this information. Despite this apparent move by the Association of British Insurers to remove this barrier several related issues remain unresolved.

Firstly, the association has not changed its statement of practice, which says that "having had a negative HIV test will not of itself prevent someone from attaining life insurance or even affect the cost, providing there are no adverse risk factors present."10 That proviso is a significant qualification, and the statement goes on to draw a distinction between having tests for "routine" and "non-routine purposes." This ignores the fact that any negative test would be accompanied by counselling that forms part of the educational process in encouraging safer sexual and other behaviour thereafter.

Secondly, the leaflet which was provided for the Riverside survey stated that people who test negative for HIV will face no difficulties in obtaining future life insurance because of having the test, and the chairman of the association's medical committee has made a similar statement." If that is so then continuing to ask for this information has no justification. But if, as suggested in a later passage in the leaflet and the different wording of a recent association leaflet issued to general practitioners, the very fact of having had a test will trigger the despatch of a supplementary questionnaire and may also lead to a request for a medical report or further test-when these steps would otherwise not have been taken—the applicant is being treated less favourably than if he or she had never had a test. Thus the statement as it stands is misleading.¹²

Moreover, even if insurers consider that knowing that an applicant previously tested negative for HIV is useful in life underwriting, any supposed benefit from asking this question is severely limited by the lack of truthful answers. In the

Riverside study 28% of patients said that they would not divulge the result of their HIV test to any insurance company.9

The best efforts of the Department of Health, the Terrence Higgins Trust, and health professionals who counsel patients about HIV tests have therefore left the practices of British insurers unchanged and the concerns raised by the Department of Health unanswered.

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Skin lightening creams containing hydroquinone

The case for a temporary ban

Over the counter products containing hydroquinone, the active ingredient of skin lightening creams, are frequently inadequately labelled and often exceed the limit of 2% on the hydroquinone concentration.¹² Although trading standards departments are right to draw attention to such problems, this can obscure a more crucial issue: are creams containing hydroquinone safe in any concentration?

Hardwick and colleagues established a causal link between hydroquinone and exogenous ochronosis, the permanent sooty black, coarse pigmentation seen in black women on areas of the skin exposed to the sun.³ It seems unlikely that breakdown products of hydroquinone or contaminants⁴ are to blame as identical effects have been described after the use of at least 30 different formulations.³ The early descriptions of exogenous ochronosis in black South African women referred to advanced cases⁵; some women had used creams containing up to 6% of hydroquinone.6 After prolonged medical pressure the South African government agreed in 1980 to set a 2% upper limit on hydroquinone for cosmetic use,7 and Britain,8 the United States,⁹ and Nigeria followed suit. The reason for choosing the 2% maximum is obscure, for it was based not on any logical toxicological limit but on tests of cutaneous irritancy¹⁰ and contact dermatitis.¹¹ It probably seemed a "sensible" figure at the time¹² given the earlier reports of ochronosis, which had emphasised the use of stronger concentrations of hydroquinone.

Hardwick and colleagues argued that the high prevalence of ochronotic changes in those using hydroquinone skin light-

eners (69%) is far more compatible with a toxic side effect from a drug with a low therapeutic index than with an idiosyncratic reaction.³ As Schulz and Sher pointed out, the amount of hydroquinone absorbed into the skin depends on the frequency and duration of application,¹³ which are beyond the control of the chemist. This is why dermatologists have always regarded the safety of even the lowest concentrations of hydroquinone as doubtful.

The results of several studies support their misgivings. In a study of women attending a South African gynaecology clinic Weiss found evidence of ochronosis in nearly one third, half of whom had used creams only since 1983 (three years after the banning of creams stronger than 2%).¹⁴ Many reports from Europe and the United States document unequivocal changes of ochronosis in people who have used creams containing 2%¹⁵⁻¹⁹ and even 1% hydroquinone.²⁰ In response, one manufacturer has pointed out that the concentrations of hydroquinone in these creams has not been determined and is likely to be much stronger than 2%.²¹ This hardly seems a plausible explanation for all reported cases, especially given the many cases that continue to be seen in South Africa, where a 2% limit has been in operation for 12 years (R Weiss, personal communication). Nevertheless, it seems prudent for local trading standards offices to test creams claiming to contain 2% hydroquinone in future cases of suspected ochronosis.

Without population based surveys, extrapolating from isolated hospital based reports probably grossly underestimates the scale of the problem in Britain. Ochronosis is often an incidental finding, and patients may not realise that their gradual facial darkening is a side effect of the cream that was intended to lighten their skin. Some continue to apply more cream as they get caught in the "skin lightener trap." Many patients may also feel guilty about using such creams and will often deny their use-even when histological evidence of ochronosis is available.

Although more public awareness of the dangers of skin lighteners may reduce their use, sufficient doubt exists regarding the safety of creams containing 2% hydroquinone to justify a temporary ban on over the counter use pending long term trials of their safety. The onus should be on manufacturers rather than consumers to establish such safety. Had it been a drug and not a cosmetic the product licence would have probably long been withdrawn. HYWEL WILLIAMS

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The demand for ophthalmic services

Increases are likely in number of patients and costs

In a study in Nottingham Sheldrick and colleagues found that during one year about one in 14 people consulted doctors with an eye problem (p 933).¹ One third of these consultations took place in an eye casualty department and the rest in general practice.

General practitioners will therefore need to be kept abreast of developments in examination and treatment, particularly those that affect general practice. Hospital eye services should be responsible for much of this continuing education. They would be building on surer foundations if all trainees had spent part of their vocational attachments with an ophthalmological service.

The authors showed that simple, traumatic injuries to the cornea make large demands on treatment services, yet most of them are preventable. A study by Chiapella and Rosenthal has shown that most foreign bodies and minor corneal injuries occur at work.² By insisting that protective goggles are worn employers could therefore reduce the number of corneal injuries and the number of hours lost from work. Management should be responsible for providing comfortable safety eye wear, educating workers about its importance, and enforcing its use.

The number of people aged 75 and over is increasing rapidly, with 10% more people in this age group expected by 2001 and 40% more by 2026.³ Because age related cataract, age related macular degeneration, and chronic simple glaucoma increase substantially after 60 (and particularly after 80) the increasing numbers of elderly patients will further strain overstretched hospital eye services. Many services already have long waiting lists for first outpatient appointments and elective surgery. In addition, fundholders in general practice will have to cope with the financial burden of more patients needing ophthalmic services, and their budgets will have to reflect this.

Although Sheldrick and colleagues show how the demand for services for chronic ophthalmic diseases increases with age, they fail to emphasise ethnic variations. Patients from the Indian subcontinent are five times more likely to need surgery for cataract than other patients in all age groups over 45.4 Eve departments serving large numbers of such patients should therefore plan for an increased workload from cataract surgery.

Important technological developments are occurring in ophthalmology, which will require hospitals to spend money if they are to provide the latest diagnostic and therapeutic advances for their patients. The move towards small incision cataract surgery with phacoemulsification and foldable intraocular lenses will eventually require all institutions doing ophthalmic work to purchase modern phacoemulsification equipment.5 Laser treatment of the "wet form" of age related macular degeneration with preservation of central vision has proved successful, but its success is limited by the fact that existing fluorescein angiographic techniques cannot clearly define over half of all retinal neovascular membranes. The use of indocyanine green dye and digital angiography allows more precise definition of these membranes,⁶ thus allowing the treatment of more patients with this common blinding condition. Each eye service will therefore want to buy digital angiographic apparatus to provide laser treatment to as many elderly patients with age related macular degeneration as possible. As ophthalmologists move towards progressively earlier surgery in chronic simple glaucoma⁷ their demands for new ways of surgically controlling intraocular pressure, such as use of a Holmium laser, will also increase.

A phacoemulsifier costs about £35000, digital angiographic equipment £55 000, and a Holmium laser £45 000; to provide this equipment for Britain's 163 ophthalmic training programmes would cost £22m. Satisfying financial demands of this size with the limited resources available poses an enormous challenge to the ophthalmic community, who will want their patients to have the best possible care.