the same stage.¹ Reasons for these variations are not hard to identify. Women are referred to many general surgical clinics, which lack the range of skill required for managing women with breast problems. Multidisciplinary breast clinics achieve a measure of uniformity and quality by working according to agreed protocols, whose implementation can be audited prospectively.

Referral to specialised breast clinics will not eliminate variation in treatment altogether because of differences of opinion between experts. Differences in treatment practices reflecting clinical uncertainty should act as a spur to participation in large randomised trials rather than to pressure for consensus guidelines. Where the adjuvant systemic treatment of early breast cancer is concerned, a worldwide meta-analysis carried out in 1992 showed conclusively that tamoxifen, chemotherapy, and ovarian suppression each reduce 10 year mortality in premenopausal and perimenopausal women.² About 5-10 extra women with early breast cancer are alive at 10 years for every 100 women treated with any of these modalities. Tamoxifen and chemotherapy are each effective in postmenopausal women. Tamoxifen has a relatively favourable toxicity profile and is simple to administer. Five years' treatment at 20 mg a day costs just under £200. It should therefore be considered for most women with early breast cancer, regardless of age. The optimal duration of tamoxifen treatment is being tested in the Cancer Research Campaign's trial and the "adjuvant tamoxifen treatment-offer more?" (aTTom) trial, and participation in these should be encouraged.

The overview carried out in 1992 also raised the possibility of appreciable further reductions in mortality from the addition of chemotherapy or ovarian suppression, or both, in women taking prolonged adjuvant tamoxifen. This hypothesis is being tested in the adjuvant breast cancer trial conducted by the United Kingdom Coordinating Committee on Cancer Research. Major trial groups in Britain are collaborating in this trial, which was launched last October. The trial's design is novel in offering a choice of randomisation options, depending on the uncertainty of the specialist, while retaining clinical freedom for the requirements of the individual patient. Several thousand women will be invited to participate to test the added survival gains of combined chemoendocrine treatment in patients taking tamoxifen. Associated studies aim to study the trade off between survival gains and side effects related to treatment.

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Incomplete case notes hamper research

EDITOR,—As a research worker who has studied clinical decision making for 20 years and has also developed breast cancer, I was concerned by A M Chouillet and colleagues' paper.¹ My own treatment has followed the guidelines mentioned and has been fully discussed with me; from talking to fellow patients, I believe that this is common practice in Leeds. My concern is on behalf of patients who are not receiving optimal treatment. Firstly, some doctors do not follow guidelines recommended by their peers. Here, it is perhaps easy to be overcritical. Guidelines are useful in general, and when they are not followed doctors should be prepared to defend their failure to comply. On the other hand, guidelines are rarely infallible, and experience in clinical research teaches the value of professional judgment, especially by experienced surgeons.

Far less easy to defend is the situation concerning case records. Clearly, those members of the medical profession who seemingly cannot be bothered to collect information and enter it into the case records need to change. In over half of the cases studied by Chouillet and colleagues the cancer could not be staged from the information recorded. This information not only would benefit the patient at the time but is vital for research if we are to improve the treatment and prognosis of this disease.

I support strongly the remarks of S J Karp that collation of data and comparison of centres are possible only if centres begin to record their data in a standardised way.² This applies to the whole of medicine: similar problems have been encountered in studies in acute abdominal pain, in which structured data collection is widely associated with improved diagnosis and decision making³⁴ but young doctors often fail to collect data crucial to patients' management. If there are doctors who are unwilling to collect such information (much less follow guidelines produced to enable patients to benefit from recommendations of those doctors' peers) then what hope is there for audit and what hope is there for optimal patient care?

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Neurological symptoms may not be due to radiotherapy

EDITOR,—As surgeons and clinical oncologists who treat the axilla by surgery or radiotherapy for early cancer, we sympathise with the patients who have experienced major morbidity after locoregional irradiation, whose cause Karol Sikora espouses.¹ Diagnosing brachial plexopathy induced by radiation is never easy. In a continuing but retrospective review of 773 women treated between 1979 and 1984 with radiotherapy after mastectomy we have identified only nine patients with symptoms suggesting brachial plexopathy, in two of whom radiation was identified as the cause. In five patients tumour was eventually identified as the cause, while in two others a final diagnosis cannot be made.

Our units are conducting a randomised trial of axillary node sampling (with axillary irradiation for women with positive nodes versus axillary clearance in which morbidity in the arm is being measured prospectively. From the response so far to a questionnaire completed by patients we cannot ascertain whether all neurological symptoms are secondary to radiotherapy. We would caution against any premature conclusions. Even computed tomography may not be helpful.² Long periods of careful follow up may be needed to exclude recurrence as a cause of this debilitating problem.

Sikora states that radiotherapy to the nodal areas

was probably unnecessary in many of the women. Patients who have had a full level III clearance (up to the apex of the axilla) will not require postoperative axillary radiotherapy. A clinical oncologist, however, is often faced with inadequate information about the pathological involvement of the axilla in patients referred for an opinion on the need for axillary irradiation.³ Commonly, this is due to inadequate sampling (when fewer than four nodes have been sampled) or occurs when no axillary procedure has been performed. A randomised trial in this unit showed that axillary sampling of at least four nodes provides an accurate assessment of the nodal status as established at a level III clearance.

It is also essential to follow up all patients to audit morbidity.

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Attack on radiotherapy too simplistic

EDITOR,-Though I agree with Karol Sikora that patients who have been damaged by radiation need a sympathetic hearing,¹ I believe that several points need to be borne in mind. The recent publicity campaign by Radiotherapy Action Group Exposure has encouraged patients who have problems after radiotherapy to assume that these are due to radiation damage and to contact the organisation for a circular letter to send to their member of parliament, demanding an investigation and compensation. We therefore need an independent assessment of these patients to verify the diagnosis and exclude other conditions such as recurrent cancer, severe cervical spondylosis, or other neurological conditions causing similar symptoms. Probably some of the injuries to the brachial plexus are due to poor technique of delivery of radiotherapy and not simply a function of dose. A relatively high dose per fraction will be magnified by faulty technique, increasing the likelihood of injury.

Simplistic statements on television implying that half the radiotherapists in Britain give the wrong dose of radiation to their patients with breast cancer do nothing to maintain confidence in our ability to give effective treatment and fail to educate patients on the complexities of the issues. Sikora also gives the impression that he does not understand the concept of biological equivalence of radiation doses.

Much would be gained from an independent confidential inquiry (with power to insist on disclosure of medical records) examining details of dose and technique. Once the inquiry had made recommendations on preventing damage to the brachial plexus the allocation of resources would have to be reviewed to allow radiotherapy departments to meet the recommendations.