**INTRODUCTION**

Patients with advanced (stage III and IV) head and neck (HN) cancer are known to have a poor prognosis and malnutrition has been frequently reported. The tumour location in itself can cause nutritional complications often before treatment is initiated and the treatment adds to the risk for malnutrition, especially for patients with a combined treatment modality. Treatment side-effects influence the risk for malnutrition and deteriorate the patient’s health related quality of life (HRQOL). Aims: This randomized study aimed to explore if prophylactic percutaneous endoscopic gastrostomy (PEG) for early enteral nutrition could prevent malnutrition and improve health-related quality of life (HRQOL).

**METHODS**

134 patients with advanced head and neck cancer were randomized to either prophylactic PEG (study-group) or clinical standardized nutritional support (control-group). Dieticians conducted all follow-ups and both groups were assessed at six occasions during one year. At each follow-up patients’ weight and body mass index (BMI) were measured and dysphagia and Karnofsky status were ranked. Use of PEG or NG tube (number of days with tube feeding) was noted and the current diet was assessed by 24-hour recall. At all follow-ups, the patients filled out HRQOL questionnaires (EORTC QLQ-C30 and QLQ-HN35). Clinical data was collected.

**RESULTS**

The number malnourished was consistently about ten percent lower in the study-group during the first study-year. The study-group started to use enteral feeding significantly earlier and for a significantly longer time-period (p<0.0001). The HRQOL differences between the two groups were most noticeable at the 6 month follow-up. At that time-point 10 clinically or statistically significant differences were found, all in favour of the study group. Most importantly, a significant difference in the global quality of life scale was found, as well as for important functions such as physical, cognitive functions and problem with fatigue, feeling ill and opening mouth wide.

134 patients with newly diagnosed oral or oropharyngeal cancer in stage III or IV were included and randomized to either PEG (study-group) or clinical standardized nutritional support (control-group). Dieticians conducted all follow-ups and both groups were assessed at six occasions during one year. At each follow-up patients’ weight and body mass index (BMI) were measured and dysphagia and Karnofsky status were ranked. Use of PEG or NG tube (number of days with tube feeding) was noted and the current diet was assessed by 24-hour recall. At all follow-ups, the patients filled out HRQOL questionnaires (EORTC QLQ-C30 and QLQ-HN35). Clinical data was collected.

**CONCLUSIONS**

The differences regarding weight loss and malnutrition were consistently in favour of the study-group the first study-year, although not statistically significant. We had expected greater differences between the two groups. A possible explanation for the rather small differences could be that both groups were followed by dieticians and had the same access to nutritional advice. Nutritional counselling has previously been shown to be effective in preventing malnutrition. Another explanation could be that the study itself might have improved clinical praxis. Compared to a previous, descriptive study of weight loss in HN cancer patients both groups in the current study lost less weight and the weight stabilized earlier.

**REFERENCES**


**CONTACT**

Ewa Silander RD MSc, Eva Hammerlid MD PhD, Leif Johansson MD PhD, Mogens Bove MD PhD

Dept. of Otorhinolaryngology Head and Neck Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden

**Poster Design & Printing by Genigraphics® - 800.790.4001**