THE MANAGEMENT OF CARCINOMA OF THE OESOPHAGUS AND STOMACH

SITE definitions:

**Oesophagus**: Site is divided into cervical, upper intra-thoracic, mid intra-thoracic and lower intra-thoracic.
Cervical oesophagus extends from lower border of the cricoid cartilage to the suprasternal notch (approximately 18cm from incisors).
Upper intra-thoracic: thoracic inlet to the tracheal bifurcation (approximately 24-26 cm. A recent study has shown the position of the carina to vary widely between patients and should be recorded at EUS).
Mid intra-thoracic: proximal half of the oesophagus from the tracheal bifurcation to the gastro-oesophageal junction (GOJ) (approximately 32-33cm cm).
Lower intra-thoracic: Distal half of the oesophagus from the tracheal bifurcation to the GOJ (approximately 40cm).

**Gastro-oesophageal junction (GOJ)**: see the staging system outlined below. GOJ tumours can be divided into 3 types:
type 1 involves the distal oesophagus and encroaches on the proximal GOJ.
type 2 straddles the GOJ.
type 3 affects the proximal stomach and encroaches on the distal GOJ.

**Stomach**: Site is divided into cardia (and gastro-oesophageal junction), fundus, corpus, antrum and pylorus.

The management of carcinoma of the cervical oesophagus is discussed in the Head and Neck section

1. **STAGE**

The UICC TNM 6th (2002) edition is used for oesophageal and gastric cancers. There is no separate staging system for oesophago-gastric junction tumours and in practice more proximal tumours are staged and treated as oesophageal and more distal as gastric tumours.

2. **PATHOLOGY**
The majority of tumours are either squamous carcinomas (more frequent in the proximal oesophagus) or adenocarcinomas (more frequent in the distal oesophagus, GOJ and stomach). Small cell carcinomas are rare and are treated using the same principles as small cell carcinomas at other sites.

3. INVESTIGATIONS

1. Full blood count, electrolytes and liver function tests.
2. Upper GI endoscopy and biopsy.
3. Endoscopic ultrasound.
4. CT scan of the chest and abdomen.
5. Laparoscopy/laparoscopic ultrasound (surgical staging of lower oesophageal, GOJ and gastric tumours).
6. Bronchoscopy (to assess tracheo-bronchial tree invasion if suspicion from CT or EUS).
7. Video-assisted thoracoscopy may occasionally give additional information for assessing the operability of oesophageal tumours.
8. Lung function tests.
9. ECHO or ejection fraction if pre-operative or peri-operative anthracycline based chemotherapy is being considered. OE05 requires echo.
10 Other investigations to assess specific symptoms/issues e.g. isotope bone scan, PET.

4. TREATMENT POLICY

Multidisciplinary Meetings

Where possible the initial assessment and management plan should be co-ordinated through either of the multidisciplinary teams meetings in the region (Lothian, Borders and Fife or Dumfries). It is often appropriate for cases to be re-discussed if new problems arise during follow-up.

4.1 OESOPHAGEAL CARCINOMA

4.1.1. Surgery

Surgery is the mainstay of curative treatment and is offered to patients with stage $T_{1-3} N_{0-1} M_0$ disease who are medically fit for resection. Surgery should be carried out by experienced upper GI surgical teams following appropriate multidisciplinary assessment. Pre-operative chemotherapy should be considered as discussed below.
Definitive radical chemo-radiotherapy and radical radiotherapy also have a role in the potentially curative management of oesophageal carcinoma as discussed below.

4.1.2. Pre-operative Chemotherapy

Pre-operative chemotherapy has been used to increase the rate of R₀ resections and to improve disease-free and overall survival by the eradication of micrometastatic disease and downstaging of the primary cancer.

The MRC’s OE02 study was published in May 2002 (Lancet 2002;359:1727-33). This study showed that 2 cycles of pre-operative Cisplatin/5FU increased 2-year survival from 34% to 43% and increased median survival from 13.3 to 17.2 months. A Cochrane Review updated in August 2003 has suggested that pre-operative chemotherapy is associated with a survival advantage at 3, 4, and 5 years after surgery, with statistical significance being reached at 5 years. It appears that at least some of the benefit may arise from increasing the R₀ (or complete resection) rate, i.e. by tumour downstaging.

The current MRC study (OE05) compares 2 cycles of Cisplatin/5FU (standard) with 4 cycles of ECX (Epirubicin, Cisplatin and Capecitabine (Xeloda)) pre-operatively for patients with stage T₁₋₂N₁, T₂N₀ and T₃N₁ adenocarcinoma of oesophagus, including type 1 and 2 junctional tumours.

Outwith clinical trials patients with operable adenocarcinoma or squamous carcinoma of the oesophagus including junctional tumours types 1 and 2 that are staged as T₃N₀M₀, T₃N₁M₀, or T₁₋₂N₁M₀ will be offered 2 cycles of pre-operative Cisplatin/5FU if they are medically fit and there are no contraindications for chemotherapy. Patients who decline pre-operative chemotherapy or for whom chemotherapy is contraindicated should proceed to surgery if they are fit enough for resection.

The most beneficial chemotherapy combination appears to be based on Cisplatin and 5FU. There is no evidence to support the substitution of Carboplatin or Oxaliplatin for Cisplatin in the pre-operative setting.

All patients suitable for entry into clinical trials should be offered phase II and III trials.

Treatment schedule:
2 cycles at 3 weekly intervals of:

Cisplatin 80mg/m² day 1.
5FU 1000mg/m²/day, days 1-4.
with operation 3-5 weeks later following a repeat CT scan to exclude the development of metastatic disease that would preclude surgery.

4.1.3 Post-operative Chemotherapy:
There is no established role for postoperative adjuvant chemotherapy and this therefore should only be used in the context of a clinical trial.

4.1.4 Pre-operative Radiotherapy alone

Meta-analysis data have shown no role for radiotherapy as a single modality pre-operative treatment in the management of oesophageal carcinoma.

4.1.5 Pre-operative Chemo-radiotherapy

The use of pre-operative combined chemo-radiotherapy should continue to be regarded as an experimental approach and should only be used in the context of a clinical trial.

4.1.6 Definitive Radical Combined Chemo-radiotherapy and Radical Radiotherapy alone

Definitive chemo-radiation or radical radiotherapy alone should be considered for patients who have either a squamous or adenocarcinoma T4 tumour with no evidence of metastatic disease, or an operable tumour but who are unfit for, or decline surgery.

Definitive chemo-radiotherapy is increasingly regarded as an alternative to surgery for potentially operable squamous carcinomas, particularly for those above the level of the carina. There is only indirect evidence to support this. Randomised data suggest that combined chemo-radiotherapy offers a benefit in terms of median and 5-year survival compared to radiation alone, but at the price of considerably higher toxicity.

Patients who are to be treated with chemo-radiotherapy using the Herskovic regimen must have adequate renal function and be generally fit. As originally described, chemotherapy and radiotherapy start together on day 1, with 2 cycles of chemotherapy being given during radiotherapy in weeks 1 and 5, and 2 further cycles of chemotherapy being given after the completion of radiotherapy in weeks 8 and 11. However, many currently used regimens defer the start of radiotherapy until later in the schedule as this is better tolerated. It also allows treatment to start more promptly thus overcoming delays associated with the radiotherapy planning process. Currently, therefore, 4 cycles of chemotherapy consisting of Cisplatin 75mg/m² day 1 and 5FU 1000mg/m²/day, days1-4 are given during weeks 1,4,7 and 11, with 5000cGy in 25 fractions of radiotherapy being given in weeks 7-11.
Radiation alone is used for those not fit for chemo-radiotherapy. The prospect of cure is in the region of 5-10%. 5250cGy is given in 20 daily fractions over 4 weeks.

Patients with squamous carcinomas who have no contraindications to 5FU chemotherapy but who are not of the requisite fitness for the modified Herskovic regime can be considered for 5250cGy in 20 daily fractions with 5FU 1000mg/m²/day (max 1500mg per day), days 1-4 by continuous infusion, given in week 1 only (Brierley et al. Clinical Oncology (Royal College of Radiologists). 2001;13:157-163).

Patients who are to be irradiated with radical intent are planned supine using a chest or wing board, except where the volume extends into the neck in which case the use of a thermoplastic shell is required. Patients are CT planned and the field set up is optimised on the basis of the dose distribution in the Planning Target Volume (PTV) and the dose to surrounding normal tissues. Use is made of all available information about the tumour and nodes i.e endoscopy report, staging CT scan and endoscopic ultrasound which ideally should indicate the position of landmarks such as the top of the aortic arch or carina that are readily identifiable on the planning scan. The PTV encompasses a 1.5-2 cm radial margin around the GTV (primary tumour and involved nodes) and a minimum of 3cm superiorly and inferiorly along the line of the oesophagus and including the gastric mucosa for those tumours approaching or involving the oesophagogastric junction. The posterior radial margin may be constrained by spinal cord. In general the maximum GTV length (primary tumour and involved nodes) radically treatable is in the order of 8-10cm with resultant maximum field lengths of approximately 18cm. Dose guidance for normal tissues is described in a separate departmental document and includes spinal cord to receive no more than 4000cGy and V20 for total lung to be ideally less than 35%. Dose constraints may be described in clinical trial protocols and should be followed for those patients enrolled in such trials.

If at all possible patients with tumours that are potentially suitable for radical radiotherapy should not have stents inserted. Stents increase the width of the volume to be irradiated and patients experiencing a good response to treatment can have very poor swallowing function with a stent in situ following treatment. There may be a role for removable plastic stents in this situation although experience is limited.

Advice from a dietician is very important during and after treatment. Patients, particularly those being treated by chemo-radiation, may need nutritional support, most commonly by NG feeding during and for some weeks after treatment.

**4.1.7. Post-operative radiotherapy**

Post-operative radiotherapy has not been shown to offer a survival benefit.
It may, however, reduce the risk of local recurrence. It is appropriate to consider its use on a patient-by-patient basis for those patients with involved mucosal or circumferential resection margins but who are at lower risk of systemic disease (N₀ or low volume N₁).

Definition of the target volume is complicated by the distortion resulting from surgery but should be based on a combination of the pre-operative scans, operation note, pathology report and any surgical clips marking areas of concern. Patients are CT planned. The dose is limited by the tolerance of the mobilised stomach in the thorax to 5000cGy in 20 daily fractions over 4 weeks.

Patients with involved resection margins and a high nodal burden can be considered for early chemotherapy with palliative intent. However in the absence of symptoms, an expectant policy with close clinical follow up and chemotherapy (or other appropriate palliative treatment) at the time of symptomatic progression is an alternative approach.

4.1.8. Palliative radiotherapy

3000cGy in 10 daily fractions or 2000cGy in 5 daily fractions for frailer patients will palliate dysphagia (improve swallowing to at least a degree) in slightly over a half of assessable patients. The median time to symptomatic improvement is approximately 4 weeks following the completion of treatment. Radiotherapy is therefore not recommended for patients with very short projected survival.

Troublesome oesophageal bleeding can be treated with an 800cGy single fraction in the frail.

Technique: parallel opposed pair covering stricture with 2-4 cm field margin superiorly and inferiorly. Barium is used at time of simulation along with all other available information including scans and endoscopy findings. Alternatively planning may be undertaken using virtual simulation.

Dysphagia can also usefully be palliated by endoscopic means, particularly laser therapy and stenting. Patients who may potentially benefit should be assessed by a gastroenterologist. There is no established benefit for the addition of radiotherapy to either laser therapy or stenting. However, palliative radiotherapy may be useful for symptoms such as mediastinal pain or tumour bleeding.

4.1.9 Palliative Endoscopic Ablation

Available methods include laser therapy and argon plasma coagulation (APC). Nd:YAG laser therapy is the preferred option for tumour destruction and re-establishing luminal patency. Laser therapy is better suited to exophytic, polypoidal tumour types and less so for flat or ulcerated types.
APC is an alternative though less effective option but is useful for treating tumour ingrowth or overgrowth after stenting.

Laser therapy is generally safe with a low morbidity rate (<5%), mainly pain, bleeding or perforation. Swallowing may temporarily worsen after laser as a result of tissue oedema. Repeat sessions are required every 1-3 weeks then 4-6 weekly once the lumen is patent and swallowing restored.

**4.1.10. Palliative Stenting**

Stents are best suited to ‘flatter’ type lesions especially in the mid-oesophagus. Insertion may be endoscopically or fluoroscopically controlled. Ideally stents should not be placed within 2-3cm of the upper oesophageal sphincter.

There are numerous stent types, each is available with and without ‘membrane’ covers. Partially covered self-expanding metal stents (SEMS) are recommended in the 2006 SIGN guideline and are the treatment of choice for patients with a respiratory fistula. Potentially removable self-expanding plastic stents may occasionally have a role in specific clinical situations.

Technical success for SEMS insertion is >90% and major complications are rare. Significant morbidity occurs in 30-60% of patients after stenting. Complications include pain, bleeding, stent migration and recurrent dysphagia from either tumour ingrowth or non-malignant stent dysfunction. Stents placed across the GO junction are commonly associated with reflux and regurgitation of gastric contents. Patients should be prescribed a proton pump inhibitor and a prokinetic if needed, along with dietary and posture advice.

**4.1.11. Palliative Chemotherapy**

See combined section below.

**4.2. GASTRIC CARCINOMA**

**4.2.1. Surgery**

Surgery is the mainstay of curative treatment and is offered to patients with stage T\(_{1-3}\) N\(_{0-1}\) M\(_{0}\) disease who are medically fit for resection. Surgery should be carried out by experienced upper GI surgical teams following appropriate multidisciplinary assessment. Peri-operative chemotherapy should be considered as discussed below.
4.2.2. Peri-operative chemotherapy

The 5-year survival following surgical resection of gastric cancer alone is only of the order of 20-30%. In 2006 the results of the MRC Magic study was published (Cunningham et al. New England Journal of Medicine. 2006;335:11). In this study patients with gastric and lower 1/3 oesophageal adenocarcinoma were randomised either to 3 cycles of pre-operative ECF (see section 4.2.5 for details of the regimen) and 3 cycles of post-operative ECF or to surgery alone. Patients in the peri-operative chemotherapy group had a significantly longer progression free survival (hazard ratio for progression 0.66) and overall survival (5 year survival 36.3% vs. 23.0%) than patients randomised to surgery alone. When patients with oesophageal cancer were excluded from the analysis, the benefit in relation to peri-operative chemotherapy was maintained.

The patients in this study were carefully selected. At entry into the trial they were of performance status 0 or 1 without significant medical comorbidity. Patients were generally not staged according to current best practice. For patients that went straight to surgery, at the time of operation 28% of operations were considered to have been palliative only. This is very considerably higher than we see locally.

Of patients randomised to peri-operative chemotherapy, 86% of patients completed pre-operative treatment (91% of patients who commenced treatment). Only 55% of patients commenced post-operative chemotherapy and only 42% completed it. The most common reason not to commence post-operative treatment was disease progression.

Patients with potentially operable gastric cancer should have full staging including CT thorax and abdomen, laparoscopy and EUS in selected patients (particularly in those with possible early stage tumours in whom proceeding straight to surgery may be more appropriate). They will then be discussed at the MDT to determine the most appropriate treatment strategy. Patients with gastric carcinoma or type III junctional tumours staged as T\textsubscript{3}N\textsubscript{0}M\textsubscript{0}, or T\textsubscript{3}N\textsubscript{1}M\textsubscript{0}, or T\textsubscript{1/2}N\textsubscript{1}M\textsubscript{0} will be considered for peri-operative chemotherapy.

If patients are medically fit with no contraindications to chemotherapy they will be offered pre-operative treatment. Outwith clinical trials, in view of the proven equivalence of ECF and ECX (see section 4.2.5 for details of the regimen) in advanced disease (Sumpter et al. British Journal of Cancer. 2005;92:1976), ECX is the most appropriate option for the majority of patients. Patients require a baseline ejection fraction prior to or during the first cycle of chemotherapy. They then receive 3 cycles of ECX (or ECF) followed by repeat CT scan of the thorax and abdomen approximately 2 weeks after day 1 of cycle 3. Provided radiological findings are satisfactory, they proceed to surgery 4-6 weeks after day 1 of cycle 3 of chemotherapy.
Post-operatively surgical and pathological findings are reviewed at the MDT. Patients are reviewed in the oncology clinic about 5 weeks post-operatively. They proceed to 3 further cycles of chemotherapy provided that they have recovered sufficiently from their surgery to allow chemotherapy to recommence within 8 weeks of their operation; they tolerated pre-operative chemotherapy adequately and there is no evidence of lack of response to pre-operative therapy on clinical, radiological, endoscopic or pathological grounds.

In the peri-operative setting, there is no evidence base for the substitution of carboplatin or oxaliplatin for cisplatin.

There is no evidence base for post-operative chemotherapy alone, and this should not be part of routine practice. Patients found to have involved resection margins can be offered early palliative chemotherapy, however in the absence of symptoms, an expectant policy with close clinical follow up and chemotherapy (or other appropriate palliative treatment) at the time of symptomatic progression is an alternative approach.

There is no evidence for chemotherapy to downstage previously inoperable gastric cancer rendering it suitable for surgical resection. Anecdotal evidence suggests that this approach rarely renders individuals disease free in the long term, so it is not the standard of care. It may, however, be an appropriate option in a minority of patients.

4.2.3. Post-operative chemo-radiotherapy

One study (Intergroup 0116. New England Journal of Medicine, 2001;345:725-730) has demonstrated an improvement in 3-year survival for post-operative combined chemo-radiotherapy. However, this study has been criticised on the basis that the results in combined modality arm are comparable to those for surgery alone in other studies. There remains concern about the toxicity of such treatment in the post-operative period. The approach merits further study in well-conducted, randomised trials with appropriate surgical and oncological quality control. Post-operative adjuvant chemo-radiation is therefore not recommended outside such a clinical trial.

4.2.4. Palliative Radiotherapy

The role of radiotherapy in the management of gastric carcinoma is limited.

Radiotherapy can usefully palliate gastric bleeding. 800cGy in a single fraction or 2000cGy in 5 daily fractions by a parallel opposed pair are used depending on the general condition of the patient and the field sizes used. Simulation with barium and information from CT films and endoscopy reports aids tumour localisation. Prophylactic Granisetron is recommended.
Bone metastases are treated as for other primary sites.

Patients with localised painful nodal deposits e.g. around the coeliac plexus may benefit from 3000cGy in 10 daily fractions as a parallel opposed pair.

### 4.2.5. Palliative chemotherapy for oesophageal and gastric carcinoma

Palliative chemotherapy may usefully palliate the symptoms of inoperable malignancy. It is less useful in individuals whose predominant symptom is fatigue.

#### Standard Therapy

Patients should be considered for entry into phase II/III chemotherapy trials. In the absence of clinical trials, if the patient is ineligible for trials or if the patient declines trial entry, the standard therapy options are and EOX and ECX. The REAL 2 study (NEJM 2008: 358:36-46 – Cunningham D et al ) demonstrated that Capecitabine and Oxaliplatin were as effective as the fluorouracil and cisplatin of the trial standard regimen of ECF. Oxaliplatin was associated with lower incidences of grade 3 and 4 neutopenia, renal toxicity and thromboembolism but slightly higher incidences of grade 3 and 4 diarrhoea and neuropathy. The toxicity of Capecitabine and Fluorouracil were similar. Capecitabine is the preferred option where possible because of the greater patient convenience of oral treatment and the avoidance of hickman lines and their associated risks. Oxaliplatin is increasingly preferred to cisplatin because of greater patient convenience (shorter administration and potential for repatriation to peripheral units), lack of need for post treatment oral hydration and less emesis. EOX is the regime of choice for patients with baseline hearing loss or tinnitus, with a degree of baseline renal impairment (creatinine clearance less than 50 but greater than 30) or those in whom the fluid load of Cisplatin is contra-indicated (e.g. pre-existing ascites). It may be appropriate to change individuals to EOX from ECX if they develop renal impairment or ototoxicity whilst on treatment and continuing chemotherapy is warranted. ECX in certain circumstances may be the regime of choice for example if the patient has preexisting peripheral neuropathy

**EOX**

Patients are treated as outpatients every 21 days. At this time they receive:

- Epirubicin 50mg/m$^2$ (iv bolus) and
- Oxaliplatin 130mg/m$^2$ (iv infusion) with appropriate anti-emetics and Ca$^{2+}$/Mg$^{2+}$ infusions.
- Capecitabine 625mg/m$^2$ p.o. b.d. continuously.

**ECX**

Patients attend as a long daycase every 21 days. At this time they receive:

- Epirubicin 50mg/m$^2$ (iv bolus) and
Cisplatin $60\text{mg/m}^2$ (iv infusion) with appropriate hydration and anti-emetics.
Capecitabine $625\text{mg/m}^2$ p.o. b.d. continuously.

**Alternative options:**

**ECF**
If an individual has significant dysphagia or is unable to tolerate oral medication for another reason, Capecitabine can be substituted by a continuous infusion of 5FU. The chemotherapy is administered via a double lumen Hickman line.
Treatment consists of long daycase attendance every 21 days and short out patient attendance days 8 and 15 for:

- Epirubicin $50\text{mg/m}^2$ (iv bolus) and
- Cisplatin $60\text{mg/m}^2$ (iv infusion) with appropriate hydration and anti-emetics.
- 5FU $200\text{mg/m}^2$/day (runs continuously via the line).

**EOF**
An oxaliplatin based regimen can be administered using infusional 5FU instead of Capecitabine if there is significant dysphagia or other contra-indication to oral medication.

Patients are treated as outpatients every 21 days. At this time they receive:

- Epirubicin $50\text{mg/m}^2$ (iv bolus) and
- Oxaliplatin $130\text{mg/m}^2$ (iv infusion) with appropriate anti-emetics and Ca$^{2+}$/Mg$^{2+}$ infusions.
- 5FU $200\text{mg/m}^2$/day (runs continuously via the line).

**MCF or MCX**
MCF has been demonstrated to be equivalent to ECF in terms of efficacy (Ross et al. *Journal of Clinical Oncology*. 2002;20:1996), and is therefore also assumed to be equivalent to ECX. MCF is generally less well tolerated than ECF, but causes minimal alopecia and thus may be the treatment of choice for some patients.

Chemotherapy is administered via a double lumen Hickman line.
Treatment consists of long daycase attendance every 21 days and short out patient attendance days 8 and 15 for:
Mitomycin C 7mg/m² iv bolus (alternate cycles only).
Cisplatin 60mg/m² (iv infusion) with appropriate hydration and anti-emetics.
5FU 300mg/m²/day continuously via the line.

The substitution of infusional 5FU with Capecitabine in this combination has been demonstrated to be tolerable. There are no trials demonstrating equivalent efficacy of this combination to MCF or ECX. As the Capecitabine dose is lower than that used in ECX, equivalent efficacy should not be assumed. Despite this, in the palliative setting, this may be an appropriate combination for patients who are concerned about the prospect of alopecia and do not wish to have a Hickman line.

Treatment consists of long daycase attendance every 21 days for:

Mitomycin C 7mg/m² iv bolus (alternate cycles only).
Cisplatin 60mg/m² (iv infusion) with appropriate hydration and anti-emetics.
Capecitabine 500mg/m² b.d. continuously.

Cisplatin/5FU
This is an option for patients with squamous carcinomas. Treatment consists of 21 day cycles of:

Cisplatin 80mg/m² (iv infusion) with appropriate hydration and anti-emetics.
5FU 1g/m²/day for 4 days.

Cisplatin/Gemcitabine
All of the above regimens contain fluoropyrimidine therapy. There is no evidence that raltitrexed can be used in place of fluoropyrimidines in these treatment combinations. In patients in whom fluoropyrimidines are strongly contra-indicated, phase II data would suggest that the combination of cisplatin and gemcitabine has some activity (Millar et al. British Journal of Cancer 2005;93:1112-6). Treatment is administered on 21-day cycles:

Gemcitabine 1g/m² (iv infusion) days 1 and 8.
Cisplatin 75mg/m² (iv infusion) with appropriate hydration and anti-emetics day 1.

This combination has not been submitted to the hospital formulary committee and funding approval should be sought prior to administration. There is no data as to comparative efficacy with standard treatment combinations.

4.2.5.1. Monitoring of therapy
The disease should be restaged after 2-3 cycles of therapy, and treatment only continued if disease is stable or responding both radiologically and symptomatically. Treatment should be continued for a maximum of 6 cycles.

4.2.5.2. Second-line therapy

There is no standard second-line chemotherapy. Patients who achieve a symptomatic progression-free interval of 6 months or more following first line treatment may be considered for re-treatment.

Patients should be considered for appropriate phase I and II studies.

4.2.5.3. Clinical Trials

Trials Currently Recruiting Patients

OEO5
This trial is looking at pre-operative chemotherapy in resectable adenocarcinoma of the oesophagus. Patients are randomised between standard chemotherapy (2 courses of cisplatin and 5FU) and trial chemotherapy (4 cycles of ECX). There is strict quality control in the trial both of oncological and surgical management.

Phase I Clinical Trials
Fit patients relapsing shortly after standard therapy should be considered for phase I clinical trials (Refer patients to Dr Clive for discussion).

Trials in follow up only

ASPECT: this trial investigating chemoprevention of oesophageal cancer amongst patients with Barrets oesophagus has closed to recruitment and follow up continues coordinated by gastroenterologists

Trials in the set up stage

SCOPE 1:
Trial of chemoradiation +/- cetuximab in carcinoma of the oesophagus – currently in set –up

REAL-3:
A randomised open labelled trial of the efficacy of EOX with or without panitumumab in previously untreated advanced oesophagogastric cancer.

4.2.6. Palliative Care

Because of the poor prognosis and significant symptom burden associated with oesophago-gastric cancers, early referral to McMillan services/Community palliative care services should be considered.

4.2.7. Audit

Data is prospectively collected to monitor the management and outcomes of all patients treated for oesophago-gastric malignancies within the region. This is coordinated via the administrative assistant Michelle Gibson (based at the NRIE, phone 23649) and audit assistants in Dumfries and Fife (Maureen Lamb).

4.2.8. Nutritional support

All patients who are to have a prosthetic stent inserted into their oesophagus should receive dietary advice prior to the procedure.

Ideally, all patients with oesophago-gastric cancers should have access to dietary advice.

5. Follow up

The follow up of patients with oesophageal and gastric cancers is controversial. The natural history of these cancers means that most patients are on active treatment with the minority attending for symptomatic review. There is no evidence that intensive follow-up improves the speed of detection of recurrent disease.

Nutritional support for patients is an essential part of ongoing management.

Patients who have had radical radiotherapy or combined chemoradiation should be reviewed in clinic a month after completing treatment and then be reviewed 3 monthly for 2 years and then annually to 5 years.

A CT scan and endoscopy at 3 months to assess response to treatment should be considered especially for patients for whom it may be appropriate to consider salvage surgery.

Patients with advanced disease should be reviewed 2 monthly if asymptomatic and as often as required for symptom control if symptomatic. Early involvement of palliative care services is to be encouraged.
6. Clinical Nurse Specialists

- The Clinical Nurse Specialists for Upper G.I. cancers in Lothian and the Borders (oesophageal and gastric cancers only) are Louise Graham and Nancy Bell. They are available at the Western General Hospital on Monday and Wednesdays and are contactable at the RIE on extension 23649 or via RIE pager #6757.
- In Fife Kerry Horstmann offers support to Upper GI cancer patients. She can be contacted via # 6162 extension 1690.
- In Dumfries Anne Callander is the upper GI nurse specialist. She is contactable on 01387 241194.

The role of the CNS is to give information, advice and support to patients and their families during their cancer journey. They are also available as an oesophageal and gastric cancer resource for nursing and medical staff.

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