POSTOPERATIVE NUTRITIONAL MANAGEMENT IS INSUFFICIENT IN MAINTAINING BODY WEIGHT IN ESOPHAGEAL CANCER PATIENTS

M. O. Holm¹ (mo.holm@rn.dk), L. B. Skadhauge¹, M. E. Cook¹, H. H. Rasmussen^{1, 2}, S. Dikinis^{2, 3}, R. Tobberup¹

¹Center for Nutrition and Bowel Disease, Aalborg University Hospital, ²Clinical Institute, Aalborg University,

³Department of Surgical Gastroenterology, Aalborg University Hospital, Aalborg, Denmark

(n) AALBORG UNIVERSITY HOSPITAL

Rationale

The aim of the study was to describe the development of body weight (BW) from diagnosis until six months postoperatively (post OP) in patients undergoing surgical removal of esophageal cancer (EC) receiving standardized nutritional management.

Methods

This was a retrospective study conducted in all patients (n=22,18 male) undergoing curative surgical removal of EC and neoadjuvant chemotherapy in 2018. Patient characteristics, body weight (BW) and details of the nutritional management were obtained by reviewing patient records. The standardized nutritional management at discharge comprised of supplemental jejunostomy feeding of 650 or 1300 kcal, regardless of gender, BMI and BW.

Patient characteristics	N=22
Sex (male/female, %)	82/18
Age (years)	66.4 (51;83)
BMI (kg/m²)	25.1 (16.0;32.6)
Body weight (kg)	75.1 (53.2;110.0)
Hospitalisation (days)	13.5 (9.0;31.0)
Re-admissions (No.)	1.5 (0;10)
Enteral feeding regime postoperatively (months)	2.4 (0.5-6.0)

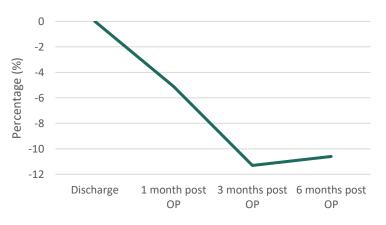


Fig. 1: Weight loss postoperatively

Results

The mean change in BW was -10.7±14.4 % from diagnosis three months preoperatively (pre OP) to six months post OP, 1.4±10.5 % during the pre OP period and -1.4±4.4 % during hospitalisation. Compared to BW at discharge, the mean change of BW post OP was -5.1±3.7 % at one month, -11.3±4.8 % at three months and -10.6±9.3 % at six months. All patients had lost BW at one and three months post OP. At six months post OP, four out of 17 patients managed to regain lost BW. Overweight or obese patients (BMI≥25 kg/m2, n=11) lost on average -9.5±0.2 % BW from diagnosis to six months post OP compared to -12.5±0.1 % in patients with normal or low BMI (BMI<25 kg/m², n=7), p=0.32. During the standard jejunostomy feeding regime (mean of 2.4 months following surgery), overweight/obese patients lost 12.5 vs. 13.9 % BW in patients with normal or low BMI, p=0.28.

Conclusion

Unintentional weight loss is most profound within the first three months post OP in EC patients. The use of a standardized jejunostomy feeding management without discriminating caloric needs and oral intake is insufficient to prevent unintentional weight loss.