

127 (40%) felt that they themselves needed to be tested. This is in contrast to the much higher uptake rate reported in the Swedish paper.

Susanne Lindgren and colleagues also suggest that to achieve a high uptake rate those offering the test should be highly motivated to recommend HIV testing. We would argue that the purpose of pretest counselling is to enable the women to make an informed decision about whether the test is right for her individually, not to ensure testing at any cost. To this end it is essential that the midwives are adequately trained to carry out pretest counselling, which the authors rightly suggest is a prerequisite to the acceptance of HIV testing. In Riverside we found that midwives, though on the whole happy to provide pretest counselling, are aware of the need for training, particularly concerning the practical and psychological implications of being HIV positive.³ Since May 1992 a specialist HIV counsellor has been in post to train and support the midwives, who are trained to discuss HIV testing with women at the booking interview, with the option of referral on to the counsellor in more complicated cases. In our experience, women are occasionally unwilling to discuss risk information with their midwife, being able only to open up to someone not directly involved in their obstetric care. The specialist counsellor also offers the test to partners, thus reaching sexually active men who may not otherwise come into contact with services.

The aim of identifying HIV infected women should be achieved in a climate where those at risk have been encouraged to come forward for testing after sympathetic counselling, not by coercive persuasion—which may drive away from services the very women we need to reach. The use of a specialist counsellor to complement the work of the midwives has proved an effective strategy in Riverside in meeting this aim.

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Actinic keratoses induced by use of sunbed

EDITOR,—David Shuttleworth's editorial¹ reminds doctors of the hazards of use of sunbeds, which were detailed by the British Photodermatology Group.² Although many adverse effects may occur, neither non-melanoma skin cancer nor dysplasia has been reported. We report on a patient with a large number of dysplastic keratoses, which seem to have been induced by use of a sunbed.

A 38 year old woman who had been abroad only once (to Spain for a short holiday at the age of 15) presented with a two year history of asymptomatic lesions on her trunk and arms and legs. She had sun reactive skin type 1 ("always burns, never tans") and had used a canopy sunbed fitted with reflector ultraviolet A fluorescent lamps for two years but had stopped three years before her presentation. She had used the sunbed twice weekly, spending 30 minutes on each side, but had achieved little or no tan. She took co-amilozide premenstrually.

Examination showed numerous (>100) warty keratoses on her arms and legs and the dorsal aspects of her hands and trunk, and widespread

freckling. Areas that had not been exposed to natural sunlight, such as the breasts, were also affected. Histological examination of several representative lesions showed epidermal dysplasia of varying severity and mild solar elastosis, changes identical with those seen in actinic keratoses induced by natural sunlight. Phototesting with a range of ultraviolet wavelengths showed normal erythral responses at 24 to 72 hours even when she was taking co-amilozide, and no abnormality was found in DNA repair and cellular studies of cultured fibroblasts (Dr C F Arlett, MRC Cell Mutation Unit, Brighton).

Although the annual incidence of squamous cell carcinoma developing in an individual actinic keratosis may be as low as 0.24% per lesion,³ the large number of keratoses in our patient probably presents a considerable risk. Long term exposure to ultraviolet A induces non-melanoma skin cancer in mice,^{4,5} but the true risk in humans remains uncertain. There was no evidence of xeroderma pigmentosum in our patient, but her sun reactive skin type may have been a predisposing factor. People who tan poorly or not at all are more susceptible to both neoplastic and dysplastic skin changes as a result of long term exposure to natural sunlight and might therefore be expected to be more susceptible to long term exposure to ultraviolet A.

Premalignant epidermal dysplasia should be added to the list of side effects of use of sunbeds.

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Anticoagulation in patients with atrial fibrillation

GPs struggle to meet demand

EDITOR,—Philip M W Bath and colleagues suggested that with the expected increase in patients taking warfarin for non-rheumatic atrial fibrillation the management of long term control with anticoagulants could be devolved into the community.¹ Fiona Taylor and colleagues showed that in London few patients taking anticoagulants were managed by their general practitioners and few general practitioners were keen to take on this task.²

I am a partner in a non-fundholding training practice in north Oxford that has seven partners and 15 483 patients. In November 1993 we had 1535 patients aged 65 or over. Assuming a Framlingham distribution of atrial fibrillation,³ we should have about 80 patients over the age of 65 who ought to be given anticoagulants.

In August 1990 an audit showed that we had 29 patients taking warfarin for a variety of indications. Of these, 22 were managed by ourselves, six by the anticoagulant clinic at the John Radcliffe Hospital, and one by the local renal unit. In November 1993 we had 65 patients taking warfarin. We are responsible for taking blood specimens from and managing 62 patients. The

anticoagulant clinic takes blood samples from and manages three patients. The laboratory tell me this pattern is common to all practices in this area. The experience in London cannot be extrapolated to the rest of the country.

The increase in the number of our patients taking warfarin (36) is the result of giving anticoagulant treatment to patients in atrial fibrillation. This has already been an increased burden for doctors, practice nurses, and district nurses. We are covering only half our "at risk" population at present and cannot absorb extra work. In 1992 our attached district nurses took 102 blood specimens from housebound patients who were taking warfarin. They now say they cannot visit new patients starting warfarin treatment because of other pressures on their time. We suggested to the manager of our community unit that a peripatetic phlebotomist might be a solution, but we were told that this would be possible only if a district nurse post were lost. This means that general practitioners are now faced with extra home visits to take blood. This is a poor use of a general practitioner's time and is a strong disincentive to starting a valuable treatment.

The workload and cost implications of giving anticoagulant treatment to all patients with atrial fibrillation within the community are tremendous and must be addressed before the work can be devolved. We have shown that we are willing and capable of controlling anticoagulation in our patients but we cannot continue to absorb this extra work without extra resources.

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Expert software may be the answer

EDITOR.—Fiona Taylor and colleagues report that general practitioners do not wish to run their own anticoagulant clinics for reasons including time, knowledge, training, facilities, and finance.¹ We are piloting an expert computer software system, validated in hospital clinics,² which may resolve these problems.

Preliminary analysis based on two general practices is encouraging. Of 43 patients seen, only one has opted to return to hospital care. The reason for this was bruising after venepuncture: the hospital clinic used prick testing of the thumb. "Near patient testing" will be looked at if we find that the software can be easily used in a general practice. The patients' international normalised ratios compare favourably with recent published results,³ with 48% of results being within ranges recommended by the British Society for Haematology. Keenan *et al* have shown that use of the software can lead to 80% of results being within the ranges recommended by the British Society for Haematology.⁴ We believe that our figures will improve as the general practice clinic develops, patients gain more confidence in the clinic, compliance improves, and formal audit is applied to the outcome.

If this system proves compatible with general practice it has several implications. Firstly, most patients requiring anticoagulant treatment could be managed in general practice, which would release time in hospital clinics. Secondly, increased knowledge or training would be unnecessary as the system is an "expert" system, though the generalists' skills would improve with use. Thirdly, use of the system would be more con-