Abstract


Early supplementation of parenteral nutrition is capable of improving quality of life, chemotherapy-related toxicity and body composition in patients with advanced colorectal carcinoma undergoing palliative treatment: results from a prospective, randomized clinical trial.

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AIM: Patients suffering from advanced colorectal cancer can experience unintended weight loss and/or treatment-induced gastrointestinal toxicity. Based on current evidence, the routine use of parenteral nutrition (PN) for patients with colorectal cancer is not recommended. This study evaluates the effect of PN supplementation on body composition, quality of life (QoL), chemotherapy-associated side effects and survival in patients with advanced colorectal cancer.

METHOD: Eighty-two patients with advanced colorectal cancer receiving a palliative chemotherapy were prospectively randomized to either oral enteral nutrition supplement (PN-) or oral enteral nutrition supplement plus supplemental PN (PN+). Every 6 weeks body weight, body mass index (BMI), chemotherapy-associated side effects and caloric intake were assessed, haemoglobin and serum albumin were measured. Body composition was assessed by body impedance analysis, and QoL was evaluated by European Organization for Research and Treatment of Cancer (EORTC) QLQC30 questionnaire.

RESULTS: No differences were evident at baseline between the groups for age, sex, diagnosis, weight, BMI or QoL. A difference in BMI was observed by week 36, whereas differences of the mean body cell mass could be observed from week 6, albumin dropped significantly in the PN-group in week 36 and QoL showed significant differences from week 18. Chemotherapy-associated side effects were higher in PN-. The survival rate was significantly greater in the PN+ group.

CONCLUSION: A supplementation with PN slows weight loss, stabilizes body-composition and improves QoL in patients with advanced colorectal cancer. Furthermore, it can reduce chemotherapy-related side effects.

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