



Title Curative Treatment for Esophageal Cancer: Systematic Review

of Neoadjuvant Therapy and Chemoradiotherapy Alone

Agency AETMIS, Agence d'évaluation des technologies et des modes d'intervention en santé

2021 avenue Union, suite 10.083, Montréal, Québec H3A 2S9, Canada;

Tel: +1 514 873 2563, Fax: +1 514 873 1369; aetmis@aetmis.gouv.qc.ca, www.aetmis.gouv.qc.ca

Reference ETMIS 2009 5 (9), Printed French edition 978-2-550-57294-7, English summary (PDF)

978-2-550-57293-0. www.aetmis.gouv.qc.ca/site/en_publications2009.phtml

Aim

To systematically review the relative efficacy of neoadjuvant chemotherapy, neoadjuvant chemoradiotherapy, and chemoradiotherapy without surgery in curative treatment of cancer of the esophagus and gastroesophageal junction.

Conclusions and results

The results of this review are intended to serve as the basis for a clinical practice guideline to be developed by the *Comité de l'évolution des pratiques en oncologie* (CEPO).

Available data do not allow selecting the most effective therapeutic option among the treatments examined in this report. The choice of therapeutic management depends on the tumor's histological type and stage and on the patient's clinical status. It has been established that patients who respond well to neoadjuvant therapy have a better prognosis and better chances of survival. However, no criteria currently define the profile of patients likely to respond to neoadjuvant therapy; information that would enable health services to target them better.

Methods

We analyzed randomized controlled trials (RTCs), meta-analyses, and systematic reviews addressing solely the curative treatment of esophageal cancer and published until 2007, with regular updates until the end of 2008. When a good-quality meta-analysis was available, we presented its results with those of the included primary studies. Otherwise, we performed a metaanalysis of the outcomes of the primary studies on the topic. Six types of treatment modalities were covered: 1) neoadjuvant chemotherapy compared to surgery alone; 2) combined neoadjuvant chemotherapy and radiotherapy (chemoradiotherapy) compared to surgery alone; 3) chemoradiotherapy alone (without surgery) compared to surgery alone; 4) chemoradiotherapy alone (without surgery) compared to radiotherapy alone; 5) chemoradiotherapy alone compared to neoadjuvant chemoradiotherapy to determine the benefit added by surgery after chemoradiotherapy with curative intent; and (6) comparison of different modalities of radiotherapy combined with chemotherapy.

Further research/reviews required

Most of the primary RCTs had small sample sizes, were of poor methodological quality, and were heterogeneous in terms of surgical techniques, chemotherapy and radiotherapy protocols, and clinical characteristics of the patients and tumors (which were not always described). Hence, more studies are required.