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The Importance of Adherence to Oral Nutritional Supplements and Enteral Nutrition for Inflammatory and Nutritional Parameters and Two-Year Survival in Patients with Laryngeal Cancer Treated with Radiochemotherapy

Streszczenie w języku angielskim

Introduction: Chemoradiotherapy in patients with laryngeal cancer is associated with a high risk of deterioration in nutritional status, including weight loss, which may affect treatment outcomes and prognosis. Adequate nutritional support is therefore an important component of patient management; however, its effectiveness depends, among other factors, on adherence to nutritional recommendations.

Aim: The primary aim of the study was to assess the impact of adherence to recommendations regarding supplementation with food for special medical purposes and enteral nutrition on inflammatory and nutritional indices and two-year survival in patients with laryngeal cancer treated with chemoradiotherapy.

Materials and methods: This retrospective study included 55 patients with laryngeal cancer treated with chemoradiotherapy between January 2019 and April 2024. Medical records were reviewed to assess adherence to nutritional recommendations, as well as changes in anthropometric parameters and inflammatory and nutritional indices, including CAR, NLR, PLR, LMR, PNI, and GNRI. Two-year event-free survival, defined as the time free from death or disease recurrence, was also analyzed.

Results: Adherence to nutritional recommendations was associated with more favorable changes in anthropometric parameters. Patients who adhered to the recommendations experienced a significantly smaller reduction in BMI during treatment and had a significantly lower risk of clinically significant weight loss exceeding 10%. However, adherence was not associated with more favorable stabilization or improvement in CAR, NLR, PLR, LMR, PNI, or GNRI. Stabilization of these indices was also not significantly associated with survival free from death or disease recurrence. No significant difference in two-year event-free survival was observed according to adherence status (HR=1.37; 95% CI: 0.66–2.84; p=0.392). The interpretation of findings concerning inflammatory and nutritional indices is limited by the

small sample size, particularly the very small number of patients who demonstrated stabilization of individual markers.

Conclusions: Adherence to nutritional support recommendations in patients with laryngeal cancer undergoing chemoradiotherapy may play an important role in maintaining body weight and limiting deterioration in nutritional status during treatment. However, in the study population, adherence was not associated with more favorable changes in the analyzed inflammatory and nutritional indices or with improved two-year event-free survival. Given the retrospective design and small sample size, the findings regarding prognostic markers and survival require confirmation in larger studies.