

# Enteral Nutrition following Oesophagectomy

Abdelkader Boukerrouche\*

Department of Digestive Surgery, Hospital of Beni-Messous,  
University of Algiers, Algiers, Algeria



\***Corresponding author:** Abdelkader Boukerrouche, Department  
of Digestive Surgery, Hospital of Beni-Messous, University of  
Algiers, Algiers, Algeria.

Tel: +213-661227298; E-mail: aboukerrouche@yahoo.com



**Article Type:** Editorial

**Compiled date:** May 24, 2020

**Volume:** 1

**Issue:** 2

**Journal Name:** Clinical Oncology Journal

**Journal Short Name:** Clin Oncol J

**Publisher:** Infact Publications LLC

**Article ID:** INF1000036

**Copyright:** © 2020 Abdelkader Boukerrouche. This is an open  
access article distributed under the terms of the Creative  
Commons Attribution 4.0 International License (CC BY-4.0).



**Keywords:** Nutrition; Oesophagectomy



**Cite this article:** Boukerrouche A. Enteral nutrition following  
oesophagectomy. Clin Oncol J. 2020;1(2):1–2.

## Editorial

The weight loss is a common clinical condition occurred in patients with oesophageal cancer and it was present in 57% of patients at the time of diagnosis [1]. This weight loss is related to malignancy and insufficient oral intake secondary to dysphagia, and it can be increased by neoadjuvant therapies. The weight loss can persist at least 3 years after surgery [1]. Therefore, surgical patient candidate for oesophageal surgery should be nutritionally evaluated before the time of surgery to detect malnutrition. Malnourished patients are considered as high-risk patients to develop high postoperative morbidity and mortality rates [2], and 40% of malnourished patients experienced postoperative complications [3]. Moreover, the oncologic results were influenced by malnutrition and overall survival was less better in malnourished patients [4]. Oesophagectomy is a complex surgical procedure with the need to use an abdominal digestive graft to establish the gastrointestinal continuity and it is a high-risk procedure with high rates of associated complications. Best perioperative nutritional condition is essential for a successful oesophageal surgery, and so, adequate nutrition is important to achieve perioperative nutritional optimisation. Enteral nutrition (EN) is the preferred nutritional support and parenteral nutrition should be used when EN is inaccessible or contraindicated. Enteral feeding can be administrated through multiple routes, including oral intake, jejunostomy-tube and nasoduodenal or nasojejunal tube. Early enteral nutrition via jejunostomy-tubes has become a common practice in oesophageal surgery [5]. Jejeunostomy-tube route has been the most used route for enteral feeding following major gastrointestinal surgical procedures. The well documented benefits of early enteral feeding on functional and nutritional outcomes, including complications and mortality after major gastrointestinal surgery have been clearly demonstrated by published reports [6]. Also, early enteral nutrition was associated with shorter hospital stay length, improved quality of life and overall survival [7,8].

Recently, the early oral feeding has been evaluated in major gastrointestinal surgery and the published reports have revealed the great benefits on postoperative outcomes that were similar to those of artificial enteral nutrition showed by previous reports [9,10]. The published reports on the ERAS programs implemented in different surgical specialties have once again proved the benefits of enteral nutritional through oral route on the postoperative outcomes [11]. Despite the safety and various advantages of early oral enteral nutrition in many major gastrointestinal surgical procedures, such as colorectal and gastric surgery [12]. The hesitance of some surgeons to initiate early oral feeding following oesophagectomy is not an evidence-based attitude but instead

based on fears regarding anastomotic leak, pneumonia secondary to aspiration and insufficient nutritional intake with oral feeding. This hesitance in initiating early oral feeding after oesophagectomy has led to limitation of studies on this topic. Early oral feeding is an important component of the ERAS program protocols. The recent implementation of the ERAS program in oesophageal surgery has resulted in publishing some reports. A meta-analysis regrouping thirteen studies evaluating ERAS protocols following oesophagectomy showed a reduced length stay and decreased pulmonary complications without significant increase in readmissions [13]. Also, early oral feeding was associated with significant cost-saving [12]. Overall, the recent evidence, including ERAS program reports clearly demonstrates that early oral feeding is safe associated with cost-saving, shorter length of hospital stay, faster return of bowel function, and improved quality of life and survival. Additionally, early oral feeding is not associated with a significant increase in anastomotic leak and non surgical complications.

### Declaration of interests

The authors have nothing to declare.

### References

1. Martin L, Lagergren P. Long-term weight change after oesophageal cancer surgery. *Br J Surg*. 2009;96:1308–1314.
2. Correia MI, Waitzberg DL. The impact of malnutrition on morbidity, mortality, length of hospital stay and costs evaluated through a multivariate model analysis. *Clin Nutr*. 2003;22:235–239.
3. Schiesser M, Muller S, Kirchhoff P. Assessment of a novel screening score for nutritional risk in predicting complications in gastro-intestinal surgery. *Clin Nutr*. 2008;27:565–570.
4. van der Schaaf MK, Tilanus HW, van Lanschot JJ. The influence of preoperative weight loss on the postoperative course after esophageal cancer resection. *J Thorac Cardiovasc Surg*. 2014;147:490–495.
5. Filip B, Scarpa M, Cavallin F. Postoperative outcome after oesophagectomy for cancer: nutritional status is the missing ring in the current prognostic scores. *Eur J Surg Oncol*. 2015;41:787–794.
6. Wakefield SE, Mansell BN, Baigrie RJ, Dowling BL. Use of a feeding jejunostomy after oesophagogastric surgery. *Br J Surg*. 1995;82:811–813.
7. Berkelmans GH, van Workum F, Weijs TJ, Nieuwenhuijzen GA, Ruurda JP, Kouwenhoven EA, et al. The feeding route after esophagectomy: a review of literature. *J Thorac Dis*. 2017;9:S785–S791.
8. Wang G, Chen H, Liu J, Ma Y, Jia H. A comparison of postoperative early enteral nutrition with delayed enteral nutrition in patients with esophageal cancer. *Nutrients*. 2015;7:4308–4317.
9. Han H, Pan M, Tao Y, Liu R, Huang Z, Piccolo K, et al. Early enteral nutrition is associated with faster post-oesophagectomy recovery in chinese esophageal cancer patients: a retrospective cohort study. *Nutr Cancer*. 2018;70:221–228.
10. Mahmoodzadeh H, Shoar S, Sirati F, Khorgami Z. Early initiation of oral feeding following upper gastrointestinal tumor surgery: a randomized controlled trial. *Surg Today*. 2015;45:203–208.
11. Sun HB, Liu XB, Zhang RX, Wang ZF, Qin JJ, Yan M, et al. Early oral feeding following thoracoscopic oesophagectomy for oesophageal cancer. *Eur J Cardiothorac Surg*. 2015;47:227–233.
12. Pisarska M, Małczak P, Major P, Wysocki M, Budzyński A, Pędzwiatr M. Enhanced recovery after surgery protocol in oesophageal cancer surgery: Systematic review and meta-analysis. *PLoS One*. 2017;12:e0174382.
13. Hur H, Kim SG, Shim JH, Song KY, Kim W, Park CH, et al. Effect of early oral feeding after gastric cancer surgery: a result of randomized clinical trial. *Surgery*. 2011;149:561–568.