use.[12] Nevertheless, there are grounds for concern about the quality of advice offered. Reliable studies tell a consistent story: although there is a wide range, traditional symptomatic treatment at pharmacies is too often inadequate; pharmacists are too often unable to identify symptoms that require referral to a doctor; and too much of the advice is given by counter assistants rather than by qualified pharmacists.[13 14] The findings of Goodburn and others (p 440) are therefore broadly (and disappointingly) in line with the results of previous work.[15]

Although the Royal Pharmaceutical Society is clearly concerned about the competence of community pharmacists, it is time to be rather more robust about improving standards of these aspects of pharmacy practice.[16 17] Practical therapeutics is being gradually introduced into the undergraduate pharmacy curriculum,[17] but is this enough? Is it sensible to allow newly registered pharmacists to practise in the community, entirely unsupervised, without any further training? What steps will the profession take to ensure the quality of the service its members deliver? And, finally, if much of the advice given in pharmacies is to be provided by counter assistants should not they themselves be trained?

That there is an extended role for the community pharmacist is accepted by the government and many other bodies, as well as the pharmaceutical profession itself.[3] The profession's leaders have a considerable responsibility, however, in ensuring that the potential is fulfilled.

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Immediate reporting of fine needle aspiration of breast lesions

Needs an experienced aspirator and breast cytopathologist at hand

Although widely practised elsewhere, fine needle aspiration of breast lesions with immediate reporting of cytological findings has been slow to catch on in Britain.[1-3] Immediate reporting has several advantages. Unsatisfactory aspirates may be repeated immediately—thereby increasing diagnostic yield—and discussion of the diagnosis is possible with the patient on her first visit. Importantly, immediate reporting of the cytological findings does not seem to reduce the accuracy of the technique.[1-3] The obvious disadvantage is that a technician and an experienced cytopathologist have to be available to stain and report the findings.

Immediate reporting of fine needle aspiration need not be restricted to palpable lesions. Stereotactic fine needle aspiration of non-palpable mammographic abnormalities is now widely practised, and results are improving.[4 5] The advantage of having immediate reporting available is that multiple passes through such lesions—usually required to obtain a diagnosis—may be kept to a minimum if a cytopathologist is able to inspect the material aspirated on each pass. The fewer the number of passes, the less the discomfort of the procedure.

Why is "best practice" not the rule in Britain? The main reason is that in countries that provide fine needle aspiration with immediate reporting cytopathologists usually perform the aspiration, report the results, and inform the patient of the diagnosis.[6] In Britain, surgeons mostly aspirate breast lumps in their outpatient clinic. Unless a technician and a cytopathologist are on hand the report is usually not available for 24-48 hours.

The technique does not have a sensitivity of 100%,[1 3 6 7] and to ensure that breast cancers are not missed fine needle aspiration and cytological examination should be combined with clinical examination by an experienced clinician and, in women over 35 years, by mammography reported by an experienced radiologist.[7] Mammography should be performed before fine needle aspiration as haematomas may produce mammographic appearances resembling those of breast carcinoma.[8] Mammography is also considerably more painful when performed after fine needle aspiration. Not having the reported mammograms available when fine needle aspiration is performed means that some patients with impalpable suspicious mammographic lesions will be inappropriately reassured.

Currently, many busy surgical outpatient clinics need to defer discussion of the diagnosis and its implications for the 36-48 hours it takes to obtain the results of cytology, the delay resulting in needless anxiety for patients whose lesions are eventually found to be benign. With immediate reporting of cytological specimens patients with benign aspirates and no clinical or mammographic suspicion of malignancy may be reassured and an unnecessary biopsy avoided.[3] Often patients can be discharged after their first visit. Being able to offer immediate reassurance to patients with benign disease referred from screening centres should minimise the psychiatric morbidity from screening.[9]

In Scandinavia fine needle aspiration of breast lesions is performed and reported by experienced staff.[4-6] Studies from Britain have shown clearly that the technique depends on the aspirator and that results improve with experience.[7 10 11] Fine needle aspiration with immediate reporting should therefore be practised only in centres where experienced aspirators and experienced breast cytopathologists are available.

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Thrombolytic treatment for recurrent myocardial infarction

Avoid repeating streptokinase or anistreplase

The widespread adoption of thrombolytic treatment and widening indications for its use have led to an increasing number of patients presenting to coronary care units who have previously received thrombolytic treatment. In the first year after thrombolytic treatment reinfarction occurs in about 9% of patients,[1] and about 20% of patients admitted with myocardial infarction to a coronary care unit will have had a previous infarction.[2-4] Both streptokinase and anistreplase are antigenic, and after their administration antibody titres rise within a few days, peak one to two months later, and then slowly recede. High titres of antibodies might potentially be associated with major anaphylactic reactions and may result in ineffective thrombolysis. Many of the patients presenting with recurrent infarction will have received streptokinase and some will have received anistreplase. It is therefore an important issue whether these drugs should be given again.

Most patients have circulating antibodies to streptokinase as a result of a previous streptococcal infection, and for effective thrombolysis the dose of streptokinase must overcome neutralisation by antibody binding. Before Verstraete *et al* advocated a standard dosing regimen[5] streptokinase resistance was tested and the dose modified for each patient. Streptokinase doses greater than 1·25 million units will overcome these antibodies in most patients. The currently recommended dose of 1·5 million units of streptokinase should therefore be effective in all patients except those who have recently received streptokinase or who have had a recent streptococcal infection.[5]

Even though some patients may have high antibody titres, the incidence of allergic reactions is low. In the second international study of infarct survival 8392 patients received streptokinase and none had anaphylactic shock.[3] In 5860 patients treated in the trial by the Gruppo Italiano per lo Studio Della Streptochinasi nell'Infarto Miocardico there were seven cases of anaphylactic shock but no deaths.[2]

Several measurements can be made to assess the likelihood of reduced fibrinolytic activity with repeat administration of streptokinase or anistreplase. The total streptokinase resistance test measures the inhibition of fibrinolysis and reflects the contribution of IgG, IgM, and IgE streptokinase antibodies as well as plasmin inhibitors such as α_2 antiplasmin. The measurement is also influenced by the amounts of fibrinogen and plasminogen present. Assays have been developed for detecting specific IgG, IgM, and IgE antibodies.

Streptokinase resistance titres increase by the fifth day after administration of either streptokinase or anistreplase and remain raised in most patients for at least one year. In a small group of patients Jalihal and Morris showed that at three months all patients had neutralising titres to 1·5 million units of streptokinase.[6] Massel *et al* showed that at one year about 70% (95% confidence interval 48% to 92%) of patients who had previously received streptokinase for acute myocardial infarction had neutralising antibodies to 1·5 million units of streptokinase.[7]

The effect of high antibody titres on lytic efficacy when these drugs are given again is uncertain. Moran *et al* showed a poor correlation between streptokinase specific IgG measured by radioimmunoassay and the functional streptokinase resistance titre.[8] In a recent study, in which patients were given streptokinase again within a year, minor allergy was common, but analysis of cardiac enzyme activities and late coronary angiography suggested successful thrombolysis in 70% of this group.[9]

It remains uncertain which thrombolytic drug is best used in acute infarction. Tissue plasminogen activator is more effective than streptokinase at attaining early arterial patency as judged by a 92 minute angiogram.[10] Nevertheless, there may be little difference between the drugs in terms of sustained patency, which is the likely mechanism of benefit.[11] No difference has been detected between the two drugs in their effect on subsequent left ventricular function[12] or on mortality.[13] The results of the third international study of infarct survival comparing streptokinase, recombinant tissue plasminogen activator, and anistreplase are awaited. In the mean time streptokinase is the cheapest drug and should be used unless there are doubts about safety or efficacy.

No comparative trials are available to guide the choice of thrombolytic drug for repeat treatment. The risk of major allergic reactions seems to be low when repeat administration is delayed for more than six months, but there are uncertainties about the efficacy of repeat administration. What then can be recommended in the light of our present state of knowledge?

Although the efficacy of repeat administration of streptokinase or anistreplase has not been studied in detail, the high prevalence of raised neutralisation titres at 12 months will probably be associated with decreased thrombolytic efficacy. Treatment shown to be effective should be given and streptokinase or anistreplase should not be administered again within 12 months if non-allergic thrombolytic drugs are available.

Further information is required about antibody titres after 12 months. Meanwhile several strategies could be adopted. Jahil and Morris have recommended measuring neutralisation titres before readministering an individualised dose.[6] But this may take up to an hour as several dilutions have to be made, and this approach is untenable in the light of the substantial evidence of the benefits of early thrombolytic treatment.[2] Moreover, an in vitro test may not reflect the