

87**Management of oesophageal
and gastric cancer**

Quick Reference Guide



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RISK FACTORS

- Oesophageal and gastric cancers occur mainly in people over 55 years of age.
- Male sex is a risk factor for squamous cancer of the oesophagus and for oesophagogastric junction cancer.
- Deprivation is a risk factor for development of squamous cancer of the oesophagus and for gastric cancer.
- Tobacco smoking increases the risk of squamous cancer of the oesophagus approximately nine fold compared with age and sex matched controls.
- Squamous cancer of the oesophagus and gastric cancer are associated with alcohol consumption.
- Increasing body mass index (BMI) is associated with an enhanced risk of oesophageal adenocarcinoma and with a risk of oesophagogastric junction cancer.
- The presence of *Helicobacter pylori* infection is associated with a two to threefold increase in the risk of developing gastric cancer.

B A test and treat policy for *Helicobacter pylori* should be employed in the initial management of patients with uncomplicated dyspepsia.

C Irrespective of age, patients should be reviewed after *Helicobacter pylori* eradication treatment. For those with recurrent or persistent symptoms the need for further assessment, including endoscopy, should be considered.

C In patients with gastro-oesophageal reflux symptoms, endoscopy with the intention of identifying cancer is not indicated unless an alarm symptom is also present.

▶ Alarm symptoms

B Patients presenting with any of the following alarm symptoms should be referred for early endoscopy:

- dysphagia
- recurrent vomiting
- anorexia
- weight loss
- gastrointestinal blood loss.

- Prompt investigation and assessment of patients referred with symptoms suggestive of oesophageal or gastric cancer are desirable in order to minimise the period of anxiety and uncertainty about diagnosis for the patients, their families and carers.

PATIENTS WITH BARRETT'S OESOPHAGUS

RISK FACTORS

- Longstanding symptomatic gastro-oesophageal reflux disease (heartburn) is a recognised risk factor for Barrett's oesophagus and oesophageal adenocarcinoma.
- The patients with Barrett's oesophagus who are at highest risk of malignant progression are: men, patients over 60, and those with any of the following on index endoscopy: ulceration and severe oesophagitis, nodularity, stricture, or dysplasia.

C Reduction of risk of progression to adenocarcinoma is not an indication for anti-reflux surgery in patients with Barrett's oesophagus.

C In patients with Barrett's oesophagus there should be a structured biopsy protocol with quadrantic biopsies every two centimetres and biopsy of any visible lesion.

C Evaluation of suspected high grade dysplasia in Barrett's oesophagus biopsies should be undertaken with knowledge of the clinical and endoscopic background and biopsies should be reviewed at a multidisciplinary meeting with access to the clinical information.

DIAGNOSIS

C Flexible upper GI endoscopy is recommended as the diagnostic procedure of choice in patients with suspected oesophageal or gastric cancer.

D Routine use of chromoendoscopy during upper GI endoscopy is not recommended, but may be of value in selected patients at high risk of oesophageal or gastric malignancy.

C A minimum of eight biopsies should be taken to achieve a diagnosis of oesophageal malignancy.

INFORMATION AND COMMUNICATION

The management of all patients who are diagnosed with gastric or oesophageal cancer, should be discussed within a multidisciplinary forum.

D Information relating to local and national support services should be made available to both patients and carers.

Patients with oesophageal or gastric cancer should be offered written information at the time of diagnosis detailing the possible sequence of events and providing them with a named contact on the multidisciplinary team.

Patients should be given clear information relating to the potential risks and benefits of treatment.

All patients newly diagnosed with oesophageal or gastric cancer should have access to a clinical nurse specialist for support, advice and information and to facilitate timely communication with primary care

HISTOPATHOLOGY

The diagnosis of malignancy should, whenever possible, be confirmed pathologically.

Invasive malignancies should be reviewed by a specialist GI pathologist at an appropriate multidisciplinary meeting.

C Pathologists should follow the revised Vienna classification for reporting dysplasia.

C Where radical intervention is contemplated on the basis of high grade dysplasia or early adenocarcinoma the diagnosis should be validated by a second pathologist experienced in this area and further biopsies should be taken if there is uncertainty.

STAGING MODALITIES

B In patients with oesophageal or gastric cancer CT scan of the chest and abdomen with intravenous contrast and gastric distension with oral contrast or water should be performed routinely. The liver should be imaged in the portal venous phase.

B Patients with oesophageal or oesophagogastric junction cancers who are candidates for any curative therapy should have their tumours staged with endoscopic ultrasound +/- fine needle aspiration.

C Laparoscopy should be considered in patients with oesophageal tumours with a gastric component, and in patients with gastric tumours being considered for surgery where full thickness gastric wall involvement is suspected.

C MRI should be reserved for those patients who cannot undergo CT, or used for additional investigation following CT/EUS.

D Bronchoscopy +/- BUS +/- biopsy should be undertaken in patients with clinical or imaging features suspicious of tracheobronchial invasion.

D Thoracoscopy may be considered for patients where a tissue diagnosis of suspicious nodes (*not possible by either EUS or CT guided techniques*) is required to determine optimum management.

C PET is not routinely indicated in the staging of oesophageal and gastric cancers.

D Neck imaging either by US or CT is recommended as part of the staging of oesophageal cancer.

SIGNIFICANCE OF TUMOUR STAGE

Treatment and survival

B Patients with gastric or oesophageal cancer should undergo careful preoperative staging to enable targeting of potentially curative treatment to those likely to benefit.

B Patients with gastric or oesophageal cancer who have distant metastases or patients with oesophageal cancer who have metastatic lymph nodes in three compartments (*neck, mediastinum and abdomen*) on preoperative staging are not candidates for curative treatment.

C When M1a nodal involvement in oesophageal cancer, or extensive lymphadenopathy in any cancer, is identified on preoperative staging, the anticipated poor prognosis should be carefully considered when discussing treatment options.

Surgery and quality of life

Where there is clear evidence of incurable disease following staging, attempts at resection should be avoided.

D The possibility of reduction in quality of life after surgery should be considered when discussing treatment options, particularly when preoperative staging suggests that surgery would be unlikely to be curative.

SURGERY

B All patients being considered for surgery should undergo careful assessment of fitness with emphasis on performance status and respiratory function.

B Surgery for oesophageal or gastric cancer should be aimed at achieving an R0 resection (*proximal, distal and circumferential margin clearance*).

Laparoscopic and thoracoscopic techniques should only be carried out by experienced surgeons within specialist units as part of a controlled prospective study with full informed consent and local clinical governance committee support.

B Resection specimens of oesophageal and gastric cancer resections should be reported according to, or supplemented by, the Royal College of Pathologists' minimum data sets.

D The routine use of epidural analgesia is recommended in gastric and oesophageal cancer surgery.

▶ Lymphadenectomy

D Two-field lymphadenectomy should be considered during oesophagectomy to improve staging and local disease control.

B Routine extension of lymphadenectomy into the superior mediastinum or neck should not be carried out.

B D2 lymphadenectomy, with a minimum of 25 lymph nodes removed, should be considered for patients undergoing gastrectomy. Routine resection of additional organs (*spleen and pancreas*) during gastrectomy is not recommended.

▶ Reconstruction

B Following oesophagectomy, the route of reconstruction and potential use of pyloric drainage procedure should be determined by the surgeon based on their individual experience.

B Consideration should be given to pouch formation after total gastrectomy.

HIGH GRADE DYSPLASIA

B Patients diagnosed with high grade dysplasia should have careful assessment (*CT, EUS, rigorous biopsy protocol +/- EMR*) to exclude coexisting cancer.

B In the absence of invasive cancer, patients with high grade dysplasia should be offered endoscopic treatment.

EARLY CANCER

B Superficial oesophageal cancer limited to the mucosa and early gastric cancer limited to the superficial submucosa should be treated by EMR.

D Mucosal ablative techniques such as PDT, APC or laser should be reserved for the management of residual disease after EMR and not for initial management if invasive disease is present in patients fit for surgery.

NEOADJUVANT AND ADJUVANT THERAPIES

Chemotherapy and radiotherapy should be prescribed, dispensed, administered and supervised in a safe and effective manner in accordance with the Joint Collegiate Council for Oncology Guidelines, clinical oncology good practice guidelines and Scottish Executive advice.

▶ Oesophageal cancer

B Patients with operable oesophageal cancer, who are treated surgically, should be considered for two cycles of preoperative chemotherapy with cisplatin and 5-fluorouracil or offered entry into a clinical trial.

The following are not recommended for patients with oesophageal cancer:

- B ▪ Preoperative chemoradiotherapy
- A ▪ Preoperative radiotherapy
- A ▪ Postoperative adjuvant chemotherapy
- Postoperative adjuvant chemoradiotherapy

▶ Gastric cancer

The following are not recommended for patients with gastric cancer:

- A ▪ Neoadjuvant chemotherapy or radiotherapy
- B ▪ Postoperative chemotherapy
- C ▪ Intraperitoneal chemotherapy and immunotherapy
- Postoperative chemoradiation

▶ Downstaging

D Patients with locally advanced disease having chemotherapy/chemoradiotherapy should have their response assessed for an impact on the potential to operate; following a good response the patient should be restaged and the role of surgery re-evaluated by the multidisciplinary team.

NON-SURGICAL TREATMENTS WITH CURATIVE INTENT

C Chemoradiotherapy should be considered in patients with oesophageal cancer who have locally advanced disease, those unfit for surgery or those who decline surgery.

D In patients with oesophageal cancer who are not suitable for surgery and intolerant to chemoradiotherapy, single modality radiotherapy can be used as a curative treatment in localised disease.

NUTRITIONAL STATUS/DIETETIC SUPPORT

All patients with oesophageal or gastric cancer should be screened using a validated nutritional screening tool to assess nutritional risk. Those at risk of nutritional problems should have access to a state registered dietitian to provide appropriate advice.

B Patients undergoing surgery for oesophageal or gastric cancer who are identified as being at high nutritional risk should be considered for preoperative nutritional support.

B All patients undergoing surgery for oesophageal or gastric cancer should be considered for early postoperative nutritional support preferably by the enteral route.

Control of symptoms such as pain, nausea, constipation and depression and good mouth care should be considered, to enable patients to maintain an oral intake in a form appropriate to their condition and treatment.

The need for artificial nutrition should be discussed with the patient, carer and multiprofessional team. Symptomatic, ethical, prognostic and practical issues should all be considered.

FOLLOW UP

D Follow up of patients with oesophageal or gastric cancer should monitor symptoms, signs and nutritional status.

Patients who have undergone curative resection for oesophageal or gastric cancer should undergo formal follow up in order to detect disorders of function either related to recurrent disease or any factors affecting quality of life.

PALLIATIVE CARE

C Patients with oesophageal or gastric cancer should have access to a specialist palliative care team.

▶ Invasive palliative treatments

Selection of patients for invasive palliative interventions should be carried out by a multidisciplinary team. There should be integration of the acute multidisciplinary team and the palliative care team to ensure appropriate continuous palliative care.

Endoscopic ablative therapies, stenting, external beam radiotherapy and brachytherapy should be used as complementary techniques.

B Laser or photodynamic therapy should be used for initial control of obstructive symptoms caused by exophytic tumours in the oesophagus including tumours near the upper oesophageal sphincter.

D Laser or photodynamic therapy should be considered for control of tumour overgrowth in stented patients.

B Partially covered self expanding metal stents are the intubation of choice for patients with obstructive oesophageal symptoms.

C Partially covered self expanding metal stents should be used to control obstructive oesophageal symptoms either following or instead of laser therapy, depending on the availability of local expertise.

D The use of oesophageal dilatation alone should be avoided.

Palliative surgery

C Oesophagectomy (*transthoracic or transhiatal*) should not be performed with palliative intent in patients with oesophageal cancer.

D Substernal bypass for oesophageal cancer should not be performed with palliative intent

C Palliative gastrectomy should be avoided in patients with gastric cancer who have disseminated peritoneal disease.

D D2 lymphadenectomy should be avoided in patients with gastric cancer in the palliative setting.

D Health professionals should take the following factors into account when considering palliative gastric resection:

- peritoneal disease (*favour minimal*)
- tumour diameter (*favour < 100 mm*)
- histological type (*favour Lauren intestinal type*)
- degree of differentiation (*favour moderate to good differentiation*).

D Laparoscopic bypass or gastric outlet stenting are alternatives to palliative gastric bypass.

D Palliative gastric bypass should be avoided when malignant ascites or small bowel obstruction are present.

D Exploratory laparotomy alone should be avoided.

Palliative chemotherapy and radiotherapy

B In patients with locally advanced or metastatic cancer of the oesophagus or stomach with good performance status combination chemotherapy including cisplatin and infusional 5-FU (such as ECF or MCF) should be considered.

Patients should have the opportunity to discuss the role of palliative combination chemotherapy with an oncologist and should be made aware of the modest survival benefit and potential symptomatic improvement, but potential toxicities, prior to a treatment decision.

D Palliative external-beam radiotherapy is an appropriate option for the treatment of mild dysphagia in patients with oesophageal cancer.

Any patient at any stage of their cancer journey who has symptomatic or supportive care needs which are difficult to address should have ready access to a specialist palliative care team.

D Endoluminal brachytherapy is an option for patients with dysphagia from oesophageal cancer.

Symptom control

- D** The principles of treatment outlined in the World Health Organisation pain relief programme should be followed (*WHO analgesic ladder*).
- C** Coeliac axis plexus block should be considered in patients with severe upper abdominal pain who are intolerant of, or have pain unresponsive to, other analgesic measures.
- D** Corticosteroids or megestrol acetate should be considered for patients with advanced oesophageal or gastric cancer who are anorexic.
- D** Octreotide and corticosteroids should be considered to relieve symptoms of bowel obstruction caused by malignancy where interventional therapy is not possible or appropriate.
- C** Blood transfusion is recommended as the standard treatment for symptomatic anaemia.
- D** Erythropoietin use should be considered in accordance with agreed guidelines.

ABBREVIATIONS

APC	Argon plasma coagulation
BUS	Bronchoscopic ultrasound
CT	Computerised tomography
ECF	Epirubicin, cisplatin, fluorouracil
EMR	Endoscopic mucosal resection
EUS	Endoscopic ultrasound
GI	Gastrointestinal
MCF	Mitomycin C, cisplatin, fluorouracil
MRI	Magnetic resonance imaging
PDT	Photodynamic therapy

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Maggie's Cancer Caring Centres

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This Quick Reference Guide provides a summary of the main recommendations in the SIGN guideline on the **Management of oesophageal and gastric cancer**.

Recommendations are graded **A B C D** to indicate the strength of the supporting evidence.

Good practice points are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: **www.sign.ac.uk**

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