

ABSTRACT

Title: Mountain tourism for diabetics with an insulin pump

Objectives: The aim of this study is to find out whether it is suitable for patients with type 1 diabetes mellitus treated with an insulin pump to undergo physical activity in the form of mountain tourism, as the more intense physical activity affects blood glucose levels and whether patients are able to work with advanced insulin pump functions.

Methods: The work is conceived as an observational study of the Medtronic educational project. One day mountain hike trip of a distance about 30 km was attended by 40 patients (men and women) with diabetes aged 15-25 years. Non-invasive methods were used. The data was obtained by monitoring insulin pump probes, glucometers and continuous monitoring, which were further evaluated using the CareLink Pro software.

Results: Physical activity in the form of mountain tourism is suitable for patients with DM1 treated on an insulin pump. 80% of the probands did not have a risk status of hypoglycaemia, and even though the determined normoglycemia for research was performed by a larger number of adults as opposed to children, this FA has a demonstrable effect on blood glucose levels. It also brings positive benefits for patients because they learn how to work better with advanced insulin pump functions.

Keywords: Mountain tourism, type 1 diabetes mellitus, insulin pump, continuous glucose monitoring, insulin.