Oesophago-gastric cancer: assessment and management in adults

NICE guideline
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Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.
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Overview

This guideline covers assessing and managing oesophago-gastric cancer in adults, including radical and palliative treatment and nutritional support. It aims to reduce variation in practice through better organisation of care and support, and improve quality of life and survival by giving advice on the most suitable treatments depending on cancer type, stage and location.

Who is it for?

- Healthcare professionals involved in the care of people with oesophago-gastric cancer
- Commissioners of oesophago-gastric cancer services
- People with oesophago-gastric cancer, their family members and carers, and the public.
Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

1.1 Information and support

1.1.1 Offer all people with oesophago-gastric cancer access to an oesophago-gastric clinical nurse specialist through the person's multidisciplinary team.

1.1.2 Make sure the person with oesophago-gastric cancer is given information, in a format that is appropriate for them, to take away and review in their own time after you have spoken to them about their cancer and care.

1.1.3 Inform people with oesophago-gastric cancer about peer-to-peer local or national support groups for them to join if they wish.

1.1.4 Provide psychosocial support to the person with oesophago-gastric cancer and those important to them (as appropriate). Cover:

- the potential impact on family life, changing roles and relationships
- uncertainty about the disease course and prognosis
- concerns over heredity of cancer, recovery and recurrence
- where they can get further support.

Radical treatment

1.1.5 Provide information about possible treatment options, such as surgery, radiotherapy or chemotherapy, in all discussions with people with oesophago-gastric cancer who are going to have radical treatment. Make sure the information is consistent and covers:
- treatment outcomes (prognosis and future treatments)
- recovery, including the consequences of treatment and how to manage them
- nutrition and lifestyle changes.

Follow the recommendations in NICE’s guideline on patient experience in adult NHS services.

Palliative management

1.1.6 For people with oesophago-gastric cancer who can only have palliative management, offer personalised information and support to them and the people who are important to them (as appropriate), at a pace that is suitable for them. This could include information on:

- life expectancy, if the person has said they would like to know about this
- the treatment and care available, and how to access this both now and for future symptoms
- holistic issues (such as physical, emotional, social, financial and spiritual issues), and how they can get support and help
- dietary changes, and how to manage these and access specialist dietetic support
- which sources of information in the public domain give good advice about the issues listed above.

Follow the recommendations in NICE’s guideline on patient experience in adult NHS services.

1.1.7 For people with oesophago-gastric cancer who can only have palliative management, consider providing support from:

- a specialist cancer care dietitian
- a specialist palliative care team
- a peer support group, if available.
For people with oesophago-gastric cancer who are having palliative care, follow the recommendations in the NICE guideline on improving supportive and palliative care for adults with cancer.

1.2 Organisation of services

1.2.1 Review the treatment of people with confirmed oesophago-gastric cancer in a multidisciplinary meeting that includes an oncologist and specialist radiologist with an interest in oesophago-gastric cancer.

1.2.2 Review the treatment of people with confirmed localised, non-metastatic oesophago-gastric cancer in a specialist oesophago-gastric cancer multidisciplinary meeting.

1.2.3 Ensure curative oesophago-gastric resections are performed in a specialist surgical unit by specialist oesophago-gastric surgeons.

1.3 Assessment after diagnosis

Determining suitability for radical treatment of histologically-confirmed oesophageal or gastro-oesophageal junctional cancer after endoscopy and whole-body CT scan diagnosis

1.3.1 Offer F-18 FDG PET-CT to people with oesophageal and gastro-oesophageal junctional tumours that are suitable for radical treatment (except for T1a tumours).

1.3.2 Do not offer endoscopic ultrasound only to distinguish between T2–T3 tumours in people with oesophageal and gastro-oesophageal junctional tumours.

1.3.3 Only offer endoscopic ultrasound to people with oesophageal and gastro-oesophageal junctional cancer when it will help guide ongoing management.

1.3.4 Only consider staging laparoscopy for people with oesophageal or gastro-oesophageal junctional cancer when it will help guide ongoing management.
Determining suitability for radical treatment of histologically-confirmed gastric cancer after endoscopy and whole-body CT scan diagnosis

1.3.5 Offer staging laparoscopy to all people with potentially curable gastric cancer.

1.3.6 Only consider endoscopic ultrasound for people with gastric cancer if it will help guide ongoing management.

1.3.7 Only consider F-18 FDG PET-CT in people with gastric cancer if metastatic disease is suspected and it will help guide ongoing management.

HER2 testing in metastatic oesophago-gastric adenocarcinoma

1.3.8 Offer HER2 testing to people with metastatic oesophago-gastric adenocarcinoma (see the NICE technology appraisal guidance on trastuzumab for HER2-positive metastatic gastric cancer).

1.4 Radical treatment

T1N0 oesophageal cancer

1.4.1 Offer endoscopic mucosal resection for staging for people with suspected T1 oesophageal cancer.

1.4.2 Offer endoscopic eradication of remaining Barrett's mucosa for people with T1aN0 oesophageal cancer.

1.4.3 For recommendations on the treatment of Barrett's oesophagus, see the NICE guideline on Barrett's oesophagus: ablative therapy.

1.4.4 Offer radical resection for people with T1bN0 oesophageal adenocarcinoma if they are fit enough to have surgery.

1.4.5 Offer people with T1bN0 squamous cell carcinoma of the oesophagus the choice of:

- definitive chemoradiotherapy or
• surgical resection.

Only make this choice after the surgeon and oncologist have discussed the benefits, risks and treatment consequences of each option with the person and those who are important to them (as appropriate).

**Surgical treatment of oesophageal cancer**

1.4.6 Consider an open or minimally invasive (including hybrid) oesophagectomy for surgical treatment of oesophageal cancer.

**Lymph node dissection in oesophageal and gastric cancer**

1.4.7 When performing a curative gastrectomy for people with gastric cancer, consider a D2 lymph node dissection.

1.4.8 When performing a curative oesophagectomy for people with oesophageal cancer, consider two-field lymph node dissection.

**Localised oesophageal and gastro-oesophageal junctional adenocarcinoma**

1.4.9 For people with localised oesophageal and gastro-oesophageal junctional adenocarcinoma (excluding T1N0 tumours) who are going to have surgical resection, offer a choice of:

• chemotherapy, before or before and after surgery or

• chemoradiotherapy, before surgery.

Make the choice after discussing the benefits, risks and treatment consequences of each option with the person and those important to them (as appropriate). Encourage people to join relevant clinical trials, if available.

**Gastric cancer**

1.4.10 Offer chemotherapy before and after surgery to people with gastric cancer who are having radical surgical resection.
1.4.11 Consider chemotherapy or chemoradiotherapy after surgery for people with gastric cancer who did not have chemotherapy before surgery with curative intent.

Squamous cell carcinoma of the oesophagus

1.4.12 Offer people with resectable non-metastatic squamous cell carcinoma of the oesophagus the choice of:

- radical chemoradiotherapy or
- chemoradiotherapy before surgical resection.

Discuss the benefits, risks and treatment consequences of each option with the person and those who are important to them (as appropriate).

1.5 Palliative management

Non-metastatic oesophageal cancer that is not suitable for surgery

1.5.1 Consider chemoradiotherapy for people with non-metastatic oesophageal cancer that can be encompassed within a radiotherapy field.

1.5.2 When the cancer cannot be encompassed within a high-dose radiotherapy field, consider one or more of:

- chemotherapy
- local tumour treatment, including stenting or palliative radiotherapy
- best supportive care.

Discuss the benefits, risks and treatment consequences of each option with the person with oesophageal cancer and those who are important to them (as appropriate).

1.5.3 After a person with oesophageal cancer has had treatment, assess the tumour's response to chemotherapy or chemoradiotherapy and reconsider if surgery is an option.
First-line palliative chemotherapy for locally advanced or metastatic oesophago-gastric cancer

1.5.4 Offer trastuzumab (in combination with cisplatin\(^1\) and capecitabine or 5-fluorouracil) as a treatment option to people with HER2-positive metastatic adenocarcinoma of the stomach or gastro-oesophageal junction (see the NICE technology appraisal guidance on trastuzumab for the treatment of HER2-positive metastatic gastric cancer).

1.5.5 Offer first-line palliative combination chemotherapy to people with advanced oesophago-gastric cancer who have a performance status 0 to 2 and no significant comorbidities. Possible drug combinations include:

- doublet treatment: 5-fluorouracil or capecitabine\(^2\) in combination with cisplatin\(^1\) or oxaliplatin\(^3\)

- triplet treatment: 5-fluorouracil or capecitabine in combination with cisplatin or oxaliplatin plus epirubicin\(^4\).

Discuss the benefits, risks and treatment consequences of each option with the person and those important to them (as appropriate).

Second-line palliative chemotherapy for locally advanced or metastatic oesophago-gastric cancer

1.5.6 Consider second-line palliative chemotherapy for people with oesophago-gastric cancer.

1.5.7 Discuss the risks, benefits and treatment consequences of second-line palliative chemotherapy for oesophago-gastric cancer with the person and those who are important to them (as appropriate). Cover:

- how different treatments can have similar effectiveness but different side effects

- how the treatments are given

- if the person has any preference for one treatment over another.

1.5.8 Consider a clinical trial (if a suitable one is available) as an alternative to second-line chemotherapy for people with oesophago-gastric cancer.

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\(^{1}\) Cisplatin
\(^{2}\) 5-fluorouracil
\(^{3}\) Capecitabine
\(^{4}\) Oxaliplatin

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Luminal obstruction in oesophageal and gastro-oesophageal junctional cancer

1.5.9 Offer self-expanding stents to people with oesophageal and gastro-oesophageal junctional cancer who need immediate relief of dysphagia.

1.5.10 Offer self-expanding stents or radiotherapy as primary treatment to people with oesophageal and gastro-oesophageal junctional cancer, depending on the degree of dysphagia and its impact on nutrition and quality of life, performance status and prognosis.

1.5.11 Consider external beam radiotherapy after stenting for people with oesophageal and gastro-oesophageal junctional cancer, for long-term disease control.

Outflow obstruction in gastric cancer

1.5.12 Offer uncovered self-expanding metal stents or palliative surgery to people with gastric cancer, depending on fitness to undergo surgery, prognosis and extent of disease.

1.6 Nutritional support

Radical treatment

1.6.1 Offer nutritional assessment and tailored specialist dietetic support to people with oesophago-gastric cancer before, during and after radical treatments.

1.6.2 Offer immediate enteral or parenteral nutrition after surgery to people who are having radical surgery for oesophageal and gastro-oesophageal junctional cancers.

1.6.3 For people with oesophago-gastric cancer, follow the recommendations in the NICE guideline on nutrition support for adults.

Palliative care

1.6.4 Consider support from a specialist cancer-specific dietitian for people with oesophago-gastric cancer receiving palliative care.
1.6.5 Together with members of the multidisciplinary team and the hospital and community palliative care teams, tailor dietetic support to the person with oesophago-gastric cancer and their clinical situation.

1.6.6 For people with oesophago-gastric cancer, follow the recommendations in the NICE guideline on improving supportive and palliative care for adults with cancer.

1.7 Follow-up

1.7.1 For people who have no symptoms or evidence of residual disease after treatment for oesophago-gastric cancer with curative intent:

- provide information about the symptoms of recurrent disease, and what to do if they develop these symptoms
- offer rapid access to the oesophago-gastric multidisciplinary team for review, if symptoms develop.

1.7.2 For people who have no symptoms or evidence of residual disease after treatment for oesophago-gastric cancer with curative intent, do not offer:

- routine clinical follow-up solely for the detection of recurrent disease
- routine radiological surveillance solely for the detection of recurrent disease.

[1] Although this use is common in UK clinical practice, at the time of publication (January 2018), cisplatin did not have a UK marketing authorisation for oesophageal or gastric cancer. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council’s Prescribing guidance: prescribing unlicensed medicines for further information.

[2] Although this use is common in UK clinical practice, at the time of publication (January 2018), capecitabine did not have a UK marketing authorisation for oesophageal cancer. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council’s Prescribing guidance: prescribing unlicensed medicines for further information.
Although this use is common in UK clinical practice, at the time of publication (January 2018), oxaliplatin did not have a UK marketing authorisation for oesophageal or gastric cancer. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

Although this use is common in UK clinical practice, at the time of publication (January 2018), epirubicin did not have a UK marketing authorisation for oesophageal cancer. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.
Putting this guideline into practice

NICE has produced tools and resources to help you put this guideline into practice.

Putting recommendations into practice can take time. How long may vary from guideline to guideline, and depends on how much change in practice or services is needed. Implementing change is most effective when aligned with local priorities.

Changes recommended for clinical practice that can be done quickly – like changes in prescribing practice – should be shared quickly. This is because healthcare professionals should use guidelines to guide their work – as is required by professional regulating bodies such as the General Medical and Nursing and Midwifery Councils.

Changes should be implemented as soon as possible, unless there is a good reason for not doing so (for example, if it would be better value for money if a package of recommendations were all implemented at once).

Different organisations may need different approaches to implementation, depending on their size and function. Sometimes individual practitioners may be able to respond to recommendations to improve their practice more quickly than large organisations.

Here are some pointers to help organisations put NICE guidelines into practice:

1. **Raise awareness** through routine communication channels, such as email or newsletters, regular meetings, internal staff briefings and other communications with all relevant partner organisations. Identify things staff can include in their own practice straight away.

2. **Identify a lead** with an interest in the topic to champion the guideline and motivate others to support its use and make service changes, and to find out any significant issues locally.

3. **Carry out a baseline assessment** against the recommendations to find out whether there are gaps in current service provision.

4. **Think about what data you need to measure improvement** and plan how you will collect it. You may want to work with other health and social care organisations and specialist groups to compare current practice with the recommendations. This may also help identify local issues that will slow or prevent implementation.
5. **Develop an action plan**, with the steps needed to put the guideline into practice, and make sure it is ready as soon as possible. Big, complex changes may take longer to implement, but some may be quick and easy to do. An action plan will help in both cases.

6. **For very big changes** include milestones and a business case, which will set out additional costs, savings and possible areas for disinvestment. A small project group could develop the action plan. The group might include the guideline champion, a senior organisational sponsor, staff involved in the associated services, finance and information professionals.

7. **Implement the action plan** with oversight from the lead and the project group. Big projects may also need project management support.

8. **Review and monitor** how well the guideline is being implemented through the project group. Share progress with those involved in making improvements, as well as relevant boards and local partners.

NICE provides a comprehensive programme of support and resources to maximise uptake and use of evidence and guidance. See our [into practice](https://www.nice.org.uk/) pages for more information.

Also see Leng G, Moore V, Abraham S, editors (2014) Achieving high quality care – practical experience from NICE. Chichester: Wiley.
Context

There are around 13,000 new cases of oesophago-gastric cancer diagnosed in England each year. Mortality rates are high, with over 10,000 deaths annually, and over the last 30 years the incidence of these cancers has continued to increase. Early diagnosis remains challenging, and optimising the diagnostic and treatment pathway is essential to improving management and prognosis.

At present there is considerable variation in management and follow-up for people diagnosed with oesophago-gastric cancer. Though there have been recent advances in surgical techniques and chemotherapeutic agents, it is not yet clear how well these compare with standard therapy in terms of improving survival and quality of life.

This guideline covers adults and young people (18 years and over) who are referred to secondary care with suspected oesophago-gastric cancer, or who have newly diagnosed or recurrent disease. It covers areas of uncertainty or variation in practice in relation to diagnosis, staging and management of various aspects of the disease. Although not intended as a comprehensive guide to the treatment of oesophago-gastric cancer, the information and support needs of people affected, organisation of specialist teams, initial assessment of disease and the management of oesophago-gastric cancer in radical and palliative settings are all covered. We have also covered related topics, such as nutritional support.

This guideline aims to help standardise the treatment of oesophago-gastric cancer.

More information

You can also see this guideline in the NICE pathway on oesophageal and gastric cancer. To find out what NICE has said on topics related to this guideline, see our web page on cancer. See also the guideline committee's discussion and the evidence reviews (in the full guideline), and information about how the guideline was developed, including details of the committee.
Recommendations for research

The guideline committee has made the following recommendations for research. The committee's full set of research recommendations is detailed in the full guideline.

1 Radical treatment of squamous cell carcinoma of the oesophagus

Does the addition of surgery to chemoradiotherapy improve disease-free and overall survival in people with squamous cell carcinoma of the oesophagus?

Why this is important

The aetiology of squamous cell carcinoma (SCC) of the oesophagus is changing. Patients with SCC are now fitter, with fewer co-morbidities than in previous years. Standard radical treatment for SCC of the oesophagus is usually chemo-radiotherapy, which is associated with a median survival of between 12 and 18 months. Given a fitter patient population, surgery may be a therapeutic option but its effectiveness in addition to chemoradiotherapy is unknown and a randomised controlled study to investigate whether the combination improves disease-free and overall survival would provide useful information to guide future clinical practice.

2 Radical treatment of T1bN0 adenocarcinoma of the oesophagus

What is the optimal treatment for T1bN0 adenocarcinoma of the oesophagus?

Why this is important

In patients with submucosal (T1b) N0 oesophageal adenocarcinoma (OAC), the associated risk of lymph node metastases is estimated to be between 4% for sub-mucosal 1 (sm1) and up to 16% for sm3 based on retrospective surgical data. The majority of patients with a submucosal T1bN0 OAC therefore currently have major surgical resection without detecting any cancer cells in the oesophagus or lymph nodes. Oesophagectomy is also a procedure associated with significant morbidity (up to 50%) and mortality (2–4%).

In comparison, endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) are techniques that can remove the submucosa with less morbidity and mortality than surgery and, providing there is no lymph node involvement, can lead to a cure. However, compared to surgery nodal involvement can only be assessed by F-18 FDG PET-CT scanning and endoscopic ultrasound (EUS), which may lead to under-treatment of some patients with T1b disease.
A study to assess which patients should have endoscopic therapy or surgery for T1bN0 OAC would be useful, as this would help prevent both under- and over-treatment of this group of people. This could be a randomised controlled trial comparing surgery and endoscopic treatment.

3 Nutritional support after radical surgery

What is the optimal method of delivering nutritional support to adults after surgery with curative intent for oesophago-gastric cancer?

Why this is important

People who have surgery for oesophago-gastric cancer have a prolonged period without adequate oral intake after surgery. Oral, enteral and parenteral nutrition support strategies are used to support people during this time. Evidence suggests that providing some form of nutrition support improves surgical outcomes. However, which of these methods is the safest and most effective has not been determined and because of this, practice in this field varies nationally. A study to identify the best method of delivering safe and effective nutritional support interventions which aim to reduce post-operative complications in this population would help guide future clinical practice.

4 Jejunostomy support after radical surgery

What is the effectiveness of long-term jejunostomy support compared to intensive dietary counselling and support along with symptom management for people having radical surgery for oesophago-gastric cancer?

Why this is important

People who have had surgery for oesophago-gastric cancer have nutritional difficulties as a result of problems eating, ongoing symptoms, and side-effects related to the surgery. It is well recognised that they have a poor quality of life (QoL). Most patients have adjuvant treatment, however their nutritional status may negatively impact on their ability to tolerate this, meaning treatment can be stopped early or not received. Jejunostomy feeding tubes are often used to provide nutrition support after discharge from hospital after surgery. Some small studies have shown a benefit in terms of weight preservation, but none have shown that this leads to better recovery, tolerance of treatment or quality of life. Practice in this area varies greatly, with some centres placing jejunostomy tubes and continuing enteral feeding after discharge, some placing the jejunostomy tubes and not using them routinely and others not placing jejunostomy tubes at all. Studies should aim to identify if jejunostomy placement leads to clinical benefit in adults who have had surgery for oesophago-gastric cancer.
5 Follow-up after treatment with curative intent

Is the routine use of CT and tumour markers effective in detecting recurrent disease suitable for radical treatment in asymptomatic people who have had treatment for oesophago-gastric cancer with curative intent?

Why this is important

There is no clearly defined follow-up protocol for people with oesophago-gastric cancer treated radically. Detection of early recurrence potentially suitable for radical treatment offers the possibility of increased survival. However, the best methods of detecting recurrence are unclear and there is no evidence to show whether early detection leads to improved overall survival. The alternative is to wait until symptoms reoccur and then re-evaluate the further treatment options available. Studies examining the role of screening in this scenario would show whether routine follow-up in asymptomatic people was effective at detecting recurrence and improving overall survival.

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Accreditation

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