The role of the nurse in colorectal cancer follow up

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The follow up of patients after colorectal cancer surgery remains controversial. It may be intensive or minimal. The authors describe an intensive follow-up regimen and discuss the leading role of the colorectal specialist nurse. In the absence of evidence from randomized trials, the most persuasive arguments for routine follow up are patient support and audit.

Clinical follow up after resection for colorectal cancers remains controversial and ranges between intensive and minimal. Anecdotal evidence suggests that patients' preference is for intensive follow up but by whom and where may depend on local protocols.

Audit should be structured with particular reference to outcome measures, and should be regarded as a routine part of a consultant's work. It may be facilitated by use of a database, such as that promoted by the Association of Coloproctology*.

The number of patients receiving ambulatory care will increase in the 21st century, as will the number of older patients (Redmond and Aapro, 1997; Greater Glasgow Health Board, 1999). Kearney (1999) perceives a model of care which is mainly ambulatory developing for cancer patients. She sees cancer patients as having their care directed mainly by specialist nurse practitioners. This would occur in differing context depending on the patient's needs: preventive care, e.g. genetics/screening; secondary care, e.g. active treatment/control of side effects; and tertiary care, e.g. palliative care.

The authors' unit has performed nurse-led colorectal cancer follow up since 1996. During this time, over 300 patients have been followed up intensively. The clinic is held weekly and is protocol driven. It runs parallel to the colorectal consultant surgical clinic.

The nurse takes a full relevant history and performs a thorough physical examination, which includes abdominal examination, digital rectal examination and rigid sigmoidoscopy as per the protocol. She can request blood tests, radiology and endoscopy investigations independently.

The nurse-led follow-up clinic has approximately 8–10 patients per week. The patients have reported complete satisfaction with this service and no patient has declined nurse-led follow up and requested to see a doctor instead. However, the value of follow up is debatable and the best method is unknown (Emberton, 1995).

PREVALENCE AND INCIDENCE

Colorectal cancer is a significant health problem in the western world and is the fourth most common cancer on a worldwide scale (Boyle, 1998) and third most common cancer in the UK.

The morbidity and mortality associated with the disease is substantial, accounting for about 20 000 deaths per year in England and Wales (Office of Population, Censuses and Surveys, 1995). Although the incidence and mortality of colorectal cancer have generally been static for the past 40 years there is some evidence to suggest that the incidence of the disease is falling in both the UK and USA (Miller et al, 1992). The reasons for this are unclear but it could possibly be a result of patients being diagnosed at an earlier stage and the increased public awareness through health education programmes and screening (Miller, 1996).

REASONS FOR FOLLOW UP

By holding follow-up clinics the authors are able to detect problems or potential problems at an early stage (*Table 1*). The benefits of these clinics include:

1. Detection of problems related to the recent surgery such as stoma/wound problems or urinary and sexual difficulties after rectal surgery

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2. Detection of recurrent disease hopefully at an early stage where cure is still possible
3. Opportunity to pick up metachronous tumours by surveillance. Between 5 and 10% of patients will develop metachronous tumours (Scholefield, 2002)
4. Psychological support by patient/doctor contact and the need for this varies widely from patient to patient
5. Facilitation of audit, clinical governance and continuing professional development.

In recent years potentially curative treatment of recurrent disease has become increasingly effective. An example of this is liver resection for hepatic metastases. Clearly a better prognosis is obtained as the recurrence is smaller and hence detected early.

WHY NURSE-LED FOLLOW UP?

There are approximately 30 000 new cases of colorectal cancer per annum in England and Wales. On average each consultant surgeon sees about 50 new cases per year and has probably between 100 and 200 patients attending follow-up appointments each year. The cost of this type of follow up is uncertain but a survey in the USA showed the cost of 5 years of follow up varied from $900 to $27 000 per patient (Virgo et al, 1995). The use of NHS resources for this group of patients alone is likely to run into millions of pounds per annum.

The consultant colorectal surgeon set up this clinic because patients had expressed dissatisfaction with the service they were getting. Patients were traditionally seen in the general surgical outpatient clinic where they would be seen by the registrar or senior house officer. This meant they were often seen by a different doctor at each follow-up visit because of the doctors rotation scheme. Another advantage for patients who see the nurse practitioner is that she is not called away in the middle of consultation unlike junior doctors who may be bleeped during consultations. Patients were often kept waiting because of the sheer volume of patients in the clinic waiting to be seen. This increased the patient's already high anxiety.

TABLE 1.
Reasons for intensive follow up

Early detection of local recurrence and therefore possible treatment
Early detection of distant metastases and therefore possible treatment
Surveillance for metachronous tumours
Psychological wellbeing
Accurate audit

In our attempts to create a seamless, high quality service and with the increasing amount of nurse specialists/practitioners it was decided to make the clinic a nurse-led process. The clinic was set up parallel to the general surgical outpatient clinic; this meant that the consultant colorectal surgeon and the nurse specialist could divide their skills equally and more effectively. In addition, if a problem was detected the consultant was immediately available to institute a management plan.

Specialist nurses have an established role in the management of patients with cancer in helping them to understand their disease and treatment options, and in offering counselling and emotional support (Watson et al, 1988). In addition patients attending nurse-led follow-up clinics can be given more time with the nurse to discuss any problems or issues. This also frees the surgeon's time to be spent with new patients and training the junior medical staff, improving the efficiency of the clinic. The patient also has a direct access to contact the nurse specialist after follow up.

Nurses have taken on more extended roles in recent years. Concerns regarding the value and contribution of nursing have come more sharply into focus in the UK following the introduction of the *Scope of Professional Practice* (United Kingdom Central Council for Nursing, Midwifery and Health Visiting, 1992) and the New Deal for doctors (NHS Management Executive, 1991). The Royal College of Nursing regard nurse-led clinics as a method of reversing the current rise in patient waiting times. The government is supportive of nurse-led clinics because of their impact on patient waiting times. However, it is important that nurses who take on this advanced role do so with the primary aim of improving the quality of life for their patients rather than filling a void caused by the reduction in junior doctors hours.

THE PROCESS

Following surgical treatment of colorectal cancer patients are given an appointment in the follow-up clinic, 6 weeks after discharge from hospital. The first visit gives the patient the opportunity to discuss any problems he or she may have encountered such as wound or stoma problems. The patient is examined and routine blood tests that include full blood count, liver function tests, urea and electrolytes are checked, along with carcinoembryonic antigen estimation.

The patients are followed up every 3 months for the first 2 years and then 6-monthly until year four and then one further visit at year five.

At each visit they will have an abdominal and rectal examination, rigid sigmoidoscopy and blood tests. Liver ultrasound is performed at 12 months following surgery to detect any evidence of metastases. A colonoscopy is performed within the first postoperative year if the whole colon was not imaged preoperatively, or at years three and five if it had been imaged either by colonoscopy or barium enema (*Table 2*).

Patients who are discharged after 5 years are then entered into a surveillance programme for colonoscopy until the age of 75 years. The nurse provides the patient with a contact telephone number, which they can freely use for any concerns or questions. Critics of intensive follow up state that there is very little evidence that intensive follow up by medical staff of patients with cancer has any impact on mortality rates, since most patients discover the recurrence themselves (Hulton and Hargreaves, 1989; Schoemaker et al, 1998). It is also thought that 75% of patients will discover symptoms of recurrent disease between follow-up appointments (NHS Executive, 1997).

Conversely, protagonists of intensive follow up such as the authors think that it is valuable for the reasons stated. In addition, with increasing utilization of intensive follow-up clinics, further evidence will soon become available. This controversy has led to a new national trial supported by the Association of Coloproctology being proposed. This trial – follow up after colorectal cancer surgery (FACS) – has already had pilot studies and will shortly begin nationally.

Whatever the situation, in practice, nurse-led colorectal cancer follow-up clinics are increasingly being started nationwide. Nurses are probably able to provide different patient-centred insights in developing roles that were previously undertaken by doctors (Porrett, 1996).

CONCLUSION

The nurse-led colorectal cancer follow-up clinic has proved successful; it has increased the throughput of patients but has many other advantages. The patients see the same person on each clinic visit and are able to form a trusting long- term relationship. Appointments are longer than those in the general surgical clinic and therefore patients can discuss any symptoms, problems or worries with the nurse specialist. In addition, a consultant surgeon is immediately available should problems develop. Patients have a direct route to appointments if symptoms occur by contacting the nurse specialist who can act quickly by seeing the patient and independently arranging the necessary investigations.

Corner (1997) sees therapeutic cancer nursing as involving an integrated view of the person, creating an environment which is conducive to caring. This process is reflective seen as needs or problem-focused, including the evaluation and promotion of healing in its widest sense.

It is hoped that the development of the nurse specialist role for patients with colorectal cancer will, through collaborative relationships and careful protocols, impact positively on the integration of care pathways in both the hospital and primary sector. HM

Conflict of interest: none.

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TABLE 2.
Schedule of investigations for colorectal cancer follow up

	Months postoperation											
Examination	3	6	9	12	16	20	24	30	36	42	49	60
PR sigmoidoscopy and abdominal examination	√	√	√	√	√	√	√	√	√	√	√	√
Full blood count		√	√	√		√		√				
Liver function tests		√		√		√		√	√			
CEA	√	√	√	√	√	√	√	√	√	√	√	√
Colonoscopy†		√										
Chest X-ray			√						√			
Liver ultrasound			√									
Pelvic MRI/CT*		√										

*Rectal cancer only; †If colon not assessed preoperatively. If polyps refer to medical follow up for colonoscopy or if cancer in polyp. CEA = carcinoembryonic antigen; CT = computed tomography; MRI = magnetic resonance imaging; PR = rectal examination

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KEY POINTS

- In the UK there are 20 000 deaths each year from colorectal cancer.
- Early detection of cancer revurrence may enable treatment.
- Nurse-led follow up is efficient and well liked by patients.
- Additional advantages of intense follow up include surveillance for metachronous tumours, accurate audit and patient psychological wellbeing.