EDITORIAL

Investigation and treatment of cancer in old age

MARGOT GOSNEY

Geriatric Medicine, University Clinical Department, The Duncan Building, Daulby Street, Liverpool L69 3GA, UK.
Fax: (+44) 151 706 4064, E-mail: germed@liv.ac.uk

Introduction

The incidence of most tumours rises steeply with age, but this does not correlate with the number of older people receiving therapy. Indeed, despite a 23% decrease in the cancer death rate of those aged 65 years or younger, the death rate in those aged over 65 has increased by 17% [1]. In order to improve morbidity and mortality as well as quality of life for older patients with cancer, it is essential that all clinicians make early diagnosis and active management their primary aim. Since geriatricians may be the first contact that such patients have with hospital services [2], they should be aware of available therapy.

Primary and secondary prevention

For many older people primary prevention of cancer is not appropriate; changes in lifestyle, exercise and diet have a role in preventing the development of cancer, but cannot rectify the damage to DNA that has already occurred as a result of lifestyle or ageing. It takes between 5 and 9 years for an ex-smoker's risk of developing lung cancer to fall to half of that seen in current smokers, and many may feel that it would be inappropriate to ask elderly people to make such a change to their habits.

Secondary prevention involves screening tests or examinations which aid the early detection of tumours, thereby increasing the chance of being able to offer effective therapy. For screening to be applicable, the disease must be common and curable if diagnosed early and, more problematically, a highly sensitive test must be available. In the case of colorectal cancer, early or pre-cancerous lesions can be resected if identified, and prompt management does lead to a reduction in both the prevalence of and mortality from bowel cancer. There are about 31,000 new cases of colorectal cancer in the UK each year, with 20,000 deaths.

Screening people at the age of about 60 years by a single flexible sigmoidoscopy examination could prevent 5500 cases of colorectal cancer and 3500 deaths per year. As over half of all malignant tumours are in patients aged 70 or above, this would greatly reduce the numbers of elderly patients with advanced colorectal cancer seen by both general surgeons and geriatricians [3]. Colorectal screening using faecal occult blood detection, digital rectal examination and sigmoidoscopy—although well accepted in the USA—is not commonly performed in the UK [4].

The study in this issue of Age and Ageing by Borum [5] illustrates that older patients (>71 years of age) are less likely to have both rectal examination and faecal occult blood testing. In the case of rectal examination, this reduction was stepwise with each decade. Additionally, older men were more likely than women to have faecal occult blood testing. This gender difference, although interesting, contradicts other studies that have shown men to participate less than women in screening procedures [6] but is in keeping with studies which have shown that, when they do attend for the management of diseases such as ischaemic heart disease, women are less likely than men to be investigated [7]. The fact that this study used retrospective data and covered a population more relevant to general practitioners (rather than geriatricians) in the UK makes the interpretation of such data difficult, although it does highlight that physicians are still reluctant to perform a rectal examination, despite it being a well tolerated procedure [8], even in very elderly patients.

Faecal occult blood testing is a non-invasive method of proven value in the detection of early colorectal cancer and its use in screening is cost effective [9]. Faecal occult blood tests are quick, easy and relatively inexpensive to perform with a reasonable level of acceptability to the general population. Unfortunately, they have a comparatively low sensitivity, with approximately 40% of cancers and 80% of adenomas being missed on a single screen. As many colonic tumours only bleed at a late stage in their natural history, such screening may need to be annual rather than biannual.

In a study of 140,000 residents in Denmark [10], screening for colorectal cancer with faecal occult blood testing was found to be acceptable, with >90%...
accepting repeated screenings. There was a reduced mortality seen in the screened group. Although this study included subjects up to the age of 75 years at recruitment, there was no comment that older subjects found the screening more onerous: indeed, the proportion of positive tests after 10 years of follow-up was highest in individuals over 75 years. This study is going to assess compliance for repeated screenings and the effect of increasing age on detection of tumours.

Palliative radiotherapy

Unfortunately, the treatment of many tumours in older people is palliative—none more so than lung cancer, which is operable at presentation in only 5–10% of patients, irrespective of age. Radiotherapy may be used for curative or palliative purposes. However, patients are more often referred for palliative radiotherapy, with curative treatment generally reserved for subjects with limited disease who have refused surgery or have coincidental medical conditions that contraindicate surgical intervention.

The paper by Patterson and co-workers [11] is an interesting retrospective study of 144 older people accepted for radiotherapy. In keeping with the natural history of lung cancer, 95% of patients were treated with palliative intent. As the mainstay of therapy for haemoptysis and pain, radiotherapy benefits many older people [12]. The increasing use of single-fraction or simplified radiotherapy schedules has been particularly beneficial to both older and younger frail patients with advanced disease [13]. The effectiveness of palliative radiotherapy for symptom reduction is well demonstrated in this study, confirming that this treatment can be given to out-patients, making it suitable for many older patients.

Unfortunately, older patients with suspected lung cancer are less likely than younger subjects to be investigated and subsequently referred for definitive therapy [14]. Although Patterson et al. showed that 70% of patients who underwent bronchoscopy and tissue had been obtained in a similar proportion, histological confirmation declines with advancing age due to a reluctance on the part of many clinicians to subject patients to invasive investigations. Bronchoscopy is well tolerated in older people [15] and should help to ensure that once a tumour has been confirmed, more older patients are offered palliative treatment.

There is controversy about the number of fractions of radiotherapy that the patient should receive: in this study, most received between two and five fractions over 1 week. A recent report from the Medical Research Council Lung Cancer Working Party showed that symptoms were more rapidly controlled in a group receiving two fractions 1 week apart rather than a more intensive schedule. Additionally, such regimens have a reduced incidence of side-effects, although perhaps at the expense of overall survival [16]. The criticism of low referral rates from geriatricians with 100% acceptance rate of those referred, although raising the issue of the possibility of under-referral, may also suggest that the life expectancy of some of the patients included in this study was so short that such treatment may not have been appropriate.

A greater knowledge of the potential benefits of radiotherapy, particularly for the alleviation of selected symptoms, is needed by geriatricians who may be the only clinicians dealing with some older patients with malignant disease. The assessment and management of such patients should be joint, with geriatricians and oncologists working together. In cases where older patients need to remain in hospital during therapy for the management of other medical problems, some might be better managed on a geriatric ward.

Older people should not be excluded from validated screening programmes and, when tumours are discovered, effective therapy should be selected—be it curative or palliative. A closer working relationship between cancer surgeons, oncologists and geriatricians as well as other health care professionals is essential to ensure high quality care to older cancer patients.

References


© Sally Greenhill.