

The British Journal of General Practice

The Journal of The Royal College of General Practitioners

Editor

E G Buckley, MD, FRCPE, FRCGP
Livingston

Assistant Editors

A R Bichard, DPhil
J M Bumstead, BSc

Editorial Board

R C Froggatt, FRCGP
Cheltenham

D R Hannay, MD, PhD, FRCGP, FFCM
Sheffield

M D Jewell, MRCP
Bristol

R H Jones, MA, DM, MRCP, FRCGP
Southampton

J S McCormick, FRCPI, FRCGP, FFCM
Dublin

D J Pereira Gray, OBE, MA, FRCGP
Exeter

N C Stott, FRCPE, FRCGP
Cardiff

C Waine, OBE, FRCGP
Bishop Auckland

Statistical Adviser

I T Russell, PhD, FSS
Aberdeen



Published by The Royal College of
General Practitioners, 14 Princes
Gate, London SW7 1PU.
Editorial Office: 12 Queen Street,
Edinburgh EH2 1JE.
Printed in Great Britain by
Hillprint Ltd.,
Bishop Auckland,
Co. Durham DL14 6JQ.

Consensus on prevention and treatment of colorectal cancer: implications for general practice

COLORECTAL cancer caused the death of 22 000 people in the United Kingdom in 1989. Presentation is often delayed and treatment is not very successful with a five year survival rate of 30% which has changed little over the past 20 years. Clear preventive strategies have not been developed because of uncertainties about the aetiological role of dietary factors, the natural history of the condition and the value of screening procedures. In view of the size of the problem and the controversies about causation, early detection and treatment, colorectal cancer was an appropriate topic for the seventh King's Fund forum held in June 1990. This followed the pattern of previous consensus conferences¹ with a panel of 12 people, two of whom were colorectal surgeons and the others drawn from a range of backgrounds including nursing, health psychology, general practice and health economics. The panel listened to evidence presented in public by experts in many fields and by patients and their carers. The panel was asked to address questions which covered prevention and treatment of colorectal cancer and directions for future research.

The role of diet in prevention was considered. The geographical variation in the incidence of colorectal cancer and the study of migrant groups support an environmental cause with diet being the most obvious risk factor.² The panel heard evidence from several experts in the field who reported that diets high in energy and fat content and low in fruit and vegetable fibre may be associated with increased incidence of colorectal cancer, while cereal fibre does not appear to have a protective effect. A positive association between colorectal cancer and alcohol (particularly beer) consumption has been reported.² However, many of the epidemiological studies that have been carried out are methodologically flawed.³ It was considered that there was insufficient evidence at present for the panel to recommend specific dietary changes beyond the current recommendations for healthy eating, that is, a reduction in fat content and alcohol consumption and an increase in fruit and vegetable fibre content.

There is evidence from epidemiological and clinical studies and, more recently, from molecular biology that the majority of colorectal cancers arise within pre-existing adenomas.⁴ If these could be detected and removed in asymptomatic individuals then, theoretically, the incidence and mortality of colorectal cancer could be reduced. However, autopsy studies⁵ have shown that adenomas are more prevalent than carcinomas (30% versus 2%) so a safe method of detecting them and also of assessing their malignant potential is required. Colonoscopy is the most effective method of detection but the malignant potential of an adenoma cannot be accurately judged, although the larger tumours are more likely to be malignant. In view of the fact that colonoscopy is an invasive procedure, the panel recommended that it should be reserved for the following high-risk groups: (1) Members of families known to carry the autosomal dominant conditions familial adenomatous polyposis and the two non-polyposis colorectal cancer syndromes (in one of these, the cancer family syndrome, there is also an increased risk of breast and pelvic cancers⁶). (2) First

© *British Journal of General Practice*, 1990, 40, 483-486.

degree relatives of patients with colorectal cancer — the risk rises from one in 17 for those with one relative affected to one in six for those with two first degree relatives affected. Genetic counselling is indicated for both these groups of families. A clinic providing counselling and screening for relatives of patients who developed the disease before the age of 45 years and members of families in which multiple cancers have occurred, has recently been described.⁶ It is therefore essential that a comprehensive family history is taken from all patients with colorectal cancer. General practitioners are particularly well placed to identify high risk individuals who should be referred for further assessment.

Screening of asymptomatic patients who are not in a high risk group for the presence of adenomas and/or early carcinomas is more contentious. Colonoscopy is inappropriate. Other, less invasive screening methods include regular rectal examinations, sigmoidoscopy and faecal occult blood testing. Of these, only the latter is practical but it has problems of limited specificity, sensitivity and patient compliance. It is currently being evaluated in randomized controlled trials of which the Nottingham trial is the largest.⁷ The introduction of faecal occult blood screening in the general population would have important implications for patients, practitioners and the resources of the National Health Service and the panel recommended that no decision should be made on its introduction until the results of the Nottingham study, which are expected in 1995, become available. In the absence of a satisfactory non-invasive screening method, the panel could not recommend case finding in general practice but again stressed the importance of taking a good family history.

Patients who are found to have colorectal cancer have only a 30% chance of surviving five years. One reason for this poor prognosis is that presentation is often delayed and the tumour has metastasized by the time the patient presents. Furthermore, delay in referral may influence outcome, particularly if emergency surgery is required when the patient presents. Evidence suggests that one component of the delay is failure of the general practitioner to recognize the symptoms of colorectal cancer and to carry out an adequate examination.^{8,9} The panel stressed the importance of carrying out abdominal and rectal examinations on all patients presenting with symptoms suggestive of colorectal cancer. Faecal occult blood testing was considered to be of no value in the assessment of the symptomatic patient in general practice.

Improved methods of treatment are needed to improve the five year survival rate. Surgery remains the mainstay of treatment and improved techniques have reduced the need for a permanent colostomy. There is evidence that the observed variation in the outcomes of surgery, including operative mortality and post-operative morbidity are surgeon related.¹⁰ The panel recommended that each district should have at least one specialist colorectal surgeon and that local referral and treatment protocols should be developed. The need for regular follow

up of patients was stressed so that synchronous and recurrent tumours could be diagnosed and treated at an early stage. Trials of adjuvant radiotherapy and chemotherapy are currently in progress and the panel recommended that quality of life measures should be included in all trial protocols.

The conference heard evidence from patients, their carers and support groups. The overriding theme was the need for better communication between patients and all involved in their care. This includes providing patients with information about treatment and possible outcomes so that they can make informed choices between treatment regimens.

How can general practitioners contribute, not only to the care of the individual patient but also to reducing the incidence of colorectal cancer in the population? The individual patient needs prompt diagnosis, specialist referral, regular follow up and support at all stages of the illness. Reducing the incidence of the disease in the UK is a task to which general practitioners can contribute by the identification and referral of high-risk individuals in their practice populations.

MARGARET LLOYD

Senior lecturer in general practice, Royal Free Hospital School of Medicine, London, and member of King's Fund forum consensus panel

References

1. Stocking B. First consensus development conference in United Kingdom; on coronary artery bypass grafting. *Br Med J* 1985; 291: 713-716.
2. Bingham SA. Diet and large bowel cancer. *J R Soc Med* 1990; 83: 420-421.
3. Vogel VG, McPherson RS. Dietary epidemiology of colon cancer. *New Perspectives in Large Bowel Cancer. Haematology/Oncology Clinics of North America* 1989; 3: 35-63.
4. Sangster JF. Epidemiology and natural history of cancer of the colon. *Fam Pract* 1986; 3: 192-198.
5. Williams AR, Balasooriya BAW, Day DW. Polyps and cancer of the large bowel; a necropsy study in Liverpool. *Gut* 1982; 23: 835-842.
6. Houlston RS, Murday V, Harocopos C, et al. Screening and genetic counselling for relatives of patients with colorectal cancer in a family cancer clinic. *Br Med J* 1990; 301: 366-368.
7. Hardcastle JD. The prospect for mass population screening in colorectal cancer. *Cancer Surv* 1989; 8: 123-137.
8. Holliday HW, Hardcastle JD. Delay in diagnosis and treatment of symptomatic colorectal cancer. *Lancet* 1979; 1: 309-311.
9. Dixon AR, Thornton-Holmes J, Cheetham NM. General practitioners' awareness of colorectal cancer; a 10 year review. *Br Med J* 1990; 301: 152-153.
10. Fielding LP. Surgeon-related variability in the outcome of cancer surgery. *J Clin Gastroenterol* 1988; 10: 130-132.

Note

One copy of the consensus statement is available free of charge on request from: The King's Fund Forum, King's Fund Centre, 126 Albert Street, London NW1 7NF. Tel: 071-267 6111 ext 209. Extra copies may be purchased at 40p per copy.

Market forces and USA health care: success or failure?

ANYONE who thinks we have problems with health care in the United Kingdom should look closely at the situation in the United States of America. Americans now spend \$541 billion a year on health care, just over 11% of gross national product. In 1987 the average for 17 countries in the Organization for Economic Cooperation and Development (including the

USA) was 8.4% of gross national product. The highest percentage after the USA was West Germany at 9.0%, followed by Sweden 8.9%, the Netherlands 8.5% and Canada 8.3%. National Health Service expenditure in the UK is quoted at 5.9% of gross national product.¹

Business in the USA now carries the biggest share of the