

Optimizing Enteral Nutrition Support for Head and Neck Cancer Patients during Combined Radiotherapy and Chemotherapy: A Comprehensive Review

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Abstract

Nutritional support and intervention are essential aspects of managing head and neck cancer. Many patients with this condition are malnourished upon diagnosis, and most of those undergoing treatment will require nutritional assistance. This paper offers a concise summary of key nutritional considerations for these patients and offers practical recommendations for clinicians in their care. Due to the potential impact of head and neck cancers on swallowing and eating, early nutritional assessment is critical. This evaluation typically includes an assessment of the patient's weight history, dietary intake, and physical examination.

Keywords: Enteral nutrition • Chemotherapy • Radiotherapy

Introduction

Nutrition and dietetic services should be organized to provide a smooth and uninterrupted experience for patients at any point in their treatment pathway. Having access to dedicated dietitians who specialize in the specific needs of head and neck cancer patients is crucial. These specialized professionals can offer tailored dietary guidance and support, taking into account the unique challenges and dietary changes that often accompany head and neck cancer treatment. Nutrition and Dietetic the importance of organizing nutrition and dietetic services in a way that seamlessly supports patients at all stages of their cancer treatment journey, especially for those with head and neck cancer. This means that patients should have access to nutritional support not only during specific phases of treatment but throughout their entire journey, from diagnosis to post-treatment care and survivorship [1-3].

Literature Review

Early nutritional intervention is essential to correct pre-existing nutritional deficiencies with regular reviews throughout the patient's journey in order to optimise nutritional status and correct nutrition-related problems at each stage of treatment. Regardless of presenting Body Mass Index (BMI), unintentional weight loss of 10 per cent or greater in the preceding six months may lead to a range of problems. Patients with head and neck cancer are at risk of malnutrition as a result of the site of their cancer, the disease process and the treatment. Patients may have long standing dietary habits and detrimental lifestyle factors such as alcohol misuse that may predispose them to malnutrition. As swallowing difficulties are common among head and neck cancer patients, texture-modified diets, which can include soft, minced, or pureed foods, are often recommended to make eating easier and more comfortable.

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Dietitians work with patients to provide dietary counseling

The goal is to maintain adequate nutritional intake throughout the treatment period, considering the potential side effects of radiotherapy, such as oral mucositis and dysphagia. Nutritional supplementation may be necessary to meet the increased nutrient requirements during radiotherapy. This can include oral nutritional supplements, which provide additional calories, protein, and essential nutrients. The impact on REE can vary from one person to another and may be influenced by factors such as cancer type and stage. Despite the variability in REE, it's noted that cancer patients often exhibit mild hyper metabolism. The passage also suggests that total energy expenditure (which includes REE, physical activity, and the thermic effect of food) and protein requirements should be considered for non-obese ambulatory cancer patients based on their actual body weight. This implies that when providing nutritional support and dietary recommendations for these patients, their energy expenditure and protein needs should be calculated with their current body weight in mind. Cancer itself does not have a uniform or consistent effect on a patient's Resting Energy Expenditure (REE). This means that the metabolic rate of individuals with cancer may remain unchanged, increase, or decrease due to the disease itself. Dietitians often work with patients to provide dietary counseling and support tailored to their specific needs [4-6].

Discussion

In such situations, patients may require more intensive nutritional support methods. In cases where food fortification alone is insufficient, the passage suggests the use of oral nutrition support, such as nutritionally complete liquid supplements. Relaxing these diets can help improve the patient's overall well-being and quality of life. Food fortification is recommended as the first line of advice to enhance the nutritional content of the patient's regular diet. However, it acknowledges that this approach may not always be suitable, especially in cases where cancer treatment regimens are intense and have significant side effects. These supplements are designed to provide essential nutrients and calories in a convenient and easily consumable form. Importantly, the passage notes that oral nutrition support can be initiated at any point from diagnosis, depending on the patient's needs. The choice of oral nutritional support products depends on several factors, including patient preference, the patient's current intake of macronutrients and micronutrients, and local healthcare policies. Different products may offer varying nutrient profiles and flavors, allowing for customization to better suit the patient's requirements and preferences. As part of nutritional interventions for cancer patients, therapeutic diets may need to be relaxed or modified. This is done to prevent further nutritional compromise, as

cancer and its treatments can often affect a patient's ability to eat and maintain their nutritional status.

Conclusion

The variability in how cancer affects resting energy expenditure and emphasizes the importance of considering the specific metabolic needs of cancer patients, including their energy expenditure and protein requirements, when planning nutritional support and interventions. This may involve a combination of approaches, including modifying therapeutic diets, using food fortification when appropriate, and incorporating oral nutrition support as needed, while considering patient preferences and local guidelines.

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Conflict of Interest

The authors declare that there was no conflict of interest in the present study.

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