Abstract

The system of nutritional support in the form of enteral and parenteral nutrition is an inherent part of therapeutic procedures in severely ill patients. The intake of sufficient energy and nutrients affects the course of treatment and subsequent convalescence. The aim of this bachelor thesis is to find out whether the intake of nutrients in these patients corresponds with the relevant recommendations and also to evaluate the difference between the nutrition indicators in blood for the different types of nutrition.

The theoretical part of this bachelor thesis defines the concepts of enteral and parenteral nutrition, their indications, contraindications, composition and delivery systems. The pathophysiological processes that occur in the organism of severely ill patients as well as the needs of individual nutrients that differ from the stabilized patients are described here.

The practical part deals with a sample of 36 patients who were hospitalized at the Intensive care unit of Department of Anesthesiology and Intensive Care, First Faculty of Medicine Charles University in Prague and General University Hospital in Prague.

It describes energy and protein intake from the different types of nutritional support. It also evaluates whether the real income corresponds to the planned intake and whether patients are fed well in connection with monitoring of essential nutritional indicators in the blood.

The results show that only 8% of patients achieved planned energy intake. The planned intake was optimal according to valid recommendations in 58% of patients. The real intake was optimal in 39% of patients. In protein monitoring, it was found out that the planned amount was achieved in 11% of patients, but the planned and real amount was optimal in only 8% of patients. When monitoring the changes of nutritional indicators in blood, it was observed that the biggest influence on the increase in their values was recorded by the combined nutrition.

Based on the results, we can say that despite the unfulfilled optimal energy and protein intake requirements in most patients, there is no deterioration in laboratory blood results. However, more attention should be paid to nutrition and, if it is found that patients fail to achieve the planned benefits, it should be considered to change the way or product of nutritional support.

Keywords: nutrition, parenteral, enteral, severely ill, patient