### SUSSEX CANCER NETWORK

**Collated Colorectal Guidelines**

**Status:** FINAL  
**Expiry date:** August 2013  
**Version Number:** 2  
**Publication Date:** August 2012  
**Quality Measures:** References Colorectal version 3.1 April 2011

**Agreed Clinical Guidelines (1C-103d)**

The following clinical guidelines were agreed by the SCN Colorectal Tumour Group as their clinical guidelines on 27th August 2012

**Revision History**

<table>
<thead>
<tr>
<th>Version</th>
<th>Who Sent To/Comments</th>
<th>Author</th>
<th>Date</th>
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<tr>
<td>2012 0.1 Draft</td>
<td>Amendments following review release of NICE cg131 November 2011: P 22 Updated investigation protocol P 24 Updated staging Ps 28 Reference to appendix 1 Ps 40 Reference to appendix 2 P 51 Follow up Guidelines P 53 Information about Bowel Cancer</td>
<td>Keith Smith / Anne Catt</td>
<td>Sent to MS 19th Jan 12, cc’d to CH</td>
</tr>
<tr>
<td>0.2</td>
<td>Amended watermark to DRAFT 2012/13, agreed Appendices with MS</td>
<td>Anne Catt</td>
<td>Colorectal Tumour Group 30 Jan 2012</td>
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<tr>
<td>0.3</td>
<td>Updated following Tumour Group meeting 9th Feb 2012</td>
<td>Anne Catt</td>
<td></td>
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<tr>
<td></td>
<td>Updated following TG meetings P28 7.1 Laparoscopic surgery P12 2.1 Colon Pathway Follow-up P42 9. Follow up Guidelines</td>
<td>Keith Smith</td>
<td></td>
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<tr>
<td>FINAL</td>
<td>Amended following review by TSSG</td>
<td>Eden French</td>
<td>Agreed 27th August</td>
</tr>
<tr>
<td>1</td>
<td>Corrected link to PET Referral Pro Forma</td>
<td>AC</td>
<td>10/09/12</td>
</tr>
<tr>
<td>2</td>
<td>Updated signatories</td>
<td>EF</td>
<td>27/09/12</td>
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The clinical and referral guidelines within this document were agreed by the following as their clinical and referral guidelines on:

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Organisation</th>
<th>Date Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair of the SCN Colorectal Tumour Group</td>
<td>M Saunders</td>
<td>Consultant Surgeon ESHT</td>
<td>21/08/12 (via email)</td>
</tr>
<tr>
<td>Chair of SCN Executive Board and Network PCT</td>
<td>D Tomalin</td>
<td>NHS Sussex, Director of Managed Clinical Networks</td>
<td>20/09/12</td>
</tr>
<tr>
<td>Representative for configuration of teams</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead Clinician of Colorectal MDT</td>
<td>M McFall</td>
<td>Consultant Surgeon WSHT</td>
<td>27/08/12</td>
</tr>
<tr>
<td></td>
<td>D Gilbert</td>
<td>Consultant Oncologist, BSUH</td>
<td>27/08/12</td>
</tr>
<tr>
<td></td>
<td>F McKinna</td>
<td>Consultant Oncologist, EDGH (ESHT) and BSUH</td>
<td>27/08/12</td>
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<tr>
<td></td>
<td>M Miller</td>
<td>Consultant Colorectal &amp; General Surgeon, Conquest (ESHT)</td>
<td>27/08/12</td>
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<tr>
<td>Radiology Group Chair</td>
<td>G Dodge</td>
<td>Consultant Radiologist, BSUH</td>
<td>27/08/12</td>
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<tr>
<td>1C-107d</td>
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<td>1C-109d</td>
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</tr>
<tr>
<td>Cellular Pathology Group Chair</td>
<td>A Williams</td>
<td>Consultant Histopathologist, BSUH</td>
<td>28/08/12</td>
</tr>
<tr>
<td>1C-107d</td>
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<tr>
<td>Previous Agreements Stand</td>
<td></td>
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</tr>
<tr>
<td>Acute trust lead clinicians</td>
<td>D Bloomfield</td>
<td>Consultant Clinical Oncologist, BSUH</td>
<td>08/10/10</td>
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<tr>
<td>1C-115d</td>
<td>J Beard</td>
<td>Consultant Haematologist, ESHT</td>
<td>19/08/10</td>
</tr>
<tr>
<td></td>
<td>J Grant</td>
<td>Consultant Histopathologist, WSHT</td>
<td>27/09/10</td>
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Agreement of this document constitutes meeting the following quality measures:

<table>
<thead>
<tr>
<th>Measure code</th>
<th>Specifics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A-202D</td>
<td>Network Agreed Policy for Diagnosis and Assessment&lt;br&gt;The Network Board in consultation with the NSSG for colorectal cancer should agree with the PCTs in the network a policy to the effect that:&lt;br&gt;i) the diagnosis and assessment of patients referred from primary care with potential colorectal cancer should only be carried out by the named diagnostic services which are agreed by the network and whose referral contact points are given in the network primary care referral guidelines;&lt;br&gt;ii) in particular there should be no direct referral of newly presenting patients for large bowel investigation from primary care to individual, named colorectal surgeons or gastroenterologists;&lt;br&gt;iii) endoscopy should be the preferred initial investigation for making the definitive diagnosis of colorectal cancer.</td>
</tr>
<tr>
<td>1A-205d</td>
<td>NSSG/Network agreed referral guidelines for anal cancer&lt;br&gt;Patients with anal cancer suitable for curative treatment should be referred to the designated anal cancer MDT</td>
</tr>
<tr>
<td>1A-207d</td>
<td>NSSG/Network agreed referral guidelines for liver metastases&lt;br&gt;The Network Board in consultation with the NSSG should produce a referral guideline to the effect that colorectal MDTs should refer patients with liver metastases, selected according to the network clinical guidelines (measure 11-1C-112d) to the liver resection MDT specified in measure 11-1A-204d. Note: This MDT may be in another network.</td>
</tr>
<tr>
<td>1A-208d</td>
<td>NSSG/Network Agreed Catchment Population for Liver Resection&lt;br&gt;The Network Board should agree with the NSSG the catchment population for referral to the liver resection MDT. This should be a minimum of 2 million. The population should be estimated from the referring catchment populations of the liver resection MDTs referring colorectal teams.</td>
</tr>
<tr>
<td>1C-103d</td>
<td>Network agreed clinical guidelines&lt;br&gt;The NSSG should agree network-wide clinical guidelines (how a given patient should be clinically managed, usually at the level of which modality of treatment is indicated, rather than detailed regimens or surgical techniques). Note: More details of regimens and techniques may be agreed if desired.</td>
</tr>
<tr>
<td>1C-104d</td>
<td>NSSG referral guidelines for patients, within or outside the network&lt;br&gt;To include how a given patients should be clinically managed, at the level of which modality of treatment is indicated</td>
</tr>
<tr>
<td>1C-106d</td>
<td>NSSG/Network agreed protocol for prioritising appointments and referral proforma&lt;br&gt;Protocol placing which types of clinical presentation into which level of priority for booking appointments for investigation of large bowel problems.</td>
</tr>
<tr>
<td>1C-107d</td>
<td>NSSG/network agreed investigation protocol&lt;br&gt;Protocol specifying, for the different clinical presentations caused directly by a large bowel, primary cancer:&lt;br&gt;• The investigations (imaging, histopathology and lab tests) which should be performed and in which sequence, for the diagnosis and subsequent assessment</td>
</tr>
</tbody>
</table>
• Which parts of the protocol are the responsibility of the diagnostic service
• Which parts of the protocol are the responsibility of the MDT
• That endoscopy is the preferred method for making the initial diagnosis of a large bowel primary cancer

| 1C-108d | NSSG/Network policy on named medical practitioner with clinical responsibility | Policy specifying the medical practitioner who is considered to be responsible for the patient at each stage from referral from primary care to the treatment planning decision of the colorectal MDT |
| 1C-109d | NSSG/Network agreed onward referral policy | Policy governing onward referral from the colorectal diagnostic service when a diagnosis is made of either malignant or non-malignant disease. The policy should specify:
• The procedure to be followed
• The personnel responsible for making the onward referral
• The contact points for the MDTs
• The points in the process and personnel responsible for informing the patient and the GP of the diagnosis
• An intention to inform the GP of a diagnosis of malignancy by the following working day after the patient has been informed |
| 1C-110d | NSSG/MDT agreed guidelines for management of anal cancer | Including:
• Pre-treatment assessment methods
• Indications of radiotherapy, chemo-radiotherapy and surgery
• The stages in the assessment process where the patient is the responsibility of the colorectal MDT and those where they are the responsibility of the anal cancer MDT |
| 1C-111d | NSSG/MDT agreed guidelines for management of rectal cancer | Including:
• Criteria based on clinical, MRI and endosonography parameters, for selecting patients for consideration of curative treatment of early rectal cancer by local resection;
• That all patients with possible T1 lesions should be referred for endosonography
• That, following endosonography, all patients then suitable should be referred to one of the MDTs agreed as specialising in local resection |
| 1C-112d | NSSG/MDT agreed guidelines for the resection of liver metastases Also see Constitution | Including:
• The indications for metastatectomy and for its use in combination with chemotherapy
• The stages in the assessment process where the patient is the responsibility of the liver resection MDT |
| 1C-113d | NSSG agreed colorectal stenting policy | Stating that the practice of colorectal stenting should be limited to named personnel agreed as being competent in the practice
Individuals agreed as competent for colorectal stenting |
| 1C-114d | NSSG/MDT agreed policy on referrals for patients outside the agreed primary care | Policy to ensure that when patients are diagnosed unexpectedly or incidentally with colorectal cancer, or known patients are diagnosed with recurrent or metastatic disease, by clinicians who are not
| 1C-115d | NSSG/MDT agreed guidelines for surgical emergencies | For each hospital which admits surgical emergency, guidelines to specify the following:
- That patients presenting as emergencies with intraluminal large bowel obstruction should be stabilised pre-operatively if necessary so that surgery can wait until it can be performed under the care of the core surgical MDT member, unless delay would be life-threatening;
- That if the hospital does not host the practice of a core surgical MDT member, there should be an agreement between the relevant trust cancer lead clinicians to transfer such patients pre-operatively to a named hospital, which hosts the surgical practice of a core surgical MDT member, for management under the care of that surgeon
- That the guidelines apply within and outside normal working hours |
| --- | --- | --- |
| 1C-116d | Primary care referral guidelines  
*Also see Constitution* | To include:
- A requirement to refer to a network agreed colorectal diagnostic service, not a named individual consultant, and to use a network agreed referral proforma;
The proforma should specify:
- Which type of presentation (specific symptoms and patient characteristics) should be referred with which level of priority
- The single referral contact point for each trust hosting a colorectal diagnostic service in the network
The primary care guidelines should be distributed to all primary care practices in the network |
| 1C-117d | Assessment protocol for early rectal cancer | Specifying:
- An investigation protocol specifying imaging techniques and selection criteria for identifying patients with T1 rectal cancer which are suitable for local resection. The protocol should specify the role of MRI scanning
- That rectal endosonography should be used in that part of the protocol which deals with selection for suitability for trans-anal endoscopic microsurgery (TEMS), if patients are referred for this procedure |
### Network criteria and referral guidelines on laparoscopic colorectal cancer surgery

The minimum network criteria for a patient to be offered laparoscopic colorectal cancer surgery. To include:

- BMI less than 30
- No previous major abdominal surgery
- Avoiding obvious T4 cancers on pre-op staging
- Those tumours not requiring TME
- No clinical or radiological signs of obstruction

MDTs without surgeons on the network list should refer patients, in line with the network criteria, to a named surgeon in a named MDT who is on the network list.

### Chemotherapy Treatment Algorithms

**New/Revised Measure** - The NSSG, in consultation with the Network Chemotherapy Group (NCG) should agree a list of acceptable chemotherapy treatment algorithms. It should be updated bi-annually.
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<td>7.5.1</td>
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### Glossary of terms and abbreviations

- **CEA** - (Serum Carcino-Embryonic Antigen)
- **FU** - (Follow Up)
- **NCASP** - (National Clinical Audit Support Programme)
- **NBOCAP** - (National Bowel Cancer Audit Project)
- **PET** - (Positron Emission Tomography)
- **TEM** - (Trans Endoscopic Microsurgical excision)
- **OPCS** - Office of Population Census and Surveys (Procedure Codes)
1. Introduction
This document specifies the patient pathway for Colorectal cancer that is recommended to Sussex Cancer Network (SCN) commissioners by the SCN Colorectal Tumour Group. The pathway has been developed to make transparent all steps from health promotion through to end of life, is linked to generic care packages (e.g. delivery of chemotherapy and radiotherapy) and is designed to enable delivery of best practice to deliver the best quality service possible for the SCN population within available resources. Sections may be useful for the NHS contract agreements.

As commissioners are aware, the Care Quality Commission assesses PCT and acute trust performance in the delivery of multi-disciplinary teams of care, based on cancer network improving outcomes guidance (IOG) action plans. This includes NICE Guidance for Improving supportive and Palliative Care Services guidance which differs from the tumour specific IOGs. It describes the development of a number of different services that should be available to all cancer patients and their carers.

Multi-disciplinary team working is vital for the improvement of outcomes for cancer patients. They lead to improved communication between the professionals involved and as a result patients are more likely to receive better health care.

1.1 Prevention and Bowel Screening

Incidence and mortality
Bowel cancer is the third most common cancer in the UK, with approximately 34,900 new cases diagnosed per annum. It is the second most common cause of cancer death, with approximately 16,100 deaths per annum.1

Bowel cancer is more common on the left side of the colon than on the right, with approximately 63% of cases occurring in the colon, 29% in the rectum and 8% in the rectosigmoid junction. The lifetime risk of being diagnosed with bowel cancer is around 1 in 20 for women and 1 in 18 for men.

Staging, survival rates and cancers detected at screening
Five year survival rates according to the Dukes’ stage of classification are shown in Table 1. Table 2 shows the proportions of cancers detected by screening for each Dukes’ stage during the first phase of the screening pilot in England.

Table 1
Dukes’ stage Five year overall survival
A 85–95%
B 60–80%
C 30–60%
D <10%

Table 2
Stage Cancers detected
Unstaged polyp cancers 16.8%
Dukes’ stage A 25.2%
Dukes’ stage B 26.0%
Dukes’ stage C 25.2%
Dukes’ stage D 1.5%
Other unstaged cancers 5.3%

Risk factors
Although the causes of bowel cancer are not fully understood, possible risk factors have been identified, several of which are outlined below.

Age/sex
The development of bowel cancer is strongly associated with age, with more than 80% of
cases occurring in those aged 60 and over. Men and women have a similar risk of developing bowel cancer up to age 40, but after this rates are higher for men. Figure 1 (above) shows UK cases of bowel cancer by age and sex.

Diet and lifestyle
There is some evidence to suggest that individuals who rarely exercise, individuals who are overweight and individuals who have a diet high in red meat, low in fruit and vegetables and low in fibre are at increased risk of developing bowel cancer.

Family history
The following individuals may have an increased risk of developing bowel cancer.

- Individuals with a single first degree relative diagnosed colorectal cancer aged 50 years or less.
- Individuals with a first and second degree relative (in the same germ line) both diagnosed colorectal cancer at any age
- Familial Adenomatosis Polyposis.
- Hereditary Non-Polyposis Colorectal Cancer family:
  - At least 3 relatives should have large bowel cancer or an HNPCC related cancer: (endometrial,ovarian,stomach,small bowel,ureter,pancreatic,renal pelvis)
  - One should be a first degree relative of the other 2 affected relatives
  - At least 2 successive generations should be affected
  - In one person, the cancer must be diagnosed less than age 50

Genetic conditions
Familial adenomatous polyposis (FAP) accounts for around 1% of cases of bowel cancer. Patients develop hundreds or thousands of polyps in the colon and rectum in their twenties and thirties, and have almost a 100% chance of developing bowel cancer by their forties.

Individuals with FAP are usually offered prophylactic colectomy in their teens or twenties.

Hereditary non-polyposis colorectal (bowel) cancer (HNPCC) accounts for around 2–5% of cases of bowel cancer. Polyps develop at a younger age and at a greater frequency than in individuals who do not have the disease, but not in such large numbers as in FAP. HNPCC is linked to bowel cancer in younger age groups, and is the cause of around 40% of cases in individuals under 30 years of age.

Disease course
Over 90% of bowel cancer cases are adenocarcinomas, arising mainly from adenomatous polyps. Adenomatous polyps increase in prevalence with age, and are present in approximately one in four people by the age of 50. Studies suggest that 1–10% of polyps change into invasive cancers. The development of a polyp into a cancer can take more than 10 years, with larger size, villous history and severe dysplasia being important indicators of progression to invasive cancer. Flat adenomas account for 10% of lesions, are harder to detect and may carry a higher risk of malignancy.

Symptoms and signs
Rectal bleeding, a change in bowel habit and anaemia are the most common presenting symptoms of bowel cancer. Nausea, weight loss, abdominal pain and anorexia may be experienced in more advanced disease. Individual symptoms may be poor predictors of bowel cancer; however, the use of a combination of signs and symptoms is more sensitive and specific.

For further details www.cancerscreening.nhs.uk or also look @ www.beatingbowelcancer.org or www.macmillan.org.uk

1.2 Colorectal Cancer Service Provision
Each acute hospital within the Sussex Cancer Network provides a clinical service for the diagnosis and treatment of colorectal cancer under the care of a multi-disciplinary team. Radiotherapy is provided at the Cancer Centre in the Sussex County Hospital, Brighton, East Sussex.
Sussex Cancer Network – Collated Clinical Colorectal Guidelines

Following is a list of all the organisations in the Sussex Cancer Network area that deal with urgent Colorectal referrals:

<table>
<thead>
<tr>
<th>Brighton and Sussex University Hospitals NHS Trust</th>
<th>Western Sussex Hospitals NHS Trust</th>
<th>East Sussex Healthcare NHS Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brighton Royal Sussex County Hospital</td>
<td>Worthing Hospital</td>
<td>Conquest Hospital</td>
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<tr>
<td>Eastern Road</td>
<td>Lyndhurst Road</td>
<td>The Ridge</td>
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<td>Brighton</td>
<td>Worthing</td>
<td>St.Leonards-on-sea</td>
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<tr>
<td>East Sussex</td>
<td>West Sussex</td>
<td>East Sussex</td>
</tr>
<tr>
<td>BN2 5BE</td>
<td>BN11 2DH</td>
<td>TN377RD</td>
</tr>
<tr>
<td>Tel: 01273-696955</td>
<td>Tel: 01903-205111</td>
<td>Tel: 01424-755255</td>
</tr>
<tr>
<td>MDT Fax: 01273-664960</td>
<td>MDT Fax: 01903-286775</td>
<td>MDT Fax: 01323-438157</td>
</tr>
<tr>
<td>MDT Lead: Dr Duncan Gilbert, Consultant in Oncology</td>
<td>MDT Lead: Mr M McFall Consultant Colorectal Surgeon</td>
<td>MDT Lead: Mr Matthew Miller Consultant Colorectal Surgeon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eastbourne District General Hospital</td>
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<tr>
<td></td>
<td></td>
<td>Kings Drive</td>
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<tr>
<td></td>
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<td>Eastbourne</td>
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<td>BN212UD</td>
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<tr>
<td></td>
<td></td>
<td>Tel: 01323-417400</td>
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<tr>
<td></td>
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<td>MDT Fax: 01323-438156</td>
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<tr>
<td></td>
<td></td>
<td>MDT Lead: Dr Fiona McKinna</td>
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<tr>
<td></td>
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<td>Consultant Oncologist</td>
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See the [SCN Colorectal Constitution](#) document for further details about the service configuration, and service provision, within the SCN.

2. **Patient Pathways**

Patient pathways have been developed and agreed by clinicians across the Sussex Cancer Network. The pathway gives an outline of what is likely to happen on the patient's journey, providing details of the services relating to their treatment, and how they interface. This pathway has several uses, but in particular can be used for planning services, patient information and service redesign. Five pathways have been agreed:

- Colon cancer pathway
- Anal cancer pathway
- Early rectal cancer pathway
- Rectal cancer pathway
- Liver metastases from a colorectal cancer pathway
- Emergency admission pathway
2.1 Colon Cancer Pathway

<table>
<thead>
<tr>
<th>Maximum timeline in days</th>
<th>Network Early Rectal Cancer (TEMS) Pathway</th>
<th>Quality Criteria</th>
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<tbody>
<tr>
<td>0</td>
<td>Referral: Urgent referred from GP with a suspicion of early rectal cancer. Received by the Trust and given appointment within 14 days. Patient biopsied straight to test according to guidelines.</td>
<td>See notes overleaf</td>
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<tr>
<td>14</td>
<td>Flaps to Consultant may upgrade non 2ax referral if there is a suspicion of early rectal Cancer.</td>
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<tr>
<td></td>
<td>Non Malignant Diagnosis, further management as appropriate.</td>
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</tr>
<tr>
<td></td>
<td>Malignant Diagnosis CT, MRI, EAU.</td>
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<td></td>
<td>Unsuitable for complete excision by EMR or per anal resection.</td>
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<tr>
<td></td>
<td>Presentation at MDT</td>
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</tr>
<tr>
<td></td>
<td>Suitable for TEMS</td>
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</tr>
<tr>
<td></td>
<td>Presentation at MDT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCIA-Histology G1-2 sm2-3.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consider curative salvage resection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refer back to referring hospital for resection surgery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Follow up (for approx 5 years) Surgery end</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recurrence management and referral to others as required</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discharge (if appropriate) to primary care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Find of Life Care Refer to and follow Map of Medicine Palliative Care Pathway</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survivorship Management as appropriate Link to rehabilitation pathway when appropriate. See overleaf.</td>
<td></td>
</tr>
</tbody>
</table>

Cases referred after initial colonoscopy performed elsewhere.
2.2 Anal Cancer Pathway

Sussex Cancer Network Anal Cancer Pathway

### Supportive care

- Discharge (if appropriate) to primary care. Letter sent to GP.
- Supportive care management as appropriate
  - Link to rehabilitation pathway (when available)
  - See evidence

### Follow Up (at RSUH) & Rehabilitation

- Minimum 5 years
- Reference: 53% staging

### Total Patients

- Discharged within 60 days

---

**Primary Care Assessment**

Appropriate referral guided by symptom profile

**Referral**

- Urgent fixed referral time 24 h with a suspicion of anal cancer. Received by the Trust and OPA within 14 days. Consultant may upgrade non-cancer referrals if there is a suspicion of Anal Cancer.
- Secondary referral from Eastbourne/Working with provisional or established diagnosis.

**First seen - biopsy taken or may need EUA/foveoscopy**

- Non malignant diagnosis. Further management as appropriate.

**Diagnosis by Day 21**

**Treatment Plan 36 days**

- MDT Review of Histology / MRI / CT / PET Scan
- Histology order, review staging MRI, CT Scan, scan and excision biopsy. Follow the anal cancer protocol.
- MDT Review of Histology / MRI / CT / PET Scan

**First Definitive Treatment**

- Consideration of complete surgical excision.
- If yet to surgical pathway with specialist anal surgery plan.
- If first definitive treatment is unsuccessful or if recurrence then back to MDT for imaging with CT/PET/MRI. Consideration of possible salvage surgery if localised disease.

**Follow Up (at RSUH) & Rehabilitation**

- Minimum 5 years
- Reference: 53% staging

---

**MDT Review of Histology / MRI / CT / PET Scan**

- Lesion less than 0.5cm or non invasive lesion with no involvement of the anal canal.
- Greater than 0.5cm or evidence of local spread or involvement of anal canal.
- Less than 0.5cm but involving canal. Consider brachytherapy.

**First Definitive Treatment Only**

- Radiotherapy or if patient declined consider AP resection.

**End of Life Care**

- Refer to and follow NICE of Medicine Programme Care Pathway
2.3 Early Rectal Cancer Pathway

![Diagram of the Early Rectal Cancer Pathway]

- **Referral**: Urgent fixed referral from GP with a suspicion of early rectal cancer. Received by the Trust and given appointment within 14 days. Patient biassed straight to Test according to guidelines.

- **First seen**: Consultant may upgrade non bio-referral if there is a suspicion of early rectal cancer.

- **Non malignant diagnosis**: Further management as appropriate.

- **Malignant diagnosis**: CT, MRI, EAU.

- **Unsuitable for complete excision by EMR or per anal resection**: Refer all 10-18yr olds to the PTC. Offer 19-35yr olds the choice of treatment at the PTC or designated TTA hospital.

- **Presentation at MDT**: Review patient and decide on management.

- **Presentation at MDT**: Consider early salvage resection.

- **Follow up (for approx 5 years)**: Surgery etc.

- **Recurrence management and referral**: to others as required.

- **Discharge (if appropriate)**: to primary care.

- **Survivorship Management**: as appropriate. Link to rehabilitation pathway when indicated. See insert.

- **End of life Care**: Refer to and follow Map of Medicine Palliative Care Pathway.
2.4 Rectal Cancer Pathway

Network Rectal Cancer Pathway

Maximum timeline in days

Primary Care Assessment
- Appropriate referral guided by symptom profile

Referral
- Urgent faxed referral from GP with a suspicion of colon cancer, received by the trust and given appointment within 14 days. Patient triaged straight to Tree, according to guidelines

First seen – test carried out as criteria
- Consultant may upgrade non 3 week referral if there is a suspicion of Colon Cancer
- Flexible sigmoidoscopy or COPD biopsy

Non malignant diagnosis
- Further management as appropriate

If - for cancer CNS meets the patient (Key Worker allocated), gives contact number & supports the patient through further diagnostic or staging tests – CT + MRT (lower 2/3s of rectum) +/- colonoscopy

Patient presented at MDT + Screening
- Patient joins the pathway
- Clinical Trial entry considered
- Disease biopsy

CNS present at Consultant OPA to discuss treatment options (Surgical DTT)
- Pre-assessment arranged OR OPA with Oncologist (DTT), Planning & Consent arranged

First Definitive Treatment
- Radiotherapy
- Oncology OPA
- Planning and treatment of short course RT treatment to be delivered over 5 days immediately prior to surgery

First Definitive Treatment
- Chemo-radiation

First Definitive Treatment Pathology
- Presentation at MDT following any surgical resection and discuss histology. If further treatment required refer to oncology for chemo or chemo-radiation

Surgical resection with TME

Second Line Treatment (if appropriate)
- within 31 days from new DTT, back to MDT and discuss about whether chemo/chemo-radiation is appropriate

Follow up (for approx 5 years)
- Surgically led or may be joint oncology

Recurrence management and referral to others as required

Discharge (if appropriate) to primary care

Survivorship
- Management as appropriate
- Link to rehabilitation pathway when available

End of Life Care
- Refer to and follow Map of Medicine Palliative Care Pathway

Key
- Referral
- Diagnosis
- Follow up
- Benign
2.5 Liver Metastases from a Colorectal Cancer Pathway

-1
0
14

Maximum time in days

SCN Liver Metastases Cancer Care Pathway

Primary Care or Surgical Follow-up for patients with a history of Colorectal Cancer within the last 7 years
Suspicious liver metastases on CT or USS imaging

Urgent Referral
Two week wait or urgent referral that could be upgraded

Colorectal MDT Discussion
Diagnosis

Request Tests
Radiology (CT, T.A.P)
Histology if appropriate
Blood tests (Liver function & CEA)

Colorectal MDT Discussions (WSHT, BSJH & PRN & ESHT) Diagnosis

Liver Only Metastasis

WSHT
BSJH
Eastbourne
Hastings

Referral to Gastroenterologist
BSJH Joint MDT with Gastroenterology
Liver surgeons (11am Wed)

Multiple Metastases
E.g. lung, nodal, peritoneum

Liver Specialist MDM Discussion
Discuss Histology & Management of Liver Metastases

Tests
Resection of Liver Metastases / FNA

Surgery

Follow Up & Rehabilitation
(Minimum 5 years)
Reference SCN Policy

Discharge (if appropriate) to primary care. Letter sent to GP

Survivorship
Management as appropriate
Link to rehabilitation pathway (when available)

Recurrence or new primary tumour (return to first seen stage)

End of Life Care
Refer to and follow map of Medicine Palliative Care Pathway

Cancer Waiting Times to be monitored throughout the pathway

Criteria 1
Patient & carer experience of pathway

Criteria 2
100% patients discussed at an MDT with a treatment plan decision

Key:
- Referral
- Diagnosis
- Follow up
- Benign

Liver
?
Brain

Stage 4 disease

Chemotherapy

End of Life Care

Liver

S:\SCN Central Files\Colorectal\Guidelines\SCN Collated Clinical Colorectal Guidelines\2012
Page - 16 - of 49
2.6 Emergency admission pathway

Assessed, resuscitated, investigated if stable
CT +/- endoscopy

Resuscitation & relief of obstruction
Emergency surgery (colorectal surgery only) or stenting
(wherever feasible not routine)

If + for cancer, where appropriate the Colorectal Surgeon/ CNS discuss further treatment options. CNS (Key Worker) gives contact number & supports the patient through recovery process and further staging test.

Patient presented at MDT
Clinical trials considered (pre-op chemotherapy) & fast track referral to Oncologist at MDT and appointment arranged

Consultant / CNS discuss further treatment options on ward or in OPD

Patient commences adjuvant chemotherapy (curative surgery) or palliative if non-curative (cancer/ radiotherapy)

5 Year Follow Up
(Follow Up as guidelines: Supportive Care pathway Re-entry if recurrence or relapse)

Survivorship Management as appropriate
Link to rehabilitation pathway when available
See overleaf

End of life care
Refer to an follow Map of Medicine palliative care pathway

Criteria 1
Network patient experience survey of the pathway

Criteria 2
100% of patients Submitted to the Cancer Registry database Outcome data submitted to NBOCAP

Criteria 3
Develop the NSSG work programme to reflect the results of audits carried out

Criteria 4
Specific to the Colorectal Emergency Admissions Pathway
For example - Access to In & Out of hours investigations Number of Pts managed by identified Colorectal Specialists Number of patients with obstruction managed with stent as bridge to surgery
Sussex Cancer Network – Collated Clinical Colorectal Guidelines

3. Referral Guidelines

Referral Guidelines for Patient, Within or Outside the Network
(1C-104d)

Protocol for Prioritising Appointments and Referral Proforma
(1C-106d)

Primary Care Referral Guidelines
(1C-116d)

3.1 GP Guidelines for Referral from Primary Care

Colorectal cancer is the second most common cause of cancer-related death in the UK. Early diagnosis increases the chance of cure.

Refer urgently to the 2 week rule fax number, to be seen within two weeks, if the patient has a new occurrence of:

<table>
<thead>
<tr>
<th>Any Age</th>
<th>Iron deficiency <strong>Anaemia</strong> without obvious cause (Hb &lt;11g/dl in men, &lt;10g/dl in women)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Palpable Right-sided <strong>Abdominal Mass</strong></td>
</tr>
<tr>
<td>Over 60</td>
<td>Palpable <strong>Rectal Mass</strong> (Pelvic masses outside the bowel should be referred to Gynaecology or Urology teams)</td>
</tr>
</tbody>
</table>

Refer urgently but not 2-week wait route, if the patient has colorectal symptoms and:

- Rectal bleeding with anal symptoms*
- Change in bowel habit to decreasing frequency of defecation and harder stools
- Abdominal pains without clear evidence of intestinal obstruction.

*Anal symptoms include soreness, discomfort, itching, lumps and prolapse as well as pain

Patients with the following symptoms and no abdominal or rectal mass are at very low risk of cancer:

- Rectal bleeding with anal symptoms*
- Change in bowel habit to decreasing frequency of defecation and harder stools
- Abdominal pains without clear evidence of intestinal obstruction.

*Anal symptoms include soreness, discomfort, itching, lumps and prolapse as well as pain

Refer urgently but not 2-week wait route, if the patient has colorectal symptoms and:

- is in a high risk group (strong family history, or previous colorectal cancer or long-standing inflammatory bowel disease);
- or is aged > 45.

NB. The above triage cannot be made without abdominal and rectal examination

The **Colorectal 2WW referral proforma** lays out the above criteria.

Policy for Diagnosis and Assessment
(1A-202d)

3.2 Policy for diagnosis and assessment (including prioritisation protocol)

All patients with a potential colorectal cancer diagnosis should be referred to a named colorectal diagnostic service. The Two Week wait criteria (see section 3.1) identify patients who should be referred urgently (i.e. within 2 weeks). The prioritisation protocol (below) identifies other patients who should be referred and what priority their referral should be.
Prioritisation protocol

Refer urgently but not 2-week wait route, if the patient has colorectal symptoms and:

- is in a high risk group (strong family history as overleaf, or previous colorectal cancer or long-standing inflammatory bowel disease);
- or is aged > 45.

**NB.** The above triage cannot be made without abdominal and rectal examination

<table>
<thead>
<tr>
<th>Refer patients at high risk for a specialist opinion, on the basis of:</th>
<th>Referral of asymptomatic patients for screening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a) Disease Groups:</strong></td>
<td>Faecal occult blood and flexible sigmoidoscopy screening in people &gt;55 years old saves lives, but has yet to be approved for use in the general population in the UK.</td>
</tr>
<tr>
<td>- Colorectal Cancer - follow-up after curative surgery; unless a decision has been made not to screen further.</td>
<td></td>
</tr>
<tr>
<td>- Colonic Polyp (adenoma)</td>
<td></td>
</tr>
<tr>
<td>- Inflammatory Bowel Disease</td>
<td></td>
</tr>
<tr>
<td><strong>b) Family Groups:</strong></td>
<td></td>
</tr>
<tr>
<td>Local specialists accept the case for screening at a lifetime level of risk of developing colorectal cancer of 1 in 12 or more but recommendations may change as new evidence becomes available. Occasional referral of patients at lower risk may be justified if anxiety is high. Patients should understand that screening may involve regular colonoscopy.</td>
<td></td>
</tr>
</tbody>
</table>

Patients with a risk of 1 in 3 or greater should be referred to a geneticist.

HNPCC (hereditary non-polyposis colorectal cancer) exists when the family history meets the following criteria: 3 or more relatives have colorectal cancer; and one of them is a first degree relative of another; and at least two generations are affected; and one cancer was diagnosed before age 50.

FAP is familial adenomatous polyposis.

A first degree relative is a parent, sibling or child.

<table>
<thead>
<tr>
<th>Lifetime colorectal cancer risk (groups printed in bold are appropriate for colorectal cancer screening):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- general population: 1 in 50</td>
<td></td>
</tr>
<tr>
<td>- a first degree relative &gt;45: 1 in 17</td>
<td></td>
</tr>
<tr>
<td>- a first and second degree relative (same germ line): 1 in 12</td>
<td></td>
</tr>
<tr>
<td>- a first degree relative &lt;50: 1 in 10</td>
<td></td>
</tr>
<tr>
<td>- 2 first degree relatives: 1 in 6</td>
<td></td>
</tr>
<tr>
<td>- more than 2 first degree relatives: 1 in 3</td>
<td></td>
</tr>
</tbody>
</table>

Contact details for local colorectal diagnostic services for referral:

| Royal Sussex County Hospital: Digestive Disease Centre, Level 9, Royal Sussex County Hospital, Eastern Road, Brighton, BN2 5BE |
|---|---|
| Eastbourne District General Hospital: Eastbourne District General Hospital, Kings Drive, Eastbourne, BN21 2UD |
| The Conquest Hospital: Conquest Hospital, The Ridge, St Leonards on Sea, TN37 7RD |
| Worthing Hospital: Worthing Hospital, Lyndhurst Road, Worthing, BN11 2DH |
Referrals for Patients outside the agreed primary care referral process (1C-114d)

3.3 Secondary to secondary referral

In instances when a colorectal cancer is unexpectedly or incidentally discovered, the patient must be referred to a named colorectal MDT. The diagram below lays out the procedure to be followed.

Referral from secondary to secondary care (unexpected findings)
Referral Guidelines for Anal Cancer

3.4 Referral guidelines for Anal Cancer

1. GP referral of suspicious lesions to colorectal MDT at DGH under 2 week rule
2. DGH colorectal surgeon arranges EUA and biopsy. Rarely patient will require defunctioning by DGH surgeon.
3. Small superficial lesions of the perianal skin may be managed at the DGH by biopsy excision
4. Following confirmation of diagnosis patient discussed at local colorectal MDM, staging CT scan of lung, liver, abdomen and pelvis requested and patient then referred to Network Anal Cancer MDM at RSCH. (Hastings refer to Anal MDM at Maidstone)
   NB Pelvic MRI scan only required for locally advanced cancer.

Referral Guidelines for Liver Metastases

3.5 Referral guidelines for liver resection

The criteria of suitability for liver resection varies and several factors are important in the decision. These mainly involve extent of liver involvement and the exclusion of extrahepatic liver disease. Age and co-morbidity must also be taken into account. Overall patients undergoing liver resection for operable colorectal liver metastases have a three-year survival of approximately 60% and a five-year survival of 30%.

The SCN is included within the catchment areas of the two network designated hospitals. The clinical guidelines produced by these hospitals, the Royal Free (see section 7.5.1), and Royal Surrey County Hospital (see section 7.5.2) make clear the criteria of suitability for liver resection. The Colorectal tumour group have reagreed the providers of liver resection for the Network at their meeting of 6th June 2011 (see constitution document for further detail). As a result the guidelines of these providers are also adhered to.

Agreed Onward Referral Policy

3.6 Onward referral from diagnostic service to MDT

The diagnosing radiologist is responsible for referring patients to designated MDT leads (as identified in 3.1). MDT operational policies specify who is responsible for informing the patient and GP of a diagnosis of cancer. They also state the GP should be informed by the next working day after the patient has been informed of their diagnosis.

4 Diagnosis and Local Staging

4.1 Investigations for patients with suspected colon or rectal cancer

The Two Week Rule has concentrated services and aims to ensure at risk patients have an urgent flexible proctosigmoidoscopy (flexi-sigmoidoscopy)

Patients not presenting as Two Week Rule but suspected of having either colon or rectal cancer are investigated according to their symptoms. However it is strongly recommended wherever possible patients go straight to Flexi-sigmoidoscopy.
### Agreed Investigation Protocol

#### (1C-107d)

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Investigations</th>
<th>Exceptions</th>
<th>Responsible (colorectal diagnostic service/MDT)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Change in bowel habit</strong></td>
<td>Flexi-sig</td>
<td>Colonoscopy</td>
<td>Flexi-sig then barium enema for patients with coMorbidty eg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR CT colonography* (if local radiology service can demonstrate competency). If lesion suspicious of C detected then colonoscopy + biopsy</td>
<td>Unless contraindicated eg renal impairment. Both responsible. Dependent on whether repeat. Ongoing discussion</td>
</tr>
<tr>
<td><strong>Bleeding</strong></td>
<td>Flexi-sig</td>
<td>AND/OR Colonoscopy</td>
<td></td>
</tr>
<tr>
<td><strong>Iron-deficiency anaemia</strong></td>
<td>Hb</td>
<td>Gastroscopy negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Duodenal biopsy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rigid proctosigmoidoscopy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AND colonoscopy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR CT colonography</td>
<td></td>
</tr>
<tr>
<td><strong>Abdominal mass related to the colon</strong></td>
<td>Rigid/flexi proctosigmoidoscopy</td>
<td>OR colonoscopy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AND CT colonography</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Investigation protocol for patients with suspected colon or rectal cancer

- **Change of bowel habit**
  Flexi-sigmoidoscopy followed by clinic, where Colonoscopy or CT Colonography maybe arranged.

- **Bleeding**
  Flexi-sigmoidoscopy with or without Colonoscopy
  (Where the bleeding is recorded/observed as fresh (bright red) without altered bowel function or anaemia, a flexible sigmoidoscopy that achieves clear views to the level of the splenic flexure is preferable and maybe considered adequate assessment.)

- **Iron-deficiency Anaemia**
  Hb, Gastroscopy negative (Duodenal biopsy to excluded coeliac disease); Rigid proctosigmoidoscopy, Colonoscopy or CT Colonography*.

- **Abdominal Mass related to the Colon**
  Rigid/Flexible proctosigmoidoscopy with CT Colonography*/ Colonoscopy/

### 4.2 Investigation protocol

*CT Colonography is increasingly used in frail elderly patients with obstructive symptoms.*
Investigation protocol

Offer patients who have had an incomplete colonoscopy:
• repeat colonoscopy or
• CT colonography, if the local radiology service can demonstrate competency in this technique or
• barium enema.

Network Policy on Named Practitioner with Clinical Responsibility (1C-108d)

4.3 Clinical responsibility

The consultant allocated to the patient prior to the MDT is responsible for the patient at each stage of their pathway. See each MDT operational policy. There is an on-call rota for core member clinicians to accept patients from non core MDT members.

Advise the patient that more than one investigation may be necessary to confirm or exclude a diagnosis of colorectal cancer.

5. Imaging guidelines

Colorectal Cancers

[a] Diagnosis

<table>
<thead>
<tr>
<th>Obstruction/Change of bowel habit</th>
<th>Rigid/ Flexible proctosigmoidoscopy/ colonoscopy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleeding*</td>
<td>Either Rigid proctosigmoidoscopy and DCBE or Flexible proctosigmoidoscopy (with/without colonoscopy).</td>
</tr>
<tr>
<td>Iron Deficient Anaemia</td>
<td>Gastroscopy negative (Duodenal biopsy to exclude Coeliac Disease). Colonoscopy or CT colon if unfit for colonoscopy.</td>
</tr>
<tr>
<td>Abdominal mass related to the Colon</td>
<td>Abdo/pelvic CT scan.</td>
</tr>
</tbody>
</table>

* Where the bleeding is recorded or observed as fresh (bright red), without altered bowel function or anaemia, a flexible sigmoidoscopy that achieves clear views to the level of the splenic flexure may be considered adequate assessment.

[b] Staging

<table>
<thead>
<tr>
<th>Colonic cancers</th>
<th>Contrast enhanced CT chest, abdomen and pelvis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectal cancers</td>
<td>Contrast enhanced CT chest, abdomen and pelvis + MRI Rectum to assess risk of local recurrence (as determined by anticipated resection margin, tumour &amp; lymph node staging) Endorectal Ultrasound if MRI shows disease amenable to local excision or if MRI contraindicated.</td>
</tr>
</tbody>
</table>
[c] Surveillance

<table>
<thead>
<tr>
<th>Colonic cancers</th>
<th>Liver, thorax, abdomen and pelvis CT scan within first two years (in the event of CT scan not being included pre-operatively then arrange as a base line within first six months).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectal cancers</td>
<td>Liver CT scan within first two years (in the event of CT scan not being included pre-operatively then arrange as a base line within first six months). Where circumferential resection margin is involved, obtain baseline MRI (liver, thorax, abdomen and pelvis) within 3 months post surgery and/or after completion of chemo/radiotherapy.</td>
</tr>
</tbody>
</table>

[d] Technique

| CT Chest & Abdo +/- Pelvis | △ Oral & iv contrast  
△ 10/10 axial scans,  
△ 5/5 if Multislice  
△ Include chest & liver  
△ Image on lung & mediastinal / soft tissue windows |
|---------------------------|--------------------------------------------------------------------------------------------------|
| MR Pelvis                 | △ Sag T2 3 mm whole pelvis  
△ Axial T2 5 mm whole pelvis  
△ Axial T2 3 mm of tumour at right angles to long axis of bowel lumen  
△ Coronal T2 3 mm of tumour parallel to long axis of lumen |

All patients having surgery

Curative Surgery is specialist work involving teams of clinicians with increasing use of laparoscopy. All rectal cancers are treated with TME examination where appropriate. All rectal cancers are considered for pre-op Chemo/DXT where appropriate. Surgical excision Specimens correlated to pre-op MRI scans as part of ongoing trials.

5.1 PET referral criteria

The South East Coast PET referral criteria are adhered to. To request a PET scan the approved proforma should be utilised.

PET Scan Contingency

PET scans are provided via the Cancer Centre in Brighton. Should there be a breakdown or non-functionality of the machine, an impact assessment will be made, and if necessary patients will be referred to University for complex investigation.
6. Pathology Guidelines

General

All colorectal cancer cases should be reviewed by a colorectal cancer multidisciplinary team (MDT) which has a histopathologist as a core member. There should be a nominated lead pathologist for the service. If there is a significant discrepancy between clinical/radiological findings and the pathology, the pathological material should be reviewed by a second pathologist who regularly reports colorectal cancer specimens.

All diagnoses of “flat” colonic epithelial dysplasia should be confirmed by a second pathologist who regularly reports GI specimens, whose name should be identified in the report.

Specimen types

Diagnostic

- Colonic and rectal biopsies
- Needle core biopsies (abdominal and liver masses)

Therapeutic

- Colectomy
- Anterior resection
- TME excision of rectum
- Abdomino-perineal resection
- TART & TEMS specimens
- Snare polypectomy and EMR specimens

Specimen examination

Protocols should exist for the handling of all diagnostic and therapeutic specimens. These should be regularly reviewed and updated by the lead colorectal pathologist in consultation with the other pathologists reporting colorectal cancer specimens.

Digital images of radical surgical resections should be considered as they contribute to the MDM discussion and form part of pathological audit.

Tissue should only be removed and stored for research if it is surplus to diagnosis and appropriate patient consent and ethical approval have been obtained.

Minimum dataset for reporting

- RCPath minimum dataset for colorectal cancer histopathology reports.

Grading and staging

Dysplasia grading

- Revised Vienna classification of gastrointestinal epithelial neoplasia

Tumour grading

- WHO invasive carcinoma grade system

Tumour staging

- TNM classification of malignant tumours (5th edition)
Sussex Cancer Network – Collated Clinical Colorectal Guidelines

- Dukes staging system

Ancillary techniques

Appropriate IHC should be available to aid and refine diagnosis.

Audit

All pathologists reporting colorectal cancer cases should participate in appropriate EQA and audit.

Referral for specialist treatment

All patients referred for treatment to a hospital within the SCN following diagnosis elsewhere should be reviewed and discussed at the treating hospitals MDM. The complete diagnostic report must be available and histological/cytological material reviewed prior to the meeting. The results of the review should be formally documented and fed back to the submitting pathologist/department in accordance with the SCN protocol.

Referral for specialist opinion

All non colorectal cancer cases (e.g. lymphoma, melanoma, sarcoma) should be referred to an appropriate MDM.

Most colorectal cancers will not require specialist/expert review. The decision to refer is a matter of judgement for the pathologist responsible for the case.

Lead pathologists for SCN

<table>
<thead>
<tr>
<th>Colorectal</th>
<th>MDT</th>
<th>Lead MDT pathologist</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSUH</td>
<td>Dr A Rainey</td>
<td></td>
</tr>
<tr>
<td>Eastbourne</td>
<td>Dr K Ramesar</td>
<td></td>
</tr>
<tr>
<td>Conquest</td>
<td>Dr I Hawley</td>
<td></td>
</tr>
<tr>
<td>Worthing</td>
<td>Dr K Roberts</td>
<td></td>
</tr>
</tbody>
</table>

7. Clinical Management

7.1 General Management

Tumours

Adenocarcinoma
Squamous cell Carcinoma
Other histological tumours should be referred to the relevant MDT.

Below are the investigation, access to treatment and preparation for surgery guidance for the management of colorectal cancer (3rd edition) issued by the Association of coloprotology of Great Britain and Ireland. Full guidance can be seen at www.acpgbi.org.uk

Referrals should be received within 24 hours and patients should be seen within two weeks of referral. Performance status will be assessed.

Investigation

i) It is recommended that patients with higher-risk symptoms should be fast-tracked either in special clinics or with urgent appointments in routine clinics. Patients so referred should be investigated with sigmoidoscopy (flexible or rigid) plus a high quality double contrast
barium enema, or colonoscopy, or CT colonography. (p18) B

ii) Pre-operative histology must be obtained from all rectal tumours. (p18) C

iii) Colonoscopists should audit their results, and expect to achieve quality and safety standards consistent with British Society for Gastroenterology guidance. (p18) B

iv) With the exception of patients with peritonitis who require emergency surgery, all patients with colon or rectal cancer should have pre-operative staging by CT scan to determine the local extent of the disease and the presence of lung or liver metastases. Patients with rectal cancer should also have MRI scans of the pelvis to stage the tumour and assess involvement of adjacent organs. Endorectal ultrasound scanning should be performed to assess T1 rectal cancers when local excision is being considered. (p19) B

v) People with a greatly elevated personal risk of gastrointestinal malignancy should be identified on the basis of family history criteria and/or pathological criteria and/or presence of a pathogenic mutation in a gene known to be responsible for a colorectal cancer susceptibility syndrome. Lifetime cancer risk ranges from 10-100% for members of high risk groups. (p20) B

vi) Patients fulfilling family history and/or clinical criteria, or those with a relative known to have a mutation associated with susceptibility to colorectal cancer, should be referred to the Regional Genetics Centre for formal counselling and mutation analysis. (p20) B

vii) People with only one first degree relative affected by colorectal cancer aged <45yrs or only two affected first degree relatives fulfil criteria for moderate risk. Although the excess personal risk is modest, these patients should be offered a single colonoscopy at age 55yrs. Polyps must be snared and histologically characterised. If adenomatous polyp is confirmed, then adenoma surveillance guidance applies. If the colon is clear of neoplasia, the patient may be reassured and discharged with recommendations relevant to population risk (e.g. uptake of FOBT screening). (p21) B

viii) People with family histories that do not fulfil the criteria described above are considered low risk. These individuals should be reassured that their risk level is only marginally greater than the general population, and that they should avail themselves of population-based screening measures. (p24) B

Access to Treatment

i) Treatment should begin within 31 days of discussion with the patient of the decision to treat. (p26) B

ii) All patients with colorectal cancer should have the benefit of a suitably informed surgical opinion and their management should be discussed by the multidisciplinary team. (p27) C

iii) Patients with colorectal cancer should have access to a colorectal nurse specialist for advice and support from the time they receive the diagnosis. (p27) 

iv) It is important that patients with colorectal cancer are offered the opportunity to ask questions and to have important information repeated. Provision of information should be an essential part of every consultation (p30) C

Preparation for Surgery

i) All patients undergoing surgery for colorectal cancer should give informed consent. Informed consent implies being given information about the likely benefits and risks of the proposed treatment and details of any alternatives. Informed consent should be obtained by the operating surgeon where possible. (p30) C

ii) The patient who may require a stoma should be seen by a stoma nurse prior to surgery.
and the referral should be made at the earliest opportunity to allow adequate time for preparation.

iii) Bowel preparation should not be used routinely before colorectal cancer resection. (p31) B

iv) A combination of graduated compression stockings and heparin should be used for thrombo-prophylaxis for patients undergoing colorectal surgery. (p31) A

v) All patients undergoing surgery for colorectal cancer should have antibiotic prophylaxis. A single dose of appropriate intravenous antibiotic is likely to be effective. (p31) A

Elective Surgical Treatment

i) It is recommended that the term curative resection should be based on surgical and histological confirmation of complete excision. Surgeons should expect to achieve an overall curative resection rate of 60%, but it is appreciated that this will depend at least in part on the stage at which patients present. (p32) B

ii) Any cancer whose distal margin is seen at 15 cm or less from the anal verge using a rigid sigmoidoscope should be classified as rectal. (p33) C

1) It is recommended that total mesorectal excision should be performed for cancer in the lower two-thirds of the rectum, either as part of a low anterior resection or an abdomino-perineal resection (APER). In tumours of the upper rectum the mesorectum should be divided no less than 5 cm below the lower margin of the tumour. Care should be taken to preserve the pelvic autonomic nerves and plexuses, and perforation of the tumour during operation should be avoided. (p33) B

2) If a surgeon has any doubt regarding the choice of operation between low anterior resection or abdomino-perineal excision of the rectum, an experienced second opinion should be sought. (p34) B

3) Surgeons should expect to achieve an operative mortality of less than 20% for emergency surgery and less than 7% for elective surgery for colorectal cancer. (p35) B

4) Surgeons should carefully audit their leak rate for colorectal surgery, and should expect to achieve an overall leak rate below 8% for anterior resections and below 4% for other types of resection. Ultra-low pelvic anastomoses are associated with a higher leak rate, and the judicious use of a temporary defunctioning stoma is recommended. (p35) B

5) Local excision for cure in rectal cancer should be restricted to T1 cancers less that 3cm in diameter with good or moderate differentiation. It must be accepted that subsequent histopathological examination of cancers thought to be suitable for local excision will identify a proportion which require more radical surgery. (p36) B

Criteria and Referral Guidelines on Laparoscopic Colorectal Cancer Surgery

(1C-123d)

6) All appropriate patients must be offered the choice of laparoscopic surgery for colorectal cancer. All laparoscopic colorectal operations should be performed by surgeons properly trained in colorectal surgery and identified as named laparoscopic surgeons on the network list found in the constitution document. These surgeons should also have undergone preceptorship laparoscopic training, particularly in rectal procedures. Their results should be carefully audited in the local hospital multidisciplinary setting and should also be submitted to the Association of Coloproctology of Great Britain and Ireland colorectal cancer database. (p36) A

Detailed referral criteria for laparoscopic surgery are being worked on, but the minimum criteria for offering patients laparoscopic surgery are:
The criteria for offering patients laparoscopic surgery are:
Sussex Cancer Network – Collated Clinical Colorectal Guidelines

a) BMI less than 30
b) No previous major abdominal surgery
c) Avoiding obvious T4 cancers on pre-operative staging
d) Those tumours not requiring TME
e) No clinical or radiological signs of obstruction

All cases for laparoscopic surgery to be considered within the MDT, and those cases unable to be treated by the local team should be offered referral elsewhere in the SCN. The MDTs will document for those patients who have open surgery why laparoscopic surgery is not suitable.

See Appendix 1 from NICE Guidance for tabulated risk analysis

Network Agreed Guidelines for Management of Anal Cancer

(1C-110d)

7.2 Management of Anal Cancer

i) At Network Anal MDM following possible decisions:
ii) for small superficial perianal lesions FU only or further local excision by BSUH designated anal cancer surgeon
iii) most other lesions patient referred to site specific Oncologist for chemoradiation wherever possible.
iv) Fiona Mckinna / Duncan Gilbert for Brighton/Mid Sussex.
v) Fiona Mckinna / Duncan Gilbert for Eastbourne.
vi) Geoff Newman for Worthing.
vii) HIV positive patients to be discussed with GUM specialist / elderly,frail patients consider for RT only.
viii) complex cases to consider joint review by DG/FM together with BSUH designated anal cancer surgeon after MRI scan and/or endo anal ultrasound.
ix) Where surgery would leave a T1 patient incontinent Brachytherapy should be considered as an alternative treatment.

INITIAL MANAGEMENT

1. EUA and Biopsy
2. CT scan of lung, liver abdomen and pelvis. MRI for locally advanced disease. PET scan considered via MDT.
3. In HIV positive cases advice from GUM clinic on current status/medication
4. Obstructed patients may require defunctioning at time of EUA
5. Advice on symptom control and involvement of colorectal nurse specialist.

DEFINITIVE MANAGEMENT

Recommended by Network Anal MDT according to:

- Site of cancer
- TNM stage
- HIV status
- Age and comorbidity

Early perianal cancer.
Often associated with AIN
Treat by wide local excision providing sphincter can be avoided.
Careful FU long term

Anal Canal T1 and all T2/3/4 NO/N1/N2 M0
Usually chemo radiation with 5FU and mitomycin C in first and fifth week of radiation.

Consideration can be given to use of oral Capecitabine instead of 5FU

Radiation fields are as in ACTII protocol
HIV positive cases with low CD4 counts may show enhanced toxic effects and consideration should be given to modifying treatment (dose and/or radiation field size) after discussion with GUM specialist.

In unfit patients with T1/T2 NO cancer consideration should be given to avoiding prophylactic lymph node irradiation and/or chemotherapy especially if cancer is well differentiated. Specialist nursing care required to treat inevitable severe radiation skin reaction. Admission to RSCH cancer ward may be required.

Follow up – to be managed by anal cancer MDT
Frequent follow up by oncologist or colorectal surgeon to detect local recurrence and inguinal lymph node spread required for 5 years, with the possibility of referral to pelvic toxicity service where required at any time after treatment. Recommend use ACT11 protocol.
AIN 3 patients followed up by Daniel Richardson, HIV GUM consultant, BSUH, with additional support provided by the anal cancer MDT and BSUH designated anal cancer surgeon where appropriate.

Management of Inguinal lymph node metastasis
1. confirm diagnosis by cytology
2. restage with whole body CT scan
3. refer to Network Anal Cancer MDM
4. If operable lymph node dissection
5. If inoperable individualise management

Management of Local Recurrence
1. confirm diagnosis by cytology or biopsy (small to reduce risk of necrosis)
2. restage with whole body CT scan
3. refer to network anal cancer MDM who will arrange joint clinic assessment by oncologist and surgeon (+/- plastic surgeon – Mr Paul Banwell at QVH), pelvic MRI

Management of Distant Metastasis
Refer to Network Anal MDM for consideration of options. Palliative chemotherapy would usually be given at local cancer unit.

Network Agreed Guidelines for Management of Rectal Cancer
(1C-111d)

7.3 Management of Early Rectal Cancer

See pathway 2.3

Introduction
Local excision for curative treatment has been increasing used in carefully selected early rectal cancer patients. Studies have shown equivalent overall survival and local recurrence rates when compared to trans-abdominal surgery (1-3).

Early rectal Cancer (ERC) is defined as invasive adenocarcinoma spreading into, but not beyond, the submucosa (T1 in the TNM Classification, 4,5).

Between 3 and 8% of resectable rectal cancers are early disease (6,7), and this is likely to rise with the implementation of the national bowel cancer screening programme.

Transanal endoscopic microscopic surgery (TEMS) offers opportunity of cure with the potential advantages of sphincter preservation, low mortality rates, minimal morbidity and reduced functional disorders, when compared to anterior resection and abdomino-perineal resection.

Its advantage over transanal resection and endoscopic mucosal resection (EMR) is that it allows full histological analysis and staging and thus prognosis on the basis of predicting...
Sussex Cancer Network – Collated Clinical Colorectal Guidelines

lymph node involvement.

Indications

1. Potentially curative treatment of early carcinoma in selected patients.

   The most significant factor is the prevalence of regional lymph node metastasis (and thus risk of recurrence), which is related to depth of penetration into the submucosa, as well as morphology (sessile having a greater risk than polypoid tumours (8,9).

   For this reason, the most widely held view is that **local excision should only be applied to T1 tumours invading the superficial submucosa and deemed as “low risk”** (see below)

   Another school of thought (mostly American) has expanded the indications to include T2 or possibly T3 tumours, by combining local excision with adjuvant chemotherapy (10).

   Several studies have shown that subsequent salvage radical surgery in the event of local recurrence results in survival no different from the expected rate with major resection as primary treatment, although others have shown poor outcomes associated with late resectional surgery

   Often the diagnosis is made retrospectively once the tumour has been removed and histology assessed. The depth of invasion can then be made and the chance of involved lymph nodes left behind and therefore local recurrence assessed. A decision can then be made whether local excision alone is reasonable or should be followed by “salvage” early classical surgery (within 30 days); this has been shown not to compromise the oncological outcome compared with primary classical surgery (11).

2. Compromise treatment in patients unfit for surgery.

3. Palliation in some patients with rectal cancer that is not curable due to distant metastases

Assessment Protocol for Early Rectal Cancer

(1C-117d)

Patient selection and staging

Patient selection and staging is crucial.
All patients should have **CT and MRI staging** as for any rectal cancer.
The following criteria have been widely used to define low risk tumours.

Well or moderately differentiated T1 tumours.
No lymphovascular invasion
<4 cms in diameter
Kikuchi Sm1 for sessile tumours and Haggit levels 1 – 3 for polypoid tumours.

From the technical point of view, the tumour should be situated up to 15cms posteriorly and 12 cms anteriorly.

The depth of penetration of tumour is probably the most important factor in predicting lymph node involvement and thus suitability of local resection over major resectional surgery. However, this is the most difficult aspect to predict and is most accurately assessed by **endorectal ultrasonography**, which should be performed in all patients.

MDM discussion and referral Pattern

The Technique of TEMS is technically challenging. Between 20 and 30 ERCs should be
Sussex Cancer Network – Collated Clinical Colorectal Guidelines

expected per annum across the tumour group.
In order to maintain experience at the management and surgical skill of TEMS (as well as developing expertise at reading endorectal ultrasonography), Where appropriate all ERCs are managed in Brighton and Worthing.

There are named Surgeons who should manage early rectal cancer. These are Marc Lamah and Etienne Moore in Brighton, and Tony Miles in Worthing.

Adjuvant therapy and follow up post TEMS

More recently neo-adjuvant or adjuvant Radiotherapy with or without chemotherapy has been used to improve local recurrence rates following TEMS and should be discussed at local MDM level. Neo- adjuvant radiotherapy if considered needs to be done before resection. Further studies on the use of adjuvant therapies are being considered by the UK TEMS users group.

Benign rectal lesions should be followed up according to the guidelines set out by the BSG.

All rectal Cancers require regular follow up and assessment from local recurrence with assessment of mesorectum. This should include endorectal ultrasonography or MRI to allow imaging of the peri-rectal tissues.

Follow up should continue long term, with digital rectal examination and rigid sigmoidoscopy undertaken every 3 months for the first 3 years and every 6 months for the next 2 years and then annually. The local colorectal teams undertake this follow up.

7.4 Management of Rectal Cancer

(Defined as tumours within 15cm of anal verge).

DIAGNOSIS AND STAGING

- Biopsy to gain histological confirmation
- Investigation and staging
  - Assessment patients’ general health (ASA Categories 1 –5)
  - Bloods (FBC, U&E, LFT’s, baseline CEA)
  - CT chest and abdo
  - MRI Pelvis
  - Colonoscopy to exclude synchronous lesions
- Assessment of Fixity
  - MRI pelvis/Endoanal ultrasound for mid/lower 2/3 tumours digital examination + EUA

BAD NEWS INTERVIEW

Full discussion of the diagnosis and treatment options. Ideally, the patient is supported by a family member/next of kin/friend. Additionally a specialist colorectal nurse is in attendance to provide support counselling and reinforcement of information given. All patients are to be offered a permanent record of significant consultations. A key worker should be allocated to each patient.

TREATMENT OF ADENO CARCINOMA OF THE RECTUM

The treatment of rectal cancer is now complex and all patients should be discussed at the multidisciplinary meetings (MDM) Options for treatment will depend on the extent of local and distant disease. The height of the tumour, the differentiation, the patient’s health and the patients wishes.

Treatment options include:
- Radiotherapy
- Chemotherapy
- Chemo-radiotherapy
- Surgery
Increasingly surgery is laparoscopic and all appropriate patients should be offered the option. (There is now no question that patients undergoing a laparoscopic resection have an enhanced recovery with the same long-term outcome as open surgery). Surgery of the rectum whether open or laparoscopic should be undertaken by surgeons trained in total mesorectal excision (TME).

Surgical resection should involve TME. At least 2cm of uninvolved distal bowel should be sought for mid – low rectal tumours and preferably 5cm.

A “Hartmanns” operation may be performed if anastomosis of the bowel is not possible.

All rectal tumours where there is a possibility of a stoma should see the stoma nurse prior to surgery.

A rectal wash out prior to anastomosis with water or Betadine should be performed.

Three doses of prophylactic antibiotics and post operation subcutaneous Heparin should be given.

Treatment of rectal cancer will vary for the following options:

a. Early rectal tumours PT1
   These are a select group where local excision without radiotherapy or chemotherapy may be performed. Assessment should include MRI and Endoanalthrasound (EUS). Here the tumour is in the submucosa and maybe excised locally through the anus either by Transanal excision or preferably by Transanal microscopic excision (TEMS). Those patients suitable for resection should be referred to a designated early rectal MDT for their treatment. (see section 7.3 for the early rectal cancer assessment protocol)

b. Locally advanced tumours
   These are inoperable surgically and require “Down Staging” with a combination of chemotherapy and radiotherapy. Patients should then be rescanned (with MRI) before considering whether they are then resectable.

c. Locally advanced tumours with disseminated secondaries
   These are inoperable and probably incurable. Pre-treatment should concentrate on palliation. Palliative Chemotherapy should be considered with involvement of palliative care team.

d. Mobile resectable tumours with disseminated secondaries
   Treatment should concentrate on control and if possible resolution of the secondaries. Previously this group were incurable, but resection of the primary and Chemotherapy for the secondaries may result in good quality of life. Conversely many patients may be treated by initial chemotherapy leaving the primary and stenting the tumour or operating if the primary obstructs.

e. Resectable T2-T3 Tumours of lower rectum with no evidence of secondaries
   The mainstay of treatment is still abdomino-perineal excision of the rectum with an end LIF Colostomy. Occasionally resection of the tumour with a colo-anal anastomosis may be possible but compromising local excision to join the bowel should not be undertaken. Where an APR is performed, radiotherapy, either 5 day or long course should be considered prior to the surgery.

If a colo-anal anastomosis* is possible radiotherapy may have a deleterious affect on sphincter function.[ *Anastomoses within 5cm from the anal canal should be defunctioned with a temporary stoma.]

There is increasing evidence that low rectal tumours have a greater recurrence rate due to inadequate surgery and there is a need for these patients to be concentrated in a sub specialist group.

f. Resectable T2– T3 tumours of mid rectum
   Patients should be considered for pre-operative radiotherapy followed by surgery with TME.

g. Resectable T2 – T3 tumours of upper rectum
These should be dealt with like sigmoid tumours. TME resections ensuring the resection margin is 5cm beneath the tumour.

**NB** Caution and careful consideration should be given to the relative merits of Palliative resection for rectal cancer since the morbidity and subsequent management can be very challenging. Many patients with advanced disease or frailty may be managed by Colonic stenting or defunctioning stomas. [see network policy on colorectal stenting in 7.8]

Network Agreed Referral Guidelines for Liver Metastases
(1A-207d)
Network Agreed Guidelines for the Resection of Liver Metastases
(1C-112d)

### 7.5 Management of Liver Metastases

The clinical guidelines produced by the Royal Free, and Royal Surrey County Hospital (see below) make clear the criteria of suitability for liver resection.

Liver secondaries in general should not be biopsied as it increases the chance of seeding and may be a contraindication to liver surgery at a later date. Following excision the pathology should be presented at the MDT meeting where the patient should be considered for adjuvant Chemotherapy wherever possible.

Those patients with disseminated tumours should be referred to the palliative care team.

#### 7.5.1 Royal Free & University College Medical school guidelines – within their 2010 guidelines

Appendix G Standard operating procedure for resections or radio frequency ablation of colorectal metastasis

**Suitable patients**

Patients who should be considered for hepatic surgery or radiofrequency ablation (RF) include those with <10 colorectal metastasis to the liver (if in doubt the imaging should be referred to the MDT) without inoperable extensive extrahepatic disease (for instance, patients with limited resectable or ablatable lung disease should also be considered). Patients unsuitable for resection by virtue of fitness for surgery should be considered for RF. Chemotherapy may enable surgery and should be considered in all patients (see appendix E and EPOC trial).

**Data for presentation to HPB MDM (Chair B Davidson)**

Spiral CT scan of the chest and abdomen and pelvis demonstrating hypovascular lesions in arterial phase and hypervascular in the venous phase* (hardcopy, compact disc or PACS to PACS)
Past medical history of colorectal cancer with R0 resection** (pathology report)
Serum CEA (pathology report)
Colonoscopy in previous year (may vary with metachronous disease, endoscopy report)
Referral letter or MDM proforma detailing performance status, suitability for surgery and indication of resectability

* further imaging, such as a MR scan with gadolinium or CT PET scan may be required. Patients with pulmonary lesions are not necessarily excluded.

** patients with primary tumour in situ (colon and rectum) may be presented to determine resectability of metastasis prior to primary treatment (surgery, radiation, or chemotherapy)

The referring MDMs are:

<table>
<thead>
<tr>
<th>Locality</th>
<th>Treating oncologist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnet General Hospital (Barnet &amp; Chase Farm Hospitals NHS Trust)</td>
<td>Glynne-Jones</td>
</tr>
</tbody>
</table>

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MDM coordinators are:

Maggie Cox, Clinical Co-ordinator, Cancer Services UCH, 1st Floor West Wing, 250 Euston Road, NW1 2PG
Tel 08451 555 000 x3358 Fax 020 7380 9128, maggie.cox@uclh.nhs.uk
Tamer Malet-Bates, MDT Co-ordinator, Cancer and Clinical Haematology, Royal Free Hospital 020 7794 0500 x35810, Bleep 71-2158, tamer.malet-bates@royalfree.nhs.uk

MDM outcomes

- Further imaging should be obtained and the case represented within 10 working days
- Surgical assessment
- New adjuvant chemotherapy
- Radio-frequency ablation
- Palliative chemotherapy and supportive care

* Any chemotherapy for patients given as combination treatment with metastatectomy, is managed by an oncologist from the referring colorectal MDT, who should attend the meetings of the liver resection team at which the patient is discussed or is managed by a core oncology member of the liver resection MDT.

The MDM will record whether the patient becomes the responsibility of the liver resection MDM or remains the responsibility of the local MDM.

Follow-up

Following resection patients should be seen with an updated CT scan of the chest and abdomen and pelvis every three months in the first two years by the surgical team. Further follow up and re-review is at the discretion of the local MDM.

See Appendix 2, NICE Guidance November 2011

7.5.2 Royal Surrey County Hospital, Guildford guidelines

*Network Guidelines for the Resection of Liver Metastases from Colorectal Cancer*

The Network Policy Board and Network Colorectal Tumour Group have agreed the following guidelines and operational policy with the regional HPB unit.

**HPB Unit Operational Policy for the surgical management of patients with colorectal liver metastases**

**Regional HPB Unit for Surrey and Sussex**
Royal Surrey County Hospital
Egerton Road
Guildford
Surrey GU2 7XX

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The Regional HPB Specialist MDT at the Royal Surrey County Hospital NHS Trust is agreed by the SWSH network as the preferred provider for the resection of liver metastases. Liver metastasectomies are performed under the care of Prof Nariman Karanjia and Mr Tim Worthington.

The Network Policy Board and Network Colorectal Tumour Group have agreed the following guidelines and operational policy with the HPB MDT.

**Criteria for liver resection**

Patients who are fit for major surgery and in whom all disease sites can be treated with curative intent should be considered for resection.

- Solitary liver metastases
- Multiple unilobar liver metastases

Provided that 30% of disease free parenchyma can be spared we also consider patients with:

- Bilobar resectable liver metastases
- Multiple bilobar liver metastases amenable to down-staging

Such patients are also considered for staged hepatectomies.

**Synchronous resectable colonic (never rectal) primary and metastatic liver disease**

Liver and localised resectable lung metastases

Patients with synchronous liver metastases and those with metachronous metastases arising within the first 2 years after resection of the primary colorectal cancer should be considered for chemotherapy before liver resection. Patients with metachronous liver metastases arising more than 2 years after their primary colorectal cancer has been removed may proceed directly to resection.

**Criteria that excludes patients from liver resections:**

- Unfit for major surgery – borderline cases assessed by an HPB anaesthetist
- Unresectable primary disease (that had failed down-staging chemotherapy)
- Positive pelvic CRM leaving local residual disease
- Peritoneal / Omental metastases
- Bony or unresectable lung metastases

**Staging protocol:**

- Spiral CT of the chest, abdomen and pelvis – contemporary scan
- TESLA MRI scan of the liver
- Colonoscopy (before or after resection of the primary)
- PET scanning if equivocal disease sites

**Multi disciplinary team involvement:**

All patients to be discussed at the SWSH Network HPB MDT meeting and selected cases at the local liver/colorectal MDT (held once a month) and a management plan made for treatment with chemotherapy and / or surgery. In addition all patients are discussed at the HPB MDT meeting held weekly in Guildford and if any modifications in the management plan are made these will be communicated back.

All patients considered for resection will be seen in Guildford by a consultant HPB surgeon together with the HPB CNS to provide a contact point and treatment details.

**Following all liver resection surgery at the specialist centre:**

Following surgery a letter is sent to the referring clinicians providing all operative details. All patients are followed up for one post-operative visit at the centre 4 to 6 weeks after surgery.

Histology once available is reviewed at the Regional weekly MDT and further adjuvant therapy plans discussed. Details of patients undergoing surgery are also fed back to the monthly Liver / Colorectal MDT.
All patients undergoing liver resection are referred back to the local oncology team who are provided with a full discharge summary and the specialist cancer MDT opinion on adjuvant therapy.

There are no definite national guidelines for follow up of these patients. However recurrent disease in the liver is still amenable to curative resection.

An intensive follow up protocol of 6 monthly CT and CEA marker is advised for the first 2 years and annually thereafter for a further 3 years.

Patients with recurrent disease will be reviewed in the same way as before to discuss further resection or non surgical options.

**Provision of chemotherapy for Colorectal Patients with Liver metastases**

It is agreed that any chemotherapy for patients given as combination treatment with metastatectomy, is managed by an oncologist from the referring colorectal MDT, who will attend the meetings of the HPB MDT at the RSCH at which the patient is discussed.

**Clinical Trials for Colorectal Patients with Liver metastases**

As the HPB Specialist MDT Lead, Prof Nariman Karanjia will review the list of Colorectal Trials relevant to treatment by metatatectomy. This review will be covered in the HPB MDT annual report.

**Guidelines for the Management of Surgical Emergencies (1C-115d)**

7.6 **Emergency Management of Colorectal Cancer**

**Patients should be enrolled under the care of the Multidisciplinary Team at the earliest available opportunity.**

**DIAGNOSIS AND INITIAL CARE**

- **Resuscitation.**  
  Adequate fluid resuscitation monitored by blood pressure and urine output. Early anaesthetic assessment necessary.

  Baseline bloods and serum for cross-match.

- **Assessment of cause.**  
  In the absence of perforation (established or incipient) or life-threatening bleeding, operation for large bowel obstruction should be **scheduled** for the next available list by experience colorectal surgeons where ever possible.

  Rigid sigmoidoscopy, AXR, Consider Abdominal/pelvic CT scan. Water-soluble contrast enema is strongly advised in all cases suggestive of left-sided obstruction. In many cases urgent CT scanning will give more information.

**Consider the option of colonic stenting for left sided obstructive cancers (as a temporary decompressing manoeuvre, i.e. “bridge to surgery,” or for palliation of non-operative cases) and occasionally right sided lesions, with definitive surgery at a later date.**

**SURGERY (25% mortality if carried out as emergency)**

Patients presenting as emergencies, either within or outside normal working hours, with intraluminal large bowel obstruction should be stabilised pre-operatively if necessary to ensure surgery can wait until it can be performed by core surgical member of a colorectal MDT, unless delay would be life threatening. If the patient presents at a hospital which does not host a colorectal MDT, the patient should be transferred pre-operatively to one which does.
• Preparation for surgery
  ➢ Informed consent
  ➢ Anti-thrombotic and Antibiotic prophylaxis
  ➢ Stoma sitting.
  ➢ HDU/ITU facilities made available.

• Surgery
  ➢ Patients in this group should be managed by surgeons and anaesthetists with appropriate experience and who are part of the Multidisciplinary Team.

  At laparotomy a careful assessment/confirmation of the stage of the cancer should be noted. Unexpected/suspicious secondaries within the abdomen should be biopsied. Resect isolated superficial/small liver metastasis with 5mm resection margin or leave alone (document for discussion at MDT with consideration of tertiary referral). In general, liver metastasis should not be biopsied as it increases the chance of “seeding” and may be a contraindication to liver surgery at a later date.

• Right-sided lesions
  Primary resection and ileocolic anastomosis. Consider palliative internal bypass for cancers that are considered not resectable.

• Left-sided lesions
  a. Primary resection with anastomosis:
     segmental resection with on-table lavage vs. subtotal colectomy and ileorectal anastomosis.
  b. Hartmann’s procedure:
     Immediate resection with end colostomy.
  c. Internal bypass:
     As a palliative manoeuvre for cancers deemed not resectable.
  d. Defunctioning stoma:
     Discouraged but has its place in very infirm patients.

FURTHER TREATMENT OPTIONS

• Histopathology review
• Counselling, support groups and stoma advice.

Multidisciplinary Team (MDT) Meeting
Surgical treatment must be judged as curative or palliative. A mechanism must be in place to "flag-up" all emergency cases for discussion within a multidisciplinary forum. Clarity of staging, adjuvant therapy options, tertiary referral, National Trials and follow-up care plan.

Where surgery achieved palliation consider other supportive therapies and follow-up by Palliative Care Team.

MDT decision to be documented in patient’s notes.

7.7 Management of Advanced Colorectal Cancer

PRESENTATION
  a. Locoregional recurrence
  b. Inoperable primary disease
  c. Metastatic disease
  d. Palliative care
MULTIDISCIPLINARY TEAM (MDT) MEETING

Irrespective of the presentation an "individualised" care-plan should be discussed within a multidisciplinary meeting forum. The importance of psychosocial support, family counselling and involvement of specialist-skilled staff cannot be over emphasised. Where appropriate, early involvement of the Palliative Care Team.

MDT decision must be documented in patient's notes.

TERTIARY REFERRAL FOR TREATMENT OF HEPATIC METASTASIS.

Hepatic Resection

Don’t biopsy suspected* colorectal metastasis. Temporary stomas should be closed if possible. Consider patients who may realistically benefit from active treatment and further surgical intervention where:

a. Primary disease radically removed.
b. Colorectal metastasis confined to the liver.
c. Liver metastasis and localised extra-hepatic disease (i.e. resectable pulmonary metastasis).

* Supported by clinical, surgical and/or radiological features.

NB: Age, multiplicity and size of metastasis, as well as proximity of metastasis to major vessels are NOT contra-indications. Post-liver resection > 30% liver must remain intact.

Local Ablation Techniques

Consider cryoablation/thermal ablation (radio-frequency ablation-RFA, interstitial laser photocoagulation-ILP) techniques to palliate inoperable/recurrent hepatic metastasis. However, size (>3cms), a superficial location or the proximity of the metastasis to major vessels may limit this option.

Network Agreed Colorectal Stenting Policy

(1C-113d)

7.8 SCN Colorectal stenting policy

Colorectal stenting may be undertaken for obstruction in two distinct circumstances; a) palliative care in cases of known malignancy. b) acute obstruction in patients where there is an “intention to treat” in whom the normal approach would be defunctioning colostomy, this to enable patient resuscitation and to establish a diagnosis. Some of these cases will subsequently be for palliative care, some will proceed to curative cancer surgery and some will be due to benign disease. All patients in this latter group should be suitable for surgery.

Inclusion criteria: All patients with obstructing left sided colonic lesions proven radiologically (up to and including distal transverse colon) will be taken on with the intention to treat by stenting.

Exclusion criteria:

a) Low rectal lesions
b) patients with signs of peritonitis and/or perforation
c) patients with closed loop obstruction and right iliac fossa tenderness
d) surgically unfit patients (intention to treat group)

Palliative care

Patients with known malignancy who are classified for palliative care will be considered for stenting. Stenting for these patients should be available within 5 working days unless there is evidence to suggest impending obstruction. In cases of impending obstruction the service should be available on a next day basis.
Initial access to the tumour will usually be via endoscopy to enable wire access across the lesion. High quality fluoroscopy with a c-arm screening unit is necessary to enable accurate stent placement. In cases where the lesion is non-obstructing departments may place the stent with fluoroscopic guidance alone but there must be easy access to back up endoscopy.

**Intention to treat**
All patients should have a water soluble contrast enema to establish and locate the level of obstruction and to define evidence of a closed loop obstruction.
Access to stenting should be within 24 hours, this will necessitate a weekend/bank holiday on call availability of personnel.
It is recognised that this will not always be available due to personnel shortages, in these case patients may be treated by conventional surgical approach. Trusts should look to develop a service rota to accommodate 24/7 cover for stenting access.

**Personnel**
The practice will be led by a named radiologist and surgeon from each hospital trust.
It will usually be undertaken as a combined procedure with an endoscopist and a radiologist.
Where either have the necessary cross cover skills then they may undertake the procedures with the necessary nursing, radiographic and ancillary staff. Each trust will agree and record who is considered competent, this will be ratified by the SCN colorectal tumour group.

**Stents**
There are several stent systems available. The ideal stent will be large enough to relieve obstruction, compliant with the bowel wall whilst having a good radial force and have a low migration rate. Stainless stents such as the Wallstent are "old" technology, these are non-compliant and have a high migration rate. Nitonol stents should be used. Sizing should be 30mm or larger ("through scope" systems only get up to 28mm and are therefore not ideal).

<table>
<thead>
<tr>
<th>Name</th>
<th>Trust</th>
</tr>
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<tbody>
<tr>
<td>Interventional Radiologists:</td>
<td>Brighton &amp; Sussex University Hospitals Trust</td>
</tr>
<tr>
<td>M Johnson</td>
<td></td>
</tr>
<tr>
<td>L Maischne</td>
<td></td>
</tr>
<tr>
<td>Surgeon Endoscopists:</td>
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<tr>
<td>M Lamah</td>
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<td>E Moore</td>
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<td>J Clark</td>
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<tr>
<td>M Uheba</td>
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<tr>
<td>Dr M Johnson</td>
<td>Western Sussex Hospitals NHS Trust</td>
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<tr>
<td>Mr Baig</td>
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<tr>
<td>Mr McFall</td>
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<tr>
<td>Lucas Maischne</td>
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<tr>
<td>Dr H Anderson</td>
<td>Eastbourne District General Hospital</td>
</tr>
<tr>
<td>Mr Aldridge</td>
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<tr>
<td>Dr N Barlow</td>
<td></td>
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<tr>
<td>Dr M Faris</td>
<td></td>
</tr>
<tr>
<td>Dr J Rademaker</td>
<td>Conquest Hospital</td>
</tr>
<tr>
<td>Cover provided by EDGH as</td>
<td></td>
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<tr>
<td>required</td>
<td></td>
</tr>
<tr>
<td>Dr M Faris</td>
<td></td>
</tr>
</tbody>
</table>

Stenting is mainly managed within normal working hours. 24 hour cover is the gold standard to be aimed for.
8. Chemical Therapy

Chemotherapy Treatment Algorithms
(1C-124d)

SCN Approved Chemotherapy Regimes
A list of the acceptable chemotherapy treatment algorithms agreed by the group can be found at: http://www.sussexcancer.nhs.uk/professionals/agreed-scn-guidelines/chemistry/agreed-chemistry-algorithms/

9. Follow-Up Guidelines

Patients treated by a curative resection for a colorectal cancer should be offered follow up in specialist clinics

An intensive follow up regime may include the following:

- CEA should be undertaken at 6 monthly intervals for 3 years and then annually.
- CT scanning should be performed at 6 months after completion of definitive treatment then annually for 3 years. In patients requiring chemotherapy this should be undertaken at 6 months after completion of chemotherapy otherwise 6 months after definitive surgery. (Chest and abdomen extended to pelvis for patients with rectal cancer). CT at the end of chemotherapy treatment will count as the first regular surveillance CT (see 1.4.1.2)
- Colonoscopy as soon as practical within 12 months after diagnosis if patient has not had a definitive treatment, to ensure there is a “clean colon”, then five yearly afterwards.

A follow-up should be instigated following discussion with the named consultant responsible for the patient and the MDT based upon patient fitness and extent of disease. We would recommend MDTs work to formalise the follow-up of these patients.

Follow-up after apparently curative resection
1.4.1.1 Offer follow-up to all patients with primary colorectal cancer undergoing treatment with curative intent. Start follow-up at a clinic visit 4–6 weeks after potentially curative treatment.
1.4.1.2 Offer patients regular surveillance with:
- a minimum of two CTs of the chest, abdomen, and pelvis in the first 3 years and
- regular serum carcinoembryonic antigen tests (at least every 6 months in the first 3 years).
1.4.1.3 Offer a surveillance colonoscopy at 1 year after initial treatment. If this investigation is normal consider further colonoscopic follow-up after 5 years, and thereafter as determined by cancer networks. The timing of surveillance for patients with subsequent adenomas should be determined by the risk status of the adenoma.
1.4.1.4 Start reinvestigation if there is any clinical, radiological or biochemical suspicion of recurrent disease.
1.4.1.5 Stop regular follow-up:
- when the patient and the healthcare professional have discussed and agreed that the likely benefits no longer outweigh the risks of further tests or when the patient cannot tolerate further treatments.

9.1 Anal cancer follow up
See section 7.2

9.2 Early rectal cancer follow up
See section 7.3

9.3 Liver metastases follow up
See section 7.5
10. Supportive and Palliative Care

In addition to the Colorectal NICE Improving Outcomes Guidance, all MDTs should have implemented the following Supportive and Palliative Care NICE Guidance recommendations:

- **Assessment**: A unified approach to patient and carer assessment should have been agreed across the SCN. There should be documented structured assessments at key points in the patient's journey. Implementation of the SCN Palliative Care and Partnership Group's Holistic Assessment Guidelines.

- **Co-ordination of Care**: Implementation of the SCN Palliative Care Group Co-ordination of Care Guidelines including the nomination of a key worker for all patients.

- **Patient/carer involvement**: Mechanisms should be established to enable the views of people with cancer and their carers to influence the development, delivery and evaluation of cancer services. Systematic review of patient experience (SCN Patient Experience Survey), review of those issues by the MDT and implementation of any actions arising.

- **Communication**: Those who must communicate particularly complex or distressing information should have enhanced skills and have applied for or completed Advanced Communication Skills training. The outcome of significant consultations should be recorded in the patient’s notes, with the patient being offered a permanent record of important points. All MDT members have read and are implementing the SCN Breaking Bad News Guidelines.

**Information**:

A comprehensive range of high quality information materials, including an up-to-date directory of cancer services, is offered to all patients and carers. The national patient information pathways and prescriptions are available and the SCN Lung Tumour Group will review and access the national pathways and review and update the supplementary local patient information that is offered.

- **Psychological Support**: Assessment, support and appropriate referral to specialist psychological and psychiatric support services.

- **Social Support**: Assessment, support and appropriate referral to social support should be made.

- **Palliative Care**: Implementation of the SCN Guidelines on Specialist Palliative Care Referral, symptom control and End of Life. Implementation of ‘Care of Dying’ guidelines, such as the Liverpool Care Pathway. 7-day-a-week access to Specialist Palliative Care assessment. Preferred place of death is elicited and pro-active mechanisms put in place to achieve that preference, if possible.

- **Rehabilitation**: All patients should have access to a full range (levels 1-4) of rehabilitation services as described in the rehabilitation pathways. The rehabilitation needs of patients should be assessed at key points in the patient pathway from pre-diagnosis to end of life care, using an assessment tool agreed. The national rehabilitation pathway for colorectal cancer and the main symptoms are available at http://www.ncat.nhs.uk/our-work/living-beyond-cancer/cancer-rehabilitation# See Appendix 3 for more information on the pathway.

- **Complementary Therapy**: Patients should be offered information about Complementary Therapy services available on NHS premises. The Cancer Action Group must be made aware of complementary therapies provided or endorsed/cited in the patient information of the MDT, chemotherapy or radiotherapy information so they can ensure they comply with the SCN Complementary Therapy Criteria.

- **Bereavement**: Referral to and access to a 3-level bereavement service, including specialist bereavement help and support, if required service, including specialist bereavement help and support, if required

The online [SCN Cancer Services Directory](http://www.ncat.nhs.uk/our-work/living-beyond-cancer/cancer-rehabilitation) provides information on local hospital, community and hospice services.
11. References

Pathology

- Minimum dataset for colorectal cancer reports. RCPath 1988
- WHO classification of tumours. Pathology and genetics of tumours of the digestive system (2000)
- NICE guidance on cancer services: improving outcomes in colorectal cancer 2004

Early rectal cancer


Documents taken into consideration in the drafting of these guidelines:

- Improving outcomes in colorectal cancers: manual update, 2004
- Revised colorectal peer review quality measures, 2010
- Guidelines for the management of colorectal cancer, Association of coloproctology, 2007
- NICE Improving Supportive & Palliative Care for adults with cancer, 2004
12. Appendices

Appendix 1

Management of local disease

1.2.1 Preoperative management of the primary tumour

For the purposes of this guideline we have defined three different risk groups of patients with rectal cancer, according to the risk of local recurrence. These groups are defined in table 1.

<table>
<thead>
<tr>
<th>Risk of local recurrence</th>
<th>Characteristics of rectal tumours predicted by MRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>• A threatened (&lt; 1 mm) or breached resection margin or</td>
</tr>
<tr>
<td></td>
<td>• Low tumours encroaching onto the inter-sphincteric plane or withlevator involvement</td>
</tr>
<tr>
<td>Moderate</td>
<td>• Any cT3b or greater, in which the potential surgical margin is not threatened or</td>
</tr>
<tr>
<td></td>
<td>• Any suspicious lymph node not threatening the surgical resection margin or</td>
</tr>
<tr>
<td></td>
<td>• The presence of extramural vascular invasion[1]</td>
</tr>
<tr>
<td>Low</td>
<td>• cT1 or cT2 or cT3a and</td>
</tr>
<tr>
<td></td>
<td>• No lymph node involvement</td>
</tr>
</tbody>
</table>

[1] This feature is also associated with high risk of systemic recurrence.

Patients whose primary rectal tumour appears resectable at presentation

1.2.1.1 Discuss the risk of local recurrence, short-term and long-term morbidity and late effects with the patient after discussion in the multidisciplinary team (MDT).
1.2.1.2 Do not offer short-course preoperative radiotherapy (SCPRT) or chemoradiotherapy to patients with low-risk operable rectal cancer (see table 1 for risk groups), unless as part of a clinical trial.
1.2.1.3 Consider SCPRT then immediate surgery for patients with moderate-risk operable rectal cancer (see table 1 for risk groups). Consider preoperative chemoradiotherapy with an interval to allow tumour response and shrinkage before surgery for patients with tumours that are borderline between moderate and high risk.
1.2.1.4 Offer preoperative chemoradiotherapy with an interval before surgery to allow tumour response and shrinkage (rather than SCPRT), to patients with high-risk locally advanced rectal cancer (see table 1 for risk groups).

Patients whose primary colon or rectal tumour appears unresectable or borderline resectable

1.2.1.5 Discuss the risk of local recurrence and late toxicity with patients with rectal cancer after discussion in the MDT.
1.2.1.6 Offer preoperative chemoradiotherapy with an interval before surgery, to allow tumour response and shrinkage, to patients with high-risk locally advanced rectal cancer.
1.2.1.7 Do not offer preoperative chemoradiotherapy solely to facilitate sphincter-sparing surgery to patients with rectal cancer.
1.2.1.8 Do not routinely offer preoperative chemotherapy alone for patients with locally advanced colon or rectal cancer unless as part of a clinical trial.

1.2.2 Colonic stents in acute large bowel obstruction
1.2.2.1 If considering the use of a colonic stent in patients presenting with acute large bowel obstruction, offer CT of the chest, abdomen and pelvis to confirm the diagnosis of mechanical obstruction, and to determine whether the patient has metastatic disease or colonic perforation.

1.2.2.2 Do not use contrast enema studies as the only imaging modality in patients presenting with acute large bowel obstruction.

1.2.2.3 A consultant colorectal surgeon should consider inserting a colonic stent in patients presenting with acute large bowel obstruction. They should do this together with an endoscopist or a radiologist (or both) who is experienced in using colonic stents.

1.2.2.4 Resuscitate patients with acute large bowel obstruction, then consider placing a self-expanding metallic stent to initially manage a left-sided complete or near-complete colonic obstruction.

1.2.2.5 Do not place self-expanding metallic stents:
• in low rectal lesions or
• to relieve right-sided colonic obstruction or
• if there is clinical or radiological evidence of colonic perforation or peritonitis.

1.2.2.6 Do not dilate the tumour before inserting the self-expanding metallic stent.

1.2.2.7 Only a healthcare professional experienced in placing colonic stents who has access to fluoroscopic equipment and trained support staff should insert colonic stents.

1.2.2.8 If a self-expanding metallic stent is suitable (see recommendations 1.2.2.1–1.2.2.7) attempt insertion urgently and no longer than 24 hours after patients present with colonic obstruction.

1.2.3 Stage I colorectal cancer

1.2.3.1 The colorectal MDT should consider further treatment for patients with locally excised, pathologically confirmed stage I cancer, taking into account pathological characteristics of the lesion, imaging results and previous treatments.

1.2.3.2 Offer further treatment to patients whose tumour had involved resection margins (less than 1 mm).

1.2.3.3 Discuss the risks and benefits of all treatment options with the patient after discussion in the MDT.

1.2.3.4 An early rectal cancer MDT[2] should decide which treatment to offer to patients with stage I rectal cancer, taking into account previous treatments, such as radiotherapy.

Criteria and Referral Guidelines on Laparoscopic Colorectal Cancer Surgery

(1C-123d)

1.2.4 Laparoscopic surgery

The recommendations in this section are from Laparoscopic surgery for colorectal cancer (NICE technology appraisal guidance 105).

1.2.4.1 Laparoscopic (including laparoscopically assisted) resection is recommended as an alternative to open resection for individuals with colorectal cancer in whom both laparoscopic and open surgery are considered suitable.

1.2.4.2 Laparoscopic colorectal surgery should be performed only by surgeons who have completed appropriate training in the technique and who perform this procedure often enough to maintain competence. The exact criteria to be used should be determined by the relevant national professional bodies. Cancer networks and constituent trusts should ensure that any local laparoscopic colorectal surgical practice meets these criteria as part of their clinical governance arrangements.

1.2.4.3 The decision about which of the procedures (open or laparoscopic) is undertaken should be made after informed discussion between the patient and the surgeon. In particular, they should consider:
• the suitability of the lesion for laparoscopic resection
• the risks and benefits of the two procedures
• the experience of the surgeon in both procedures.

1.2.5 Adjuvant chemotherapy in rectal cancer

1.2.5.1 Assess pathological staging after surgery, before deciding whether to offer adjuvant chemotherapy.

1.2.5.2 Consider adjuvant chemotherapy for patients with high-risk stage II and all stage III rectal cancer to reduce the risk of local and systemic recurrence.
1.2.6 Adjuvant chemotherapy for high-risk stage II colon cancer
1.2.6.1 Consider adjuvant chemotherapy after surgery for patients with high-risk stage II colon cancer. Fully discuss the risks and benefits with the patient.

1.2.7 Adjuvant chemotherapy for stage III colon cancer
The recommendations in this section are from Capecitabine and oxaliplatin in the adjuvant treatment of stage III (Dukes’ C) colon cancer (NICE technology appraisal guidance 100).
1.2.7.1 The following are recommended as options for the adjuvant treatment of patients with stage III (Dukes’ C) colon cancer following surgery for the condition:
• capecitabine as monotherapy
• oxaliplatin in combination with 5-fluorouracil and folinic acid.
1.2.7.2 The choice of adjuvant treatment should be made jointly by the individual and the clinicians responsible for treatment. The decision should be made after an informed discussion between the clinicians and the patient; this discussion should take into account contraindications and the side-effect profile of the agent(s) and the method of administration as well as the clinical condition and preferences of the individual.
Appendix 2

Management of metastatic disease

1.3.1 Patients presenting with stage IV colorectal cancer
1.3.1.1 Prioritise treatment to control symptoms if at any point the patient has symptoms from the primary tumour.
1.3.1.2 If both primary and metastatic tumours are considered resectable, anatomical sitespecific MDTs should consider initial systemic treatment followed by surgery, after full discussion with the patient. The decision on whether the operations are done at the same time or separately should be made by the site-specialist MDTs in consultation with the patient.

1.3.2 Imaging hepatic metastases
1.3.2.1 If the CT scan shows metastatic disease only in the liver and the patient has no contraindications to further treatment, a specialist hepatobiliary MDT should decide if further imaging to confirm surgery is suitable for the patient – or potentially suitable after further treatment – is needed.

1.3.3 Imaging extra-hepatic metastases
1.3.3.1 Offer contrast-enhanced CT of the chest, abdomen and pelvis to patients being assessed for metastatic colorectal cancer.
1.3.3.2 If intracranial disease is suspected, offer contrast-enhanced MRI of the brain. Do not offer imaging of the head, neck and limbs unless involvement of these sites is suspected clinically.
1.3.3.3 Discuss all imaging with the patient following review by the appropriate anatomical sitespecific MDT.
1.3.3.4 If the CT scan shows the patient may have extra-hepatic metastases that could be amenable to further radical surgery, an anatomical site-specific MDT should decide whether a positron emission tomography-CT (PET-CT) scan of the whole body is appropriate.
1.3.3.5 If contrast-enhanced CT suggests disease in the pelvis, offer an MRI of the pelvis and discuss in the colorectal cancer MDT.
1.3.3.6 If the diagnosis of extra-hepatic recurrence remains uncertain, keep the patient under clinical review and offer repeat imaging at intervals agreed between the healthcare professional and the patient.

1.3.4 Chemotherapy for advanced and metastatic colorectal cancer

Oxaliplatin and irinotecan in combination with fluoropyrimidines
1.3.4.1 When offering multiple chemotherapy drugs to patients with advanced and metastatic colorectal cancer, consider one of the following sequences of chemotherapy unless they are contraindicated:
• FOLFOX (folinic acid plus fluorouracil plus oxaliplatin) as first-line treatment then single agent irinotecan as second-line treatment or
• FOLFOX as first-line treatment then FOLFIRI (folinic acid plus fluorouracil plus irinotecan[3]) as second-line treatment or
• XELOX (capecitabine plus oxaliplatin) as first-line treatment then FOLFIRI (folinic acid plus fluorouracil plus irinotecan) as second-line treatment.
1.3.4.2 Decide which combination and sequence of chemotherapy to use after full discussion of the side effects and the patient's preferences.

Raltitrexed
1.3.4.3 Consider raltitrexed only for patients with advanced colorectal cancer who are intolerant to 5-fluorouracil and folinic acid, or for whom these drugs are not suitable (for example, patients who develop cardiotoxicity). Fully discuss the risks and benefits of raltitrexed with the patient.
1.3.4.4 Prospectively collect data on quality of life, toxicity, response rate, progression-free survival, and overall survival for all patients taking raltitrexed.

Capecitabine and tegafur with uracil

The recommendations in this section are from Guidance on the use of capecitabine and tegafur with uracil for metastatic colorectal cancer (NICE technology appraisal guidance 61).
1.3.4.5 Oral therapy with either capecitabine or tegafur with uracil (in combination with folinic acid) is recommended as an option for the first-line treatment of metastatic colorectal cancer.
Sussex Cancer Network – Collated Clinical Colorectal Guidelines

1.3.4.6 The choice of regimen (intravenous 5-fluouracil and folinic acid or one of the oral therapies) should be made jointly by the individual and the clinician(s) responsible for treatment. The decision should be made after an informed discussion between the clinician(s) and the patient; this discussion should take into account contraindications and the side-effect profile of the agents as well as the clinical condition and preferences of the individual.

1.3.4.7 The use of capecitabine or tegafur with uracil to treat metastatic colorectal cancer should be supervised by oncologists who specialise in colorectal cancer. Biological agents in metastatic colorectal cancer

Refer to Bevacizumab in combination with oxaliplatin and either 5FU or capecitabine for the treatment of metastatic colorectal cancer (NICE technology appraisal guidance 212).

Refer to Cetuximab for the first-line treatment of metastatic colorectal cancer (NICE technology appraisal guidance 176).

Refer to Cetuximab for the treatment of metastatic colorectal cancer following failure of oxaliplatin-containing chemotherapy (terminated appraisal) (NICE technology appraisal 150).

Refer to Bevacizumab and cetuximab for the treatment of metastatic colorectal cancer (NICE technology appraisal guidance 118).
Appendix 3

INTRODUCTION TO REHABILITATION CANCER CARE PATHWAYS
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Cancer rehabilitation attempts to maximise patients’ ability to function, to promote their independence and to help them to adapt to their condition. It offers a major route to improving their quality of life, no matter how long or short the timescale. Rehabilitation aims to improve quality of life, maximise dignity and reduce the extent to which cancer interferes with an individual’s physical, psychological, social and economic functioning.1

The 4 stages of cancer rehabilitation demonstrate how rehabilitation is integral to patient centred care: 2

1. **Preventative**: reducing the impact of expected disabilities and providing assistance in learning to cope with any disabilities
2. **Restorative**: returning the patient to pre-illness level without disability
3. **Supportive**: in the presence of persistent disease and continual need for treatment, goal is to limit functional loss and provide support
4. **Palliative**: in the event of further loss of function, put in place measures which eliminate or reduce complications and provide support (symptom management).

Benefits of effective and timely rehabilitation interventions:

- prevent or reduce problems, to improve quality of survival
- increase patients’ independence and promote self management resulting in reduced need for health and social input
- have major psychological, social and spiritual benefits

Rehabilitation services are provided by a range of health care professionals known as Allied Health Professionals (AHPs). The 5 key professional groups which are known to provide specialist rehabilitation expertise in cancer care are:

- Dietitians
- Lymphoedema Therapists
- Occupational Therapists
- Physiotherapists
- Speech and Language Therapists

Each AHP group has unique skills. Whilst much of their input is provided by generalist AHP staff, many patients will require input from AHPs with specialist knowledge, skills and experience in cancer care at different stages of their cancer journey.

Rehabilitation is not solely the responsibility of professionals with specialist rehabilitation expertise. All health and social care professionals can play a part in rehabilitation as patients may benefit from efforts to promote their well-being whatever their stage of illness and wherever care is being provided. Patients can also play a central role in their own rehabilitation, and many take an active role through self-management.


References


2. Rehabilitation in Cancer Care (2008) Edited by Jane Rankin, Karen Robb, Nicola Murtagh, Jill Cooper and Sian Lewis. Wiley-Blackwell