

Abstract

This diploma thesis is focused on patients who are undergoing surgery - intestinal resection. In a surgical patient, malnutrition is a frequent and significant negative factor that affects postoperative morbidity and lethality. Proper nutritional care has an irreplaceable role in the prevention and treatment of malnutrition. Nutritional elements are part of the perioperative care of the modern ERAS concept, which leads to reduction in the frequency of postoperative complications and a shortening of the hospitalization duration. The concept emphasizes early physical rehabilitation and shortening of the fasting period around the time of the operation, which leads to a significant saving of body protein.

The theoretical part describes particular diseases that lead to surgical treatment. Special attention is paid to idiopathic intestinal inflammations and colorectal cancer. It also includes current recommendations of professional companies.

The primary objective of the practical part is to compare two groups of patients who underwent intestinal resection. To find out whether targeted nutritional intervention (before, during and after surgery) has an impact on postoperative convalescence, the frequency of complications and the overall length of hospitalization. The aim was also to improve the quality of hospital meals - to increase the attractiveness of served meals (in terms of appearance and content of quality nutrients).

A total of 64 patients from IBD and the Proctological Outpatient in Hořovice Hospital were observed. These patients were randomly divided into two groups. Group 1 received nutritional intervention before surgery and on release day. The intervention consisted of personal education on the appropriate principles of eating and physical activity. During hospitalization, patients from the intervention group were regularly visited by a nutritional therapist and the diet was individually adjusted according to current preferences. Patients from group number 2 were guided preoperatively only by a surgeon indicating resection and received a standard diet postoperatively according to the doctor's prescription. Both groups followed the ERAS recommendation.

The research was carried out in the form of a questionnaire survey. The questionnaires include anthropometric, laboratory values, functional (hand grip) and fatigue test (Facit - F). Patients were followed at three time periods: four weeks prior to surgery, the day of onset of surgery, and the day of discharge. In addition, hospital meals were evaluated on the day of discharge and the Clavien - Dindo classification of postoperative complications was recorded.

In both groups, 53 % of patients gained weight before surgery. However, in group number 1 there was a higher share of the increase in muscle mass compared to adipose tissue. Also, the strength of the handgrip, the level of albumin and transferrin in the period from the first intervention into the operation increased more in group number 1.

The median length of hospital stay was 7 days in both groups. The average length of hospitalization was 0.7 days longer in the intervention group. The average length was influenced by individual longer hospitalizations in a small group. However, in group number 1, the incidence of malnutrition and malnutrition markers was initially higher, so it was more risky for complicated healing.

According to the Clavien-Dindo classification of complications, a total of 62 % of patients in the intervention group and 75 % of patients in the non-intervention group healed. However, the incidence of serious complications was 50 % lower in the intervention group. It is the serious

complications that affect the overall convalescence and their reduction is significant. It can be said that nutritional intervention had a positive effect.

Weight loss was more common in the intervention group during hospitalization. The assumption of a lower weight loss for the intervention group was therefore not confirmed. With discharge, most patients had a decrease in laboratory plasma protein levels, regardless of grouping. The correlation between plasma protein values and CRP values was confirmed. Transferrin corresponded better to the current nutritional status than the other markers monitored. The circumference of the non-dominant arm showed the least telling value - the value hardly changed during the period.

Patients from the intervention group rated hospital meals more positively. There was a predominance of patients who rated the diet positively. Uniform conclusions cannot be drawn from the evaluation of the least / most popular dishes.

The modern ERAS approach followed by the Hořovice hospital undoubtedly influences the postoperative results. All patients started rehabilitation shortly after surgery, most patients did not feel sick or vomited during hospitalization.

Key words: Inflammatory Bowel Disease, colorectal cancer, surgical patient, malnutrition, ERAS