

Editorial

Challenges in Nutritional Support for Head and Neck Cancer Patients

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Nutritional management of head and neck cancer patients is challenging. At the same time, there is a catabolic state induced by the malignancy and a potential for dysphagia caused by an obstructing tumor [1]. The majority of head and neck cancers are locally or regionally advanced at presentation. It is estimated that 25%–57% of patients with these tumors already have an impaired nutrition status at the time of diagnosis and before beginning treatment [2]. Many patients with head and neck cancer also have a history of heavy smoking, alcohol consumption, and poor diet, all of which can lead to malnutrition [3].

The effects of cancer therapy can also compromise the nutrition status of head and neck cancer patients. Treatment options include surgery, Radiotherapy (RT), and a combination of RT and chemotherapy [4]. The importance of adequate nutritional status prior to a major operation is well recognized, since nutritional status and immune response are closely connected. Evidence clearly indicates that malnourished patients that undergo major operations are predisposed to infectious complications and poor outcomes [5]. Many centers advocate a regimen of neoadjuvant chemo radiation prior to esophagectomy. The side effects of most common chemotherapy regimen include nausea, vomiting, and diarrhea [6]. Also, therapy with radiation frequently causes esophagitis which aggravates dysphagia. Malnutrition itself reduces the rate of patient tolerance of a complete chemo radiotherapy regimen [7].

Several guidelines suggest that if an obstructing head and neck cancer interferes with swallowing, Enteral Nutrition (EN) should be delivered by tube. Tube feeding is also suggested if severe local mucositis occurs [8]. Tube feeding can either be delivered via the Nasogastric tube (NG) or Percutaneous Gastrostomy (PEG). PEG may be preferred because of radiation induced oral and esophageal mucositis [9]. It has been demonstrated that early and appropriate supplementary enteral nutrition via a PEG system is more effective than oral nutrition alone in those cases in which the patient undergoes for weeks of chemotherapy/radiotherapy. Few studies have compared NG and PEG in terms of nutritional outcomes, complications, and radiation treatment interruption [10]. So, there is not sufficient evidence to determine the optimal method of enteral feeding for patients with head and neck cancer receiving chemo radiotherapy.

Recently, prophylactic feeding through NGT or PEG has become more common before beginning CRT, to prevent weight loss, reduce dehydration and hospitalizations, and avoid treatment breaks [11]. However, literature shows that prophylactic feeding, compared to reactive feeding (patients are supported with oral nutritional supplements and when it is impossible to maintain nutritional requirements enteral feeding via a NGT or PEG is started), does not offer significant advantages in terms of nutritional outcomes, interruptions of radiotherapy and survival [10,12]. It is important to highlight that, considering the limited number of randomized studies, definitive conclusions cannot be drawn. Further investigations should be conducted in the next future.

In conclusion, head and neck cancer patients undergoing chemo radiotherapy are at risk of malnutrition before and during treatment. Nutritional support and oral nutritional supplements should be used to increase dietary intake and to prevent weight loss and interruption of radiation therapy. If obstructing cancer and/or mucositis interfere with swallowing, enteral nutrition should be delivered by tube. However, still there is not sufficient evidence to determine the optimal method of enteral feeding.

Decisions relating to PEG insertion remain difficult. Therefore, in clinical practice, decisions must be taken together with the patient and their families. Priority should be quality of life and patient comfort.

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