

Referral guidelines for colorectal cancer: a threat or a challenge?

Colorectal cancer is a major cause of death in England and Wales where there are 30 000 new cases per annum with approximately 40% of patients surviving 5 years. Survival from bowel cancer in the UK is worse than the United States and Europe, perhaps because approximately one quarter of UK patients are diagnosed with incurable disease (Sharp, 1999). Large bowel cancer accounts for more hospital expenditure than any other cancer site and for between 10 and 20% of all palliative care provision (East Riding Cancer Services Alliance, 1998).

TWO WEEK RULE

In July 2000 the Department of Health is introducing a 'Two Week Rule' where:

'everyone with suspected cancer will be able to see a specialist within two weeks of their GP deciding that they need to be seen urgently and requesting an appointment'.

There is an assumption that patients with a short history will have less advanced disease when compared to patients with a longer history.

However, a number of retrospective and prospective studies do not support this concept (Baig et al, 1999a). On the basis of this assumption that early diagnosis will improve survival, it has been decreed that all patients with symptoms suggestive of colorectal cancer should be investigated urgently. If this happens, a very large number of patients will be investigated for benign colorectal disease and this demand for investigations will exceed available resources for both outpatient attendance and investigation (endoscopy and radiology).

There is a fear that, if patients are not selected carefully before referral,

this will lead to over-investigation, unnecessary worry and occasional harm to patients who do not suffer from cancer, as well as causing excessive delays in routine clinics.

At the moment, even if the resource was made available, there are not sufficient personnel with the skills, either in radiology or particularly endoscopy, to perform the necessary investigations. In addition, the increasing public awareness of the importance of large bowel cancer will result in pressure on GPs for more referrals to hospital for investigation, and there is therefore an urgent need for the definition of high-risk symptoms which merit further investigation.

SYMPTOMS AND TUMOUR SITES

The primary symptoms of colorectal cancer are:

1. Rectal bleeding
2. Change in bowel habit — most commonly increased frequency and/or looseness of stool (alternating constipation/diarrhoea is rare, as is true constipation)
3. Abdominal pain.

The systemic symptoms are:

1. Weight loss
2. Symptoms of anaemia
3. Pain from metastases.

Findings on clinical examination are:

1. Abdominal mass
2. Rectal mass
3. Signs of obstruction/perforation.

There are two important qualifications about these symptoms:

1. Rectal bleeding in association with anal symptoms is less likely to be caused by cancer than rectal bleeding alone
2. Patients with rectal bleeding and anal symptoms, who do not have a change in bowel habit or a palpable anorectal mass, have a very low

likelihood of having cancer (Department of Health, 1999).

Cancer of the left colon often presents with different symptoms to those on the right. Rectal and sigmoid carcinomas commonly present with rectal bleeding and a change in bowel habit (64%), change in bowel habit alone (21%), rectal bleeding without anal symptoms (10%), rectal mass (2%) and non-specific symptoms (3%) (Dodds et al, 1995). In contrast, nearly two-thirds of tumours proximal to the sigmoid (63%) do not present with specific bowel symptoms.

Thirty-four per cent of patients present as emergencies with either intestinal obstruction, an acute bleed, perforation or an abscess. Of the remaining 61% who have anaemia or an intra-abdominal mass, approximately half (29%) have no primary symptoms and the remainder have primary symptoms. Only 1 in 20 (5%) of these patients do not present with either iron deficiency anaemia, an abdominal mass or as an emergency.

AGE

In England and Wales, 99% of patients with large bowel cancer are aged over 40 years and 95% over 50 years (Department of Health, 1999). It is important to take age into account because there is a very large prevalence of the primary symptoms which could be the result of colorectal cancer in the community and general practice. However, it should be remembered that approximately 3000 patients under 65 years die from colorectal cancer each year (Thompson, 1999).

Only a small proportion of these younger patients are referred for further investigation. In most instances, the GP will carry out a 'wait and watch' policy to monitor the symptoms and, if in doubt, then refer the patient

for investigation. In this context, it is appropriate to stress that the time from the onset of the first symptoms to treatment of colorectal cancer has remained constant at approximately 6 months for colon cancer and 7 months for rectal cancer in different countries over many years. Approximately half of this delay occurs before the patient seeks advice from their GP or further GP referral. The shortest delay (less than 1 month) is for an outpatient appointment at the hospital. This delay will be addressed by the 2-week rule and by increased public awareness of large bowel cancer (Baig et al, 1999a).

However, very few reports have demonstrated that shorter delays in treatment actually improve survival. On the contrary, a paradoxical relationship has been well recognized. This is thought to be the result of biological predeterminism whereby slow-growing tumours produce low-grade symptoms and thereby delay diagnosis, in contrast to aggressive tumours which produce rapidly progressive and incapacitating symptoms which result in earlier referral and diagnosis. If this phenomenon is true, biological predeterminism will make it very difficult to demonstrate a beneficial effect of earlier symptomatic diagnosis.

Delay after referral to hospital has not been correlated with deterioration in stage of the disease or survival, even in those patients who waited more than 5 months (Baig et al, 1999b). However, there may be a subset of patients who benefit from earlier diagnosis who present with the characteristic symptoms of earlier disease, such as overt rectal

bleeding, which may be symptoms of low-grade tumours or large polyps.

HIGH RISK SYMPTOMS

On the basis of the limited amount of evidence available, the following guidelines for urgent referral have been chosen (Thompson, 1999).

1. Rectal bleeding and a persistent change in bowel habit for at least 6 weeks
2. Rectal bleeding persistently without anal symptoms, with no obvious external evidence of benign anal disease*
3. A persistent change in bowel habit for at least 6 weeks to looser stools and/or increased frequency of defaecation*
4. Iron deficiency anaemia, without an obvious cause, <10 g/dl postmenopausal women and <11g/dl in men
5. A definite palpable abdominal or rectal mass.

*depending on facilities available for outpatient/further investigations, there may be a qualifying age (>60 years).

In order to take up the challenge of the 2-week rule, these symptoms should be used to identify patients who are at an increased risk of malignancy, in contrast

to those at lower risk. These symptoms will need to be evaluated continuously, not only to measure their effectiveness as a means of diagnosing patients at high risk of cancer, but also to enable the best use of resources to diagnose patients who do suffer from cancer. **HM**

MK Baig/CG Marks

*Specialist Registrar/Consultant Surgeon and
Professor of Surgical Oncology
Colorectal Unit
Royal Surrey County Hospital
Guildford GU2 5XX*

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KEY POINTS

- Cancer of the colon and rectum is common in the UK, with patients doing badly.
- The 2-week rule starts from July 2000.
- High risk symptoms may lead to early diagnosis.
- Earlier diagnosis may not correlate with improved survival.
- There is an urgent need to audit the effectiveness of the 2-week rule to make the best use of the limited resources.