needs to continue further study in transfusion- dependent β-thalassemia patients.