Background information

RED FLAG!
Bleeding, obstruction, perforation, or peritonitis

Refer as emergency for investigations and specialist management
Admit

Go to colorectal cancer - emergency

Information resources for patients and carers

Information on colorectal cancer

Updates to this care map

Colorectal cancer - clinical presentation

History

Examination, including rectal examination

Full blood count, coeliac screen if anaemic (tissue transglutaminase test)

Consider differential diagnoses

Low risk features

Consider urgent referral - 2 week wait

Refer urgently - 2 week wait

Refer urgently (2 week wait) for investigation and specialist assessment

Investigations or colonoscopy

Go to colorectal cancer - management

Watch and wait

Anticipate all investigations to be complete within 31 days to enable treatment planning

Note: this care map is currently under local review within Derbyshire

Treatment to start within 31 days of decision to treat being made (62 days total)

Follow-up and review

RED FLAG!
Symptoms change or develop

Consider routine referral to a colorectal specialist if symptoms persist

Clinical assessment

Routine referral to colorectal specialist

Go to colorectal cancer - management

This care map was published by . A printed version of this document is not controlled so may not be up-to-date with the latest clinical information.
1 Background information

Quick info:
Scope:
• presentation, investigation, staging, and management (including surgical and adjuvant chemo- and radiotherapy) of colorectal cancer, in adults and the elderly
• primary and secondary care settings
Out of scope:
• screening and detection
• end of life care (see 'End of life care in adults' care map)
• management of Familial Adenomatous Polyposis (FAP), Hereditary Nonpolyposis Colon Cancer (HNPCC)
• previous cancer
• anal cancer
Definition:
• most cases of colorectal cancer evolve from polyps (outgrowths of the bowel wall)
• a malignant polyp is defined as cancer if it invades the muscularis mucosae and penetrates the submucosa
Incidence and prevalence:
• in the UK:
  • colorectal cancer is the third most common cause of cancer related deaths [1]
  • approximately 100 new cases of colorectal cancer are diagnosed each day [1]
  • 5 year survival rates are approximately 45% [2]
  • 50-60% of patients diagnosed with colorectal cancer will develop metastases [3]
Preventative factors:
• pharmacological interventions:
  • studies have indicated a protective role of the following drugs in the development of colorectal cancer:
    • non-steroidal anti-inflammatory drugs (NSAIDs), eg aspirin
    • cyclo-oxygenase-2 inhibitors
  • NSAIDs and cyclo-oxygenase-2 inhibitors are associated with cardiovascular events and gastrointestinal (GI) harm
  • long-term follow-up studies are required to establish the effects of less frequent doses and lower doses of such interventions
• hormone replacement therapy (HRT) – benefits should be balanced against the possible risk of breast cancer, stroke, and pulmonary embolism (PE)
Risk factors:
• increasing age
• hereditary disease
• high intake of processed meat and red meat
• low intake of vegetables
• smoking
• obesity (especially men)
• low levels of physical activity
• alcohol consumption
• male population
• history of inflammatory bowel disease (IBD)
References:
2 Information resources for patients and carers

Quick info:
The following resources have been produced by organisations certified by The Information Standard:

- ‘Bowel cancer’ (URL) from Bupa at http://www.bupa.co.uk
- ‘Bowel cancer (colorectal cancer)’ (URL) from Cancer Research UK at http://www.cancerresearchuk.org/
- ‘Colon cancer’ (URL) from Macmillan Cancer Support at http://www.macmillan.org.uk
- ‘Colorectal cancer’ (URL) from Datapharm at http://www.medguides.medicines.org.uk
- ‘Colon cancer’ (URL) from Datapharm at http://www.medguides.medicines.org.uk
- ‘Rectal cancer’ (URL) from Datapharm at http://www.medguides.medicines.org.uk
- ‘Hereditary non-polyposis colorectal cancer (HNPCC)’ (URL) from Macmillan Cancer Support at http://www.macmillan.org.uk
- ‘Colorectal (bowel) cancer’ (PDF) from Patient UK at http://www.patient.co.uk
- ‘Healthcare services for bowel (colorectal) cancer: Understanding NICE guidelines – information for the public’ (PDF) from National Institute for Health and Clinical Excellence (NICE) at http://www.nice.org.uk

Information for carers and people with disabilities is available at:

- ‘Caring for someone’ (URL) from Directgov at http://www.direct.gov.uk
- ‘Disabled people’ (URL) from Directgov at http://www.direct.gov.uk

Explanations of clinical laboratory tests used in diagnosis and treatment are available at ‘Understanding Your Tests’ (URL) from Lab Tests Online-UK at http://www.labtestsonline.org.uk

NB: This information appears on each page of this care map.

3 Updates to this care map

Quick info:
Date of publication: 17-June-2011

This care map was created in line with the following references:

5 Note: this care map is currently under local review within Derbyshire

Quick info:
For further information, please contact Anne Hayes, NHS Derbyshire County Public Health Specialist

6 Colorectal cancer - clinical presentation

Quick info:
Most patients with colorectal cancer will present with:
- rectal bleeding (with or separate from the faeces)
- changes in bowel habit, such as:
  - increased frequency of defaecation
  - looser stools
- non-specific symptoms, ie tiredness due to undetected blood loss
- abdominal pain
Other presenting complaints include:
- feeling of bloatedness
• weight loss
• malaise or mucus in the faeces

Patients with cancers proximal to the sigmoid colon may present with:
• intestinal obstruction
• iron deficiency anaemia (haemoglobin less than 10g/100mL in postmenopausal women)
• abdominal mass

This information was drawn from the following references:

8 History

Quick info:

Ask patient about history of:
• risk factors, eg inflammatory bowel disease (IBD)
• rectal bleeding
• changes in bowel habit
• rectal mass
• abdominal mass
• positive family history of colorectal cancer

This information was drawn from the following reference:

9 Examination, including rectal examination

Quick info:

Examination should include:
• assessment of the presence of a palpable rectal mass (if there is uncertainty regarding the mass, the patient should be re-examined after treatment with laxatives)
• digital rectal examination (DRE), if the patient:
  • is age 40 years or older
  • has persistent symptoms
  • has symptoms suspicious of colorectal cancer
• palpation for abdominal mass
• vaginal examination

Assess patient for:
• weight loss and anorexia
• signs of cachexia
• anaemia
• abdominal distension
• palpable lymph nodes
• signs of obstruction or acute abdomen

This information was drawn from the following references:
11 Consider differential diagnoses

Quick info:
Differential diagnoses include:
- inflammatory bowel disease (IBD):
  - Crohn's disease (see 'Crohn's disease' care map)
  - ulcerative colitis (UC; 'Ulcerative colitis' care map)
- irritable bowel syndrome (IBS; must not have bleeding; see 'Irritable bowel syndrome' care map)
- haemorrhoids (see 'Haemorrhoids' care map)
- benign polyps
- non-pathological constipation or faecal incontinence
- infective colitis
- coeliac disease (see 'Coeliac disease' care map)
- medication related, eg erythromycin use
- anal cancer

This information was drawn from the following references:

12 RED FLAG! Bleeding, obstruction, perforation, or peritonitis

Quick info:
An emergency referral should be made if there is evidence of [1]:
- obstruction:
  - distension
  - vomiting
  - high pitched bowel sounds
- evidence of acute bleeding
- evidence of perforation
- peritonitis

An urgent referral should be made in [1]:
- patients age 40 years or older with rectal bleeding and a change in bowel habits persisting for 6 weeks or more
- patients age 60 years or older with rectal bleeding persisting for 6 weeks or more
- patients age 60 years or older with a change in bowel habits with or without rectal bleeding persisting for 6 weeks or more
- patients with a right lower abdominal mass [2] suggestive of large bowel involvement
- patients with a palpable intraluminal rectal mass [2]
- men with unexplained iron deficiency anaemia and a haemoglobin of 11g per 100mL or less
- non-menstruating women with unexplained iron deficiency anaemia and a haemoglobin of 11g per 100mL or less [2]
- patients with faecal incontinence and passing mucus

References:
13 Low risk features

Quick info:
Features indicating a low risk of colorectal cancer include:
- rectal bleeding with anal symptoms [1,2]
- rectal bleeding with an external visible cause, such as [1]:
  - prolapsed piles
  - rectal prolapse
  - anal fissures
- change in bowel habit (decreased frequency of defaecation and harder stools) for less than 6 weeks [1,2]
- abdominal pain without iron deficiency anaemia or palpable abdominal mass [1]
- abdominal pain without evidence of intestinal obstruction [2]

GP or practice nurse should discuss how to reduce the risk of developing colorectal cancer by offering lifestyle guidance, such as [1]:
- encouraging the patient to give up smoking
- encouraging regular exercise
- encouraging weight loss
- dietary advice (eg reducing intake of processed meat and increasing intake of vegetables)

References:

14 Consider urgent referral - 2 week wait

Quick info:
Consider urgent referral (2 week wait) for patients with persistent low-risk features if there are worrying factors, such as [1]:
- positive family history
- a positive faecal occult blood (FOB) test

Reference:

15 Follow-up and review

Quick info:
Advise should be given on appropriate diet and maintaining adequate fluid intake [13].

Reference:
[13] Contributors to the international care map, invited by Map of Medicine (MoM); 2010.

17 Refer urgently - 2 week wait

Quick info:
An urgent referral (2 week wait) should be made for [1]:
- patients age 40 years or older with rectal bleeding and a change in bowel habits persisting for 6 weeks or more
- patients age 60 years or older with rectal bleeding persisting for 6 weeks or more
• patients age 60 years or older with a change in bowel habits with or without rectal bleeding persisting for 6 weeks or more
• patients with a right lower abdominal mass [2] suggestive of large bowel involvement
• patients with a palpable intraluminal rectal mass [2]
• men with unexplained iron deficiency anaemia and a haemoglobin of 11g per 100mL or less
• non-menstruating women with unexplained iron deficiency anaemia and a haemoglobin of 11g per 100mL or less [2]
• patients with faecal incontinence and passing mucus

References:

19 Consider routine referral to a colorectal specialist if symptoms persist

Quick info:
Review patient and if symptoms persist, consider non-urgent referral for further assessment [13].
Reference:
[13] Contributors to the international care map, invited by Map of Medicine (MoM); 2010.

21 Admit

Quick info:
Emergency presentation includes evidence of [1]:
• obstruction:
  • distension
  • vomiting
  • high pitched bowel sounds on auscultation
• evidence of acute bleeding
• evidence of perforation
• peritonitis
Reference:

24 Investigations or colonoscopy

Quick info:
Consider the following investigations for suspected colorectal cancer (type of examination may vary depending on availability and expertise):
• flexible or rigid sigmoidoscopy and colonoscopy [4,10]:
  • permits biopsy and histopathological assessment [1,2]
  • polyps can be removed [1,2,10]
  • rigid sigmoidoscopy can be used to assess the distance of the tumour from the anal verge [14]
• CT colonography [1,2,4,10]:
  • should replace barium enema, if an experienced radiologist and facilities are available [2]
  • if abnormal findings are revealed the patient may require colonoscopy [2]
• CT pneumocolon [10]:
  • can be used to stage malignant disease
  • useful in frail, elderly patients
Colorectal cancer - suspected
Derbyshire local pathways > Oncology > Colorectal cancer

- high quality double contrast barium enema [2,4]:
  - is a less sensitive diagnostic tool [2]
  - does not permit biopsy or polyp removal [2]
- confirm iron deficiency anaemia by:
  - hypochromic, microcytic anaemia [23]
  - low iron saturation [4]
- magnetic resonance (MR) colonography – experimental approach that is currently being evaluated [4]

Confirm colon cancer by histology, unless [1]:
- lesion has been detected by:
  - high quality double contrast barium enema; or
  - CT colonography
- and patient is iron-deficient and colonoscopy is not possible [23]

Confirm histology if [1]:
- rectal cancer surgery may result in a permanent stoma or ultra-low anterior resection
- preoperative radiotherapy is being considered [14]

References:

25 Watch and wait

Quick info:
Adopt a watch and wait approach if [2]:
- cancer and significant polyps are not detected by sigmoidoscopy; and
- there are no signs of right-sided disease

Decisions on performing further investigations should be made by the specialist and patient [2].

Reference:
Colorectal cancer
Oncology / Oncology

Provenance certificate

Overview

This document describes the provenance of the Derbyshire Health Community Colorectal cancer care map.

This care map has been localised by Derbyshire Health Community, under the lead of Anne Hayes, NHS Derbyshire County Public Health Specialist. The care map has been reviewed by Derbyshire stakeholders and has been approved by relevant members of the Health Community-wide Clinical Effectiveness and Guideline Group (CEGG).

Published: 17th June 2011
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Editorial methodology

The Map of Medicine Editorial Team have undertaken the localisation editing of the care map. The text is based on the Map of Medicine international care map, which was created in line with the Map of Medicine editorial methodology.