

Colorectal cancer case study

The Royal Marsden's GP Education Programme
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Case 1:



Life depends on it

Case history

- 29 year old male solicitor
- Not seen his GP since he was a child
- Complains of episodes of diarrhoea, faecal urgency, and feels he is 'not emptying' his bowels
- Symptoms have been present for 6 weeks



What are you thinking?

1. I need more information
2. This sounds serious
3. I need to examine him
4. Get out of my room you time waster!!



What actually happened

- Patient abdomen examined. Nothing found
- rectal examination not performed
- Given advice about irritable bowel syndrome
- Suggested he return if symptoms do not improve



One month later, patient returns

- Symptoms continue, but he now has pain on passing stool, and a single episode of rectal bleeding



What would you do next?

1. Rectal examination
2. Refer for out patient endoscopy
3. Refer on two week rule
4. Order a full blood count and review



What actually happened

- GP performed rectal examination and felt hard fixed mass 3cm from anal margin. There was blood on his figure, and the examination was very painful
- Patient was referred urgently on the two week rule



Discussion points

Symptoms in a young man never previously attended GP, present for 6 weeks, should that ring alarm bells?

Should symptom of faecal urgency prompt a DRE?



The diagnosis is likely to be?

1. Squamous cell carcinoma of anus
2. Adeno carcinoma of rectum
3. Rectal abscess
4. Something rare and odd

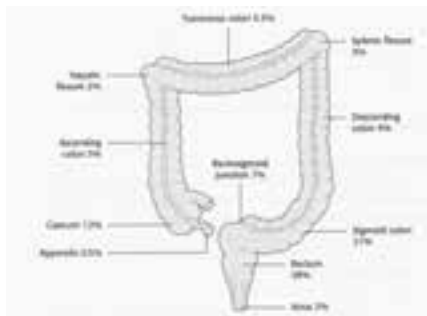


What proportion of colorectal cancers are rectal?

1. 5%
1. 20%
2. 40%
3. 60%



Distribution of Colorectal Cancers/adenomas



What proportion of rectal cancers are palpable

- 1. 10%
- 2. 30%
- 3. 60%
- 4. 90%

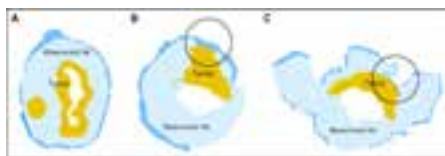


Rectal Cancer

156 de Boer et al. *Gastroenterology*

CRM

Schematic representation of the CRM; the margin is marked with black ink



Nagtegaal, I. D. et al. *J Clin Oncol*; 26:303-312 2008



Rectal cancer with threatened resection margin?

1. Treatment with chemotherapy followed by surgery
2. Treatment with 1 week of radiotherapy then surgery
3. Surgery alone
4. Combined chemotherapy and 6 weeks of radiotherapy



What happened to our patient

He was treated with chemo-radiotherapy with a very good response.

Advised he needed an APR with permanent colostomy

Had further chemotherapy with the hope of achieving a complete response

Residual disease on MRI

APR performed

Remains disease free at two years



Colorectal cancer CASE 2



Part one - Initial presentation

44 year old male accountant married with two children attends your GP surgery. He presents with a marked change in bowel habit over 1 month. He is not a frequent attendee at the practice and in fact has not been seen for 4 years. He is a non smoker and drinks approximately 25-30 units' alcohol per week.



Q1. What additional information do you want from the history of this patient?

Answer:

- Persistency of symptoms?
- PR bleeding ?
- Tenesmus ?
- Weight loss ?
- Abdominal pain ?
- Anorexia ?
- Nausea and vomiting ?
- [Recent foreign travel]?
- Family history of bowel cancer?



Q2. What examinations, if any, would you perform?

Answer:

- Abdominal examination-palpable mass or liver
- Rectal examination –palpable mass
- Systemic review ?Anaemia or jaundice



- ❖ He reports feeling more tired at work but no other symptoms and you find no other abnormalities on examination.
- ❖ He also gives a family history of colon cancer , his father had colon cancer at the age of 55 and is alive and well now.



Q3. What is the differential diagnosis?

Answer:

Colorectal cancer

Inflammatory bowel disease

Coeliac disease

Infective (if foreign travel)



Q4. What is the next step in the management plan?

Answer:

Bloods –FBC, LFTs

Refer to the 2 week rule colorectal clinic

Refer to direct access colonoscopy



Q1. What histological types of cancer are there in the bowel?

Answer:

Colon –adenocarcinoma

Rectum –adenocarcinoma

Anus –squamous cell cancer



Q2. What percentage of bowel cancers are inherited?

Answer:

Approximately 5%

HNPC

FAP



Q3. Are his children now likely to get colon cancer?

Answer:

Unlikely

❖ Based on the family history of a first degree relative from another generation

➤ Patients' tumour will be tested by IHC for MMR to exclude HNPCC



Q4. Is he likely to be cured?

Answer:

Dukes A -90% 5yr cancer free survival

Dukes B -80% 5yr cancer free survival

Dukes C -50 % 5yr cancer free survival (surgery alone)
-70% 5yr cancer free survival (+chemotherapy)



Q5. Is he definitely going to need chemotherapy?

Answer:

Dukes A – not required

Dukes B –absolute survival benefit of chemotherapy ~3.6% discuss with oncologist

Dukes C –benefit established
~15 -20% risk reduction in cancer recurrence

Recommended in all Dukes C cancer patients of adequate fitness



Q6. Will he be able to have more children after chemotherapy?

Answer:

More than likely but cant guarantee

Chemotherapy agents utilised in this setting do not commonly cause infertility

Sperm cryopreservation or ova harvesting offered to patients after discussion



Diagnosis

- Dukes C cancer distal transverse colon
- L hemicolectomy –Laparoscopic , no complications , in patient stay 3 days
- Based on pathology
- Adjuvant IV chemotherapy FOLFOX administered for 24weeks



He is still worried about the risk of colon cancer in other family members and he has a brother in Australia aged 47, whom he has not yet told about the diagnosis.



Q3. Should he call him and ask him to have a colonoscopy?

Answer:

- Refer to genetics team
 - Dependent on the family history and testing for FAP and HNPCC gene
 - Usually strong FH is :
 - 1 first degree relative below aged 45 at diagnosis
 - ≥ 2 first degree relatives

Then first colonoscopy at between 35 -45 in at risk individuals



Q4. The patient has seen the literature on aspirin, should he and his family members (the adults) take it and if so what dose?

Answer:

Can do and would suggest 75 mg aspirin providing no CI, for relatives discuss with GP

Colon cancer patients

Trials ongoing for adjuvant aspirin post surgery for colorectal cancer

Patients with family history of colon cancer

Cancer registry data suggests benefit for use of aspirin in reducing cancer specific and overall mortality

Primary Prevention

Data from vascular studies suggests benefit but confounding factors



He remains worried about recurrence now that he is not on active treatment and asks about his chances if the cancer comes back in the liver.



Q5. If this were to happen to him, would he be able to have treatment and is it ever possible to eradicate the disease at this stage?

Answer:

- Varying outcomes and prognosis in metastatic colorectal cancer based on distribution and disease burden
- For liver limited disease that is surgically resectable 5yr cancer free survival ~50-60%
- Localised treatment to liver include surgery, radiofrequency ablation (RFA), radiotherapy
- Use of targeted agents combined with chemotherapy has improved outcome in this setting



Take home messages -Symptoms /signs and risks

1. Persistency of symptoms in previously well patient
2. Possible family history of colorectal cancer
3. History of inflammatory bowel disease needs early colonoscopic evaluation
4. Always check for palpable rectal mass
5. Refer to specialist early if any alarm bells on history and examination



Question 1: localised anal cancer is treated with?

1. Chemotherapy
2. Radiotherapy
3. Surgery
4. Chemo-radiotherapy



Question 2: Rectal cancel with threatened resection margin?

1. Treatment with chemotherapy followed by surgery
2. Treatment with 1 week of radiotherapy then surgery
3. Surgery alone
4. Combined chemotherapy and 6 weeks of radiotherapy



Question 3: 5year cancer free survival for Dukes C colon cancer treated with surgery is?

- 1. 20%
- 2. 50%
- 3. 70%
- 4. 90%



Question 4: 5year cancer free survival for Dukes C colon cancer treated with surgeryand chemotherapy is?

- 1. 20%
- 2. 50%
- 3. 70%
- 4. 90%



Question 5: CyberKnife...

- 1. Is a precision surgical instrument
- 2. Is a linear accelerator mounted on a robotic arm
- 3. Can treat cancers with no side effects
- 4. Had a starring role in "The return of the Jedi"