

Abstract

This bachelor thesis describes diabetes mellitus and the possibility of introducing a new flexible treatment of insulin therapy in people with intensive insulin regimen. The theoretical part is intended to describe diabetes mellitus, causes of illness, treatment, principles of proper eating, the relationship between carbohydrate metabolism and insulin hormone and also discuss flexible dosage of insulin, history and ways of flexible treatment.

The practical part of the work was aimed at monitoring the effect of regular patient education on the transition from intensive to flexible dosing of insulin. Within six weeks, patients attended educational meetings where they tried to learn how to work with the new regime. Results from glucometers and changes in glycated haemoglobin values were then used to evaluate the underlying research.

Research has made it possible to determine to what extent flexible insulin dosing and proper diet can positively influence diabetes compensation, as well as the effect of motivation and regular patient education on final results. The follow-up patients showed great willingness and motivation to work together and adopt new insulin dosage regime. The results of the research have shown that even in such a short period of time the new treatment is able to positively change the disease compensation. Self-monitoring of patients showed changes in glycated haemoglobin values. Glucose levels have also decreased.

For the overall outcome of the work, flexible dosing of insulin is considered to be a high potency regimen. Extending this method to the population, interests and motivation of patients can be expected to have very positive changes in diabetes compensation.

Keywords: diabetes mellitus, insulin therapy, carbohydrates, insulin dosage, diabetic diet.