

# Carcinoma of the oesophagus

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Cancer of the oesophagus has an estimated incidence of 4600–5600 new cases per year in France and ranks third in frequency among digestive tract cancers after colon and gastric cancer. It is responsible for 3.9% of cancer deaths and is the fourth commonest cause of death after lung, colon, rectum and prostate cancer. The prognosis is very poor; the French registry shows a 5-year survival of only 3–6%. These recommendations concern only squamous (epidermoid) and adenocarcinomas of the oesophagus and none of the other rarer histological types.

These guidelines were validated in April 2000 and an update is planned for late 2000.

## DIAGNOSIS AND INITIAL ASSESSMENT

The diagnosis of cancer of the oesophagus is based on the histopathological study of biopsies taken by oesophago-gastric fibroscopy. Staining with Toluidine blue or Lugol can be used to define more clearly the extent of the primary tumour and/or demonstrate a second site of disease (defined as a lesion more than 5 cm away from the primary lesion).

Assessment of the extent of disease spread should include (standard) a complete clinical examination (including nutritional state), as well as fiberoptic bronchoscopy to exclude the presence of tracheo-bronchial mucosal extension or a synchronous primary lesion.

A formal head and neck examination should be done to look for a synchronous lesion in the oropharynx.

Other assessments include an analysis of respiratory function (blood gas analysis) as well as cardiological, hepatic and renal function (standard). Thoraco-abdominal CT scan or abdominal ultrasound, sub-clavicular ultrasound, oesophagogram and oesophageal echo-endoscopy are all options depending on the results of initial staging examinations.

## CLASSIFICATION

There is no standard for the pre-therapeutic classification of oesophageal cancers. The us-TNM classification based on echo-endoscopy is an option. The standard post-surgical classification is the pTNM classification of the UICC (1997).

## TREATMENT MODALITIES

### Surgery

The standard technique for curative surgery is a subtotal transthoracic oesophagectomy with concurrent nodal clearance and gastroplasty if possible.

Surgical treatment is recommended for stages I and II (disease localized to the oesophagus). This treatment remains an option for tumours extending beyond the oesophageal wall (involving the adventitia (T3) or involving nodes (N1)). Surgery is not recommended for tumours involving mediastinal organs (T4) or with distant metastases (M). The inclusion of patients in therapeutic trials is recommended especially for T3, N0–1 tumours.

### Radiotherapy

If chemotherapy is contra-indicated, radiotherapy alone is recommended for the treatment of advanced or inoperable cancers of the oesophagus. Pre- or postoperative radiotherapy is not recommended for the treatment of oesophageal cancers (option).

### Chemotherapy

Chemotherapy for the adjuvant treatment of oesophageal cancer is not recommended (option, level of evidence B). Therapeutic trials in which surgery alone is the control should be undertaken. Chemotherapy for the treatment of advanced oesophageal cancer is an option, but this must be considered case by case, and be given when possible within a trial context.

### Chemoradiation therapy

Combined modality therapy with radiotherapy and chemotherapy is superior to radiotherapy alone for the non-surgical treatment of cancer of the oesophagus (level of evidence B). The RTOG schedule (four cycles of 5-FU-cisplatin (weeks 1, 5, 8, 11) and radiotherapy 50 Gy 25 fractions spread over 5 weeks, from week 1 to week 5) can be considered standard treatment for inoperable cases. It is superior to accelerated high dose per fraction (split course) radiotherapy (level of evidence B). Combined chemoradiation therapy is an alternative to surgery in operable disease that penetrates the wall of the oesophagus to involve the adventitia (T3) or nodes (N1) and also for T1 or T2 tumours (in certain institutions only). A formal comparison between surgery and chemoradiation therapy alone has never been undertaken.

Preoperative chemoradiation therapy has not been proven to be superior to surgery alone in operable subjects with stage I and II epidermoid cancer of the thoracic oesophagus (level of evidence B). This treatment remains an option; further trials are necessary. In operable adenocarcinomas of the oesophagus or the oesophago-gastric junction, the combination of chemoradiation therapy is efficacious when given preoperatively (level of evidence B). This treatment constitutes a therapeutic option but should still be given within randomized controlled trials.

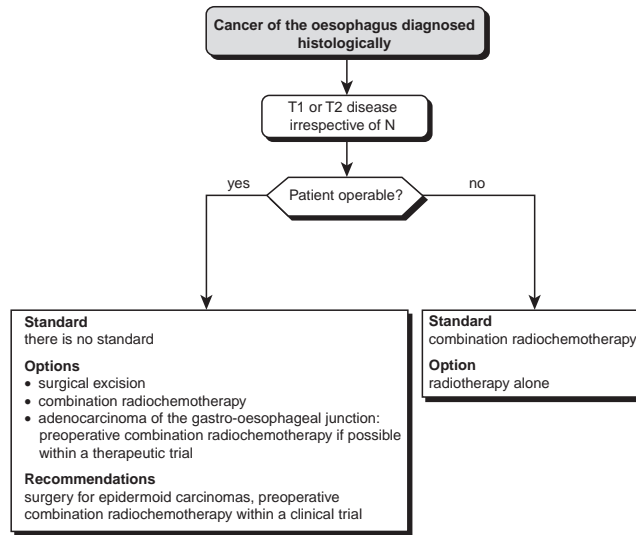


Figure 1 Treatment of limited-stage carcinoma of the oesophagus

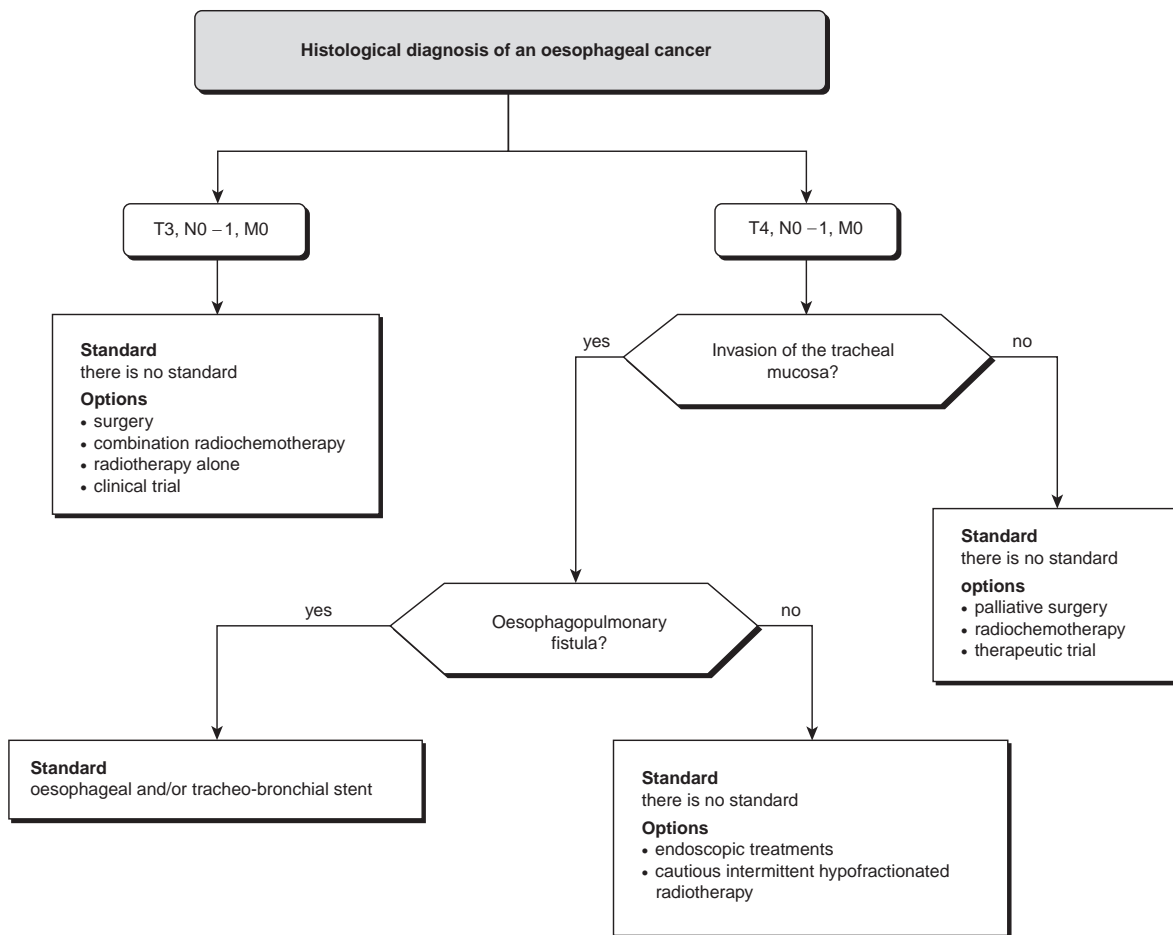


Figure 2 Treatment of advanced stage disease

**Endoscopic therapy**

This represents the standard for patients unfit for other treatments. Formal comparisons with other therapy in prospective trials are necessary to evaluate the impact on quality of life.

**THERAPEUTIC STRATEGY**

**T1 N0-1 M0, T2 N0-1 M0 disease**

There is no standard treatment in operable patients (Figure 1). Surgical excision (level of evidence C) and combination

chemoradiation therapy are options. Surgical resection is recommended. Preoperative chemoradiation therapy must be re-evaluated within therapeutic trials. For patients with inoperable disease, chemoradiation therapy is the standard treatment. If chemotherapy is contra-indicated, radiotherapy alone is a therapeutic option.

**US T3 N0–1 M0 disease**

There is no standard. Surgical excision, chemoradiation therapy (or radiotherapy alone if chemotherapy is contra-indicated) and chemoradiation therapy followed by surgery are the therapeutic options (Figure 2). Patients should be included in prospective randomized trials.

**US T4 N0 and T4 N1 disease without invasion of the tracheal mucosa**

There is no standard. Palliative surgery, chemoradiation therapy or radiotherapy alone (if chemotherapy is contra-indicated) are options (Figure 2). Patients should be included in prospective randomised trials.

**US T4 N0 and T4 N1 disease with involvement of the tracheal mucosa**

a) Patients without oesophageal–respiratory tract fistulae. There is no standard. Endoscopic treatments for dysphagia and respiratory compromise or radiotherapy (using small doses per fraction) with or without chemotherapy for patients of reasonable performance status are therapeutic options.

b) Patients with oesophageal–respiratory tract fistulae. The placement of an oesophageal and/or tracheo-bronchial stent constitutes standard treatment.

**Metastatic oesophageal cancer**

a) Coeliac axis and cervical node metastases (M1). There is no standard treatment. Chemotherapy, combination chemoradiation therapy and endoscopic treatments are therapeutic options. (Figure 3)

b) Visceral metastases. If the primary oesophageal tumour has not been resected, and if the patient is of good performance status (PS1 or 2), there is no standard. Combination chemoradiation therapy followed by chemotherapy alone (if there is evidence of an objective response), endoscopic treatment for dysphagia and/or chemotherapy are therapeutic options. If the oesophageal tumour has not been resected and if the patient is of poor performance

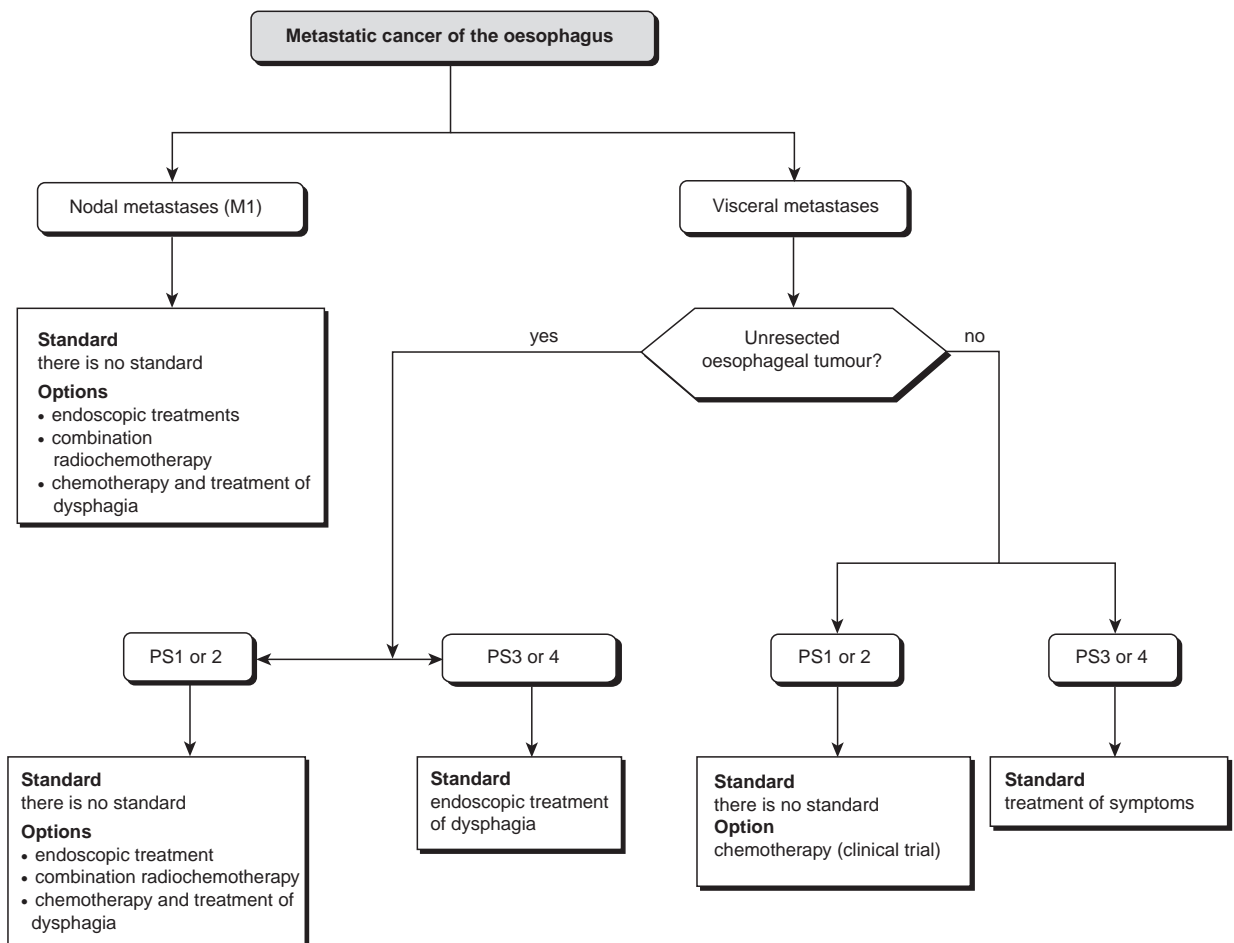


Figure 3 Treatment of metastatic disease

status (PS3 or 4) the standard therapy is endoscopic therapy for the palliation of dysphagia.

If the primary oesophageal tumour has been resected and if the patient has a good performance status (PS1 or 2) there is no standard. Chemotherapy, preferably within the context of a therapeutic trial is an option.

If the oesophageal tumour has been resected and if the patient is of poor performance status, symptomatic treatment is standard.

### **Non-metastatic adenocarcinoma of the cardio-oesophageal junction**

If the patient has operable disease, surgical excision is standard. Preoperative chemoradiation therapy, preferably within a clinical trial is a therapeutic option. If the patient does not have operable disease, combination chemoradiation therapy is standard. When chemotherapy is contra-indicated, radiotherapy alone and/or endoscopic treatments are therapeutic options.

### **FOLLOW-UP**

The follow-up of patients with oesophageal cancer relies on clinical examination focusing on dysphagia, nutritional status and the sites of likely nodal relapse. There is no consensus as to the interval between assessments (3–6 months). Paraclinical follow-up (i.e. by imaging and blood tests) is an option, especially if patients are entered into therapeutic trials. A formal head and neck examination should be undertaken 12–18 months after initial treatment in patients without recurrence.

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