

Follow up of patients with colorectal cancer: no simple solutions

THE paper by Miles and colleagues, in this issue of the *Journal*, adds to the increasing literature trying to simplify the difficulties inherent in the follow up of patients with colorectal cancer.¹ Their data are useful but, as with similar papers,^{2,3} they tend to support Grossman's law: 'For every complicated problem there is a simple, easy to understand and wrong answer'.⁴ This may be a little harsh, but a simple solution to the problem of how to follow up patients with colorectal cancer remains illusory.

Historically, follow up of surgical patients was thought to be beneficial for the three groups of people involved: patient, consultant and general practitioner. Over the years, and more so recently, this hallowed principle has been eroded by research evidence and changes in National Health Service practice.

After surgery for colorectal cancer, a patient attends a follow-up clinic at various intervals, the frequency of attendance depending on the institution. The extent of patient review ranges from a cursory chat to an extensive investigative programme; in 1990 it was reported that in one American clinic four patient visits per year cost £1630.⁵ The purpose, for the patient, is to receive reassurance that all is well or to discover whether there is recurrent disease which may be amenable to cure or palliation. There is now a wealth of literature to show that the latter aim is a vain hope as most patients present with symptoms of recurrent disease between follow-up visits.⁶⁻⁸ The value to the patient of the reassurance received is more difficult to assess. It could be that the follow-up visit induces anxiety and distressing memories of the initial treatment. It may also lead to false reassurance if symptoms which develop between visits are ignored by the patient.⁶

The consultant reviews outpatients in order to reassure them of their progress, to ascertain if there have been any complications following initial treatment, to assess the possibility of recurrence and, finally, to review the outcome of treatment. The last task has now become complex and ranges from the inner satisfaction of a job well done to assessing outcome according to audit protocols devised by research establishments. All these good intentions of follow up are laudable and, personally, I find the satisfaction of reviewing a patient who has had a good outcome as something to boost flagging morale. However, the one serious difficulty with a follow-up protocol is that few consultants themselves review patients in follow-up clinics and therefore the ideals of follow up are devalued and even counterproductive. It is known that many outpatients complain of seeing a different doctor every time they visit a clinic. One of the increasing number of performance indicators is the 'new to review outpatient ratio'. There are data from hospital statistics which show that consultant-only clinics have a ratio of 1: 1 or less whereas with review clinics devolved to non-consultant staff the ratio is as high as 1: 5. Therefore, meaningful consultant review may be feasible.

The general practitioner expects a regular update from a specialist on the progress of his or her patient, another colleague's support if there are difficulties in patient management, and the ability to refer to an appropriate specialist if problems arise between outpatient clinic visits. As a hospital specialist, I accept that this summary may not be a full appraisal of general practitioners' views. Intuitively, general practitioners have been aware of the problems related to hospital follow up. This, in combina-

tion with two recent changes in practice — shared care and fundholding — has led to the value of hospital follow up being questioned. Shared hospital-general practitioner care has been shown to be successful for patients with asthma and diabetes.^{9,10} Shared care might also be successful for other conditions, such as follow up of patients with colorectal cancer. Fundholding practices have general practitioner-devised treatment protocols in which the necessity for follow up is assessed and, if it is considered necessary, there are stipulations about its quality.

The difficulties surrounding conventional follow up have led to many potential solutions being put forward. Carcinoembryonic antigen, as a tumour marker, has been central to several of them. Unfortunately, it has not lived up to its original expectations. Only in up to 60% of cases is there an increased carcinoembryonic antigen level before surgery which falls to a normal level thereafter.¹¹ If it then rises it will give a lead time to clinical recurrence of three to five months. However, on the evidence available, this does not produce any significant statistical or clinical improvement in cure rates or in survival in palliative treatment. The latter problem is compounded by the absence of any successful protocols for palliative therapy for this condition.¹¹ A large United Kingdom study of the value of carcinoembryonic antigen was commenced in 1985 and the results are awaited with interest.¹²

Colonoscopic surveillance has also been suggested as a useful follow-up procedure.¹ However, it is a potentially difficult and expensive examination and its value is in the diagnosis only of new polyps and metachronous (subsequent) tumours. These tend to occur in the high risk group which includes patients with genetically induced tumours. This group constitutes 20% of cases and, even now, the most appropriate periodicity of examinations is uncertain.¹³ However, the workload produced by the group of patients with genetically induced tumours and their relatives is enough to overwhelm current resources. Therefore, most authorities believe the larger percentage of patients with sporadic tumours would be inappropriate for this form of follow up.

How do we proceed from here? It is accepted that outcome audit is valuable and, some would say, essential. It will help maintain high standards in the management of patients with colorectal cancer. It may lead to better management plans as data are accumulated in the longer term. A good example is the beneficial effect of the Scottish melanoma group on the treatment of cutaneous melanoma.¹⁴ Data from this group revealed a reduction in the extent of secondary scar excision. Outcome audit may also help the purchasers decide where to place their contracts. However, this may be premature since the central collection of statistics is currently too inaccurate to be informative on anything but a general level. One only has to read the 'health warnings' accompanying the recently published clinical outcome indicators produced by the Scottish Office to realize the difficulties with this form of data.¹⁵ Even without the subtleties of case mix, selective referral patterns and so on, an easy endpoint such as death needs to be assessed over a long time to be accurate. Mortality following elective colorectal cancer resection is between 2% and 8% and this is from a population in which 70% are over the age of 65 years.¹⁶ Therefore, large numbers are required, ideally over a long time, to accrue meaningful statistics. A general practitioner may be lucky enough to complete his or

her career in general practice with only one or two patients dying following elective colorectal cancer resection. The contentious issue of the purchasers points immediately to the fact, quoted time and time again, that outcome audit must be performed or supervised by doctors.¹⁷ The Scottish melanoma group is doctor-based and works well even after 15 years, with few lapses in follow-up data.¹⁴

To conclude, outcome audit is required as part of the management of patients with colorectal cancer, and this must be doctor-based. The current outpatient follow-up system is not ideal either in the short-term or for the long-term. However, there are advantages to a limited consultant outpatient review, which may be possible, and this would help to establish the long-term programme. The gathering of information needs to be computer-based with a simple form which could be completed by the consultant, the general practitioner or even the patient if it were correctly designed. This scheme has been elegantly set down by Macintyre, discussing the broader problems of follow up.¹⁷ A proven rapid, simple solution is needed for the follow up of patients with colorectal cancer. Until such a solution is found, we in the medical profession must take on the added workload of providing good, long-term outcome audit in order that we, and our patients, can benefit from the data that will accrue from it.

JOHN M GOLLOCK

Consultant surgeon, Borders General Hospital, Melrose

References

- Miles WFA, Greig JD, Seth J, *et al.* Raised carcinoembryonic antigen level as an indicator of recurrent disease in the follow up of patients with colorectal cancer. *Br J Gen Pract* 1995; **45**: 287-288.
- Wanebo HJ, Stearns M, Schwartz MK. Use of CEA as an indicator of early recurrence and as a guide to a selected second look procedure in patients with colorectal cancer. *Ann Surg* 1978; **188**: 481-493.
- Sugarbaker PH, Gianola FJ, Dwyer A, Neuman MR. A simplified plan for follow up of patients with colorectal cancer supported by prospective studies of laboratory and radiological test results. *Surgery* 1987; **102**: 79-87.
- Partington A (ed). *Oxford dictionary of quotations*. Oxford University Press, 1992.
- Rocklin MS, Slomski CA, Watne AL. Post operative surveillance of patients with carcinoma of the colon and rectum. *Am Surg* 1990; **56**: 22-27.
- Cochrane JPS, Williams JT, Faber RG, Slack WW. Value of outpatient follow-up after curative surgery for carcinoma of the large bowel. *BMJ* 1980; 593-595.
- Kronborg O. Controversies in follow up after colorectal carcinoma. *Theor Surg* 1986; **1**: 140-146.
- Ballantyne CH, Irvin MM. Postoperative follow up for colorectal cancer: who are we kidding? [editorial]. *J Clin Gastroenterol* 1988; **10**: 359-364.
- Jones RB, Hedley AJ. Patient-held records, censoring of information by doctors. *J R Coll Physicians (Lond)* 1987; **21**: 35-38.
- van Damme R, Drummond N, Beattie J, Douglas G. Integrated care for patients with asthma: views of general practitioners. *Br J Gen Pract* 1994; **44**: 9-13.
- Bleday R, Steele G Jr. Second-look surgery for recurrent colorectal carcinoma: is it worthwhile? *Semin Surg Oncol* 1991; **7**: 171-176.
- Northover JM. Carcinoembryonic antigen and recurrent colorectal cancer. *Br J Surg* 1985; **72** suppl: 544-546.
- Gjohe E, Myren J, Johansson T, *et al.* Screening for hereditary colorectal cancer. *Scand J Gastroenterol* 1989; **24**: 1153-1158.
- Mackie R, Hunter JAA, Aitchison TC, for the Scottish melanoma group. Cutaneous malignant melanoma in Scotland 1979-1989. *Lancet* 1992; **339**: 971-975.
- Clinical Resource and Audit Group. *Clinical outcome indicators*. Edinburgh: Scottish Office, 1994.
- Gordon NLM, Dawson AA, Bennet B, *et al.* Outcome of colorectal adenocarcinoma: two seven-year studies of a population. *BMJ* 1993; **307**: 707-710.
- Macintyre IMC. Extending surgical audit: the assessment of post-operative outcome. *Br J Surg* 1989; **76**: 531-532.

Address for correspondence

Mr J M Gollock, Surgical Department, Borders General Hospital, Melrose, Roxburghshire TD6 9BS.

Changing patterns of consultation in general practice: fourth national morbidity study, 1991-1992

B RITISH general practice is a major resource for the study of morbidity in the population as barriers of access to services are minimal and coverage is almost complete. Information on the incidence and prevalence of common conditions, their secular trends and geographic and socioeconomic variation in their occurrence is of great importance in monitoring the health of the population, in determining health service policy, in measuring workload in general practice, in targeting interventions, and in allocating resources. Such information is complementary to that provided by routine mortality statistics and provides a more complete picture of the interactions between disease and health services. Information from general practice should also be of use in shaping undergraduate and postgraduate curricula for doctors and nurses, which are still dominated by diseases that interest teaching hospital doctors rather than the illnesses and other reasons that cause patients to consult in general practice.

Morbidity statistics from general practice collected in 1991-92 have been published recently.¹ Doctors and practice nurses in the

60 practices, in England and Wales, involved in the study recorded every face-to-face contact with patients who were on the practices' age-sex registers. The number of patients involved was substantial: 502 493 patients were on the practice lists for part of the year, giving 468 042 person-years of observation. The majority (83%) also had socioeconomic data recorded. Patients were representative of the general population when compared with the 1991 census. The practices were geographically diverse but tended to be larger and employed more ancillary staff; general practitioner principals were younger and more were authorized to carry out minor surgery than was typical in England and Wales. Most importantly, the practices had computer systems that permitted complete recording of morbidity. Unfortunately, such systems are used by only 34% of all practices in England and Wales. The lack of flexibility and compatibility and the low quality of many computer systems purchased for general practice has done untold damage to the ability to conduct such studies efficiently.