

questioning what the medical establishment considers its gold standard for evaluating treatment.

PAUL KNIPSCHILD
Professor of epidemiology

University of Limburg,
Department of Epidemiology,
6200 MD Maastricht,
The Netherlands

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How can doctors diagnose colorectal cancer earlier?

By increasing patients' awareness of the disease and investigating them promptly when they present

The life time risk of death from colorectal cancer in England and Wales is about 1 in 50, rising rapidly after the age of 50. With more than 17 000 deaths a year¹ colorectal cancer is the second commonest cause of death from cancer. The results of treatment remain disappointing: five year survival is less than 40% and this has not changed for 30 years.²

The prognosis of the disease is closely related to the stage of the tumour at presentation. Of those patients with Dukes's type A tumours (confined to the bowel wall), more than 90% survive long term; the figure in those with lymph node disease is 30%.² Currently, only 1 in 10 excised colorectal malignancies are Dukes's type A lesions.³ As operative mortality for elective surgery is less than 10% and adjuvant treatment has yet to make any substantial impact, earlier diagnosis offers the only hope for improved survival.

The population can be divided into groups at average and high risk of colorectal cancer. Mass population screening for faecal occult blood detects 56%-78% of asymptomatic colorectal carcinomas.^{4,6} Malignancies diagnosed in this way tend to be less advanced than cancers in an unscreened population.⁴ Uptake of screening, however, is often disappointing: in the largest British trial just over half the patients completed the screening test.⁴ To date, only one controlled trial has shown that annual screening for faecal occult blood significantly reduces mortality from colorectal cancer.⁷

If the case for mass screening has not yet been proved, who should be investigated and how? Patients with a genetic predisposition to colorectal cancer, adenomatous polyps, previous colorectal carcinoma, or ulcerative colitis affecting the whole colon for more than 10 years are all at higher risk of colorectal cancer. Between 5% and 10% of all colorectal cancers are associated with autosomal dominant conditions (such as familial adenomatous polyposis and Lynch syndromes types I and II).⁸ Family history, DNA probe analysis, dental screening, and ophthalmic testing can identify patients at risk. This approach is currently being evaluated.⁹ The establishment of a regional register for familial adenomatous polyposis in the west midlands has resulted in a significant reduction in the mean age at diagnosis in patients affected by the condition and in the incidence of colorectal cancer.¹⁰ This service should be established nationwide.

For patients with adenomatous colorectal polyps most gastroenterologists follow the recommendation of the King's Fund consensus panel.¹¹ This is to perform colonoscopy and remove symptomatic polyps larger than 5 mm, and repeating colonoscopy every three to five years. A similar policy may be justified for patients with colorectal carcinoma because of the 2-5% risk of subsequent new (metachronous) carcinoma.^{12,13} Although patients with longstanding ulcerative colitis affecting the whole colon make up a small proportion of patients who develop colorectal cancer, careful surveillance with barium enema examination or colonoscopy and biopsy

enables cancer to be diagnosed when cure is likely.¹⁴ (The cost in terms of medical resources, however, is high.)

All patients presenting to their general practitioner with gastrointestinal symptoms should have a family history taken and an abdominal and rectal examination performed. Evidence exists that these are frequently neglected in patients subsequently shown to have a colorectal cancer. Testing for occult blood is not recommended in the community for determining which symptomatic patients to refer because of its low specificity and sensitivity.^{11,15}

Nearly half of all colorectal cancers originate in the rectum and are within reach of a rigid sigmoidoscope. As few general practitioners perform sigmoidoscopy and open access barium enema examination is not generally available symptomatic patients require investigation in hospital. Open access sigmoidoscopy has been evaluated: although popular and well used, it led to only a modest improvement in the detection of early colorectal cancers.¹⁶ Sigmoidoscopy is a straightforward skill to acquire: hopefully the likelihood of payment for sigmoidoscopy will increase the estimated 10% of general practices that own and use a sigmoidoscope.

Above all, we should raise the awareness of colorectal cancer and encourage symptomatic patients to present earlier, investigating them appropriately and promptly when they do so.

IAN MACLENNAN
Consultant general surgeon
JAMES HILL
Senior registrar in surgery

Manchester Royal Infirmary,
Manchester, M13 9WL

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