Before I left, Greenfield sat down with me for an hour and checked that I knew the language. But then he added: "Of course, no matter what you call these tumours, assess their prognosis as you would that of any connective tissue tumour anywhere in the body. Is it well organised, fibrous, with mature blood vessels and cells well formed and uniform? If so it's simple. But if it has immature blood vessels, multiform cells of many different sizes and shapes and complex active nuclei, and is loosely organised, it's malignant. Never mind its name." I realised that he was very close to Daddy Duncan.

What's in a name?

The final enlightenment came, as so often, from Robert Muir (portrait No 2). On my way back from London to Aberdeen I called on my friends in Glasgow. Muir wanted to see me. Somehow he

knew that I had been in London learning about brain tumours from Greenfield. Muir gave me four microscopic sections to examine and name. "Write down your diagnosis," he ordered. I remember them still: astrocytoma, ependymoma, spongioblastoma, and angioma. Muir consulted a postcard.

"Well, you've given them the same names as Kernohan gave them. He's from the Mayo Clinic where they stick to the Bailey and Cushing language. These four sections, however, are from different parts of the same tumour—so you see what you're up against if your biopsy is from only one area of an extensive growth. Bailey and Cushing's nomenclature presupposes that all brain tumours arise only from the growth of embryonic rests, and they do not." Dott, as I was told, used the Bailey and Cushing nomenclature.

I bore the news back to Dr Buchan as the probable explanation of the different outcomes of his two cases.

"Tomorrow," he said, "let's go to Edzell for a game of golf."

For Debate . . .

Testing for HIV without permission

RAANAN GILLON

Sir Richard Doll wishes to carry out anonymous screening for the prevalence of the acquired immune deficiency syndrome (AIDS) on blood samples taken in hospitals for other purposes. Apparently ethics committees have been reluctant to sanction such testing. In a letter to the *BMJ* he says: "How it can be unethical is incomprehensible, as it can do no possible harm to anyone and could do much good."^{1,2}

The proposal is simple enough: after blood samples have been tested for the reasons they were taken they would be made unidentifiable except for the donor's age, sex, and residential district and would then be tested for antibody to human immunodeficiency virus (HIV). Samples for testing "might for example be obtained from antenatal clinics or casualty departments."

The case in favour of doing prevalence studies is straightforward and uncontroversial: HIV positivity occurs far earlier than AIDS, and by testing for HIV prevalence the earliest measurements of spread within the population may be obtained. Such information is likely to be beneficial in combating AIDS and its spread.

Few people can object to the desire to obtain information about the prevalence of HIV. But medicomoral problems arise in relation to two aspects of the proposed method. Firstly, such testing would be carried out without the patient's permission. Secondly, results would be anonymous so that patients could not be told that they did or did not have HIV antibodies even if they wished to know.

In analysing these issues perhaps the first thing to note is that the proposed prevalence testing falls into the realm of non-therapeutic medical research—that is, research that is done without any direct intent to benefit the subjects of that research but with the hope of

benefiting others medically. The World Medical Association's Declaration of Helsinki on the principles that should underline medical research on human subjects, which was last endorsed in 1983, makes it explicit that "the subjects should be volunteers"—either healthy persons or patients for whom the experimental design is not related to their illness.³ Moreover, in any research on human beings each potential subject must be "adequately informed" and "should be informed that he or she is at liberty to abstain from participation in the study." And for good measure the declaration states (in effect twice) that "in research on man the interests of science and society should never take precedence over considerations related to the well being of the subject."

Absolute moral principles are always questionable, and the last is no exception. Sufficient benefit, or the avoidance of sufficient harm, may I think (but do not argue here) in rare cases justify the overriding of normally strong moral obligations when these unavoidably conflict with such benefit or avoidance of harm. But the principle of consent is an extremely important one and should be upheld unless there are powerful moral arguments against obtaining such consent. In the case proposed I see no such powerful arguments and am not at all clear why adequate consent should be unobtainable. Given the importance of consent, if it is obtainable then it is surely important to obtain it rather than do the research without it.

As I understand them the main objections are that (i) it would be too cumbersome to obtain consent; (ii) if any patients withheld consent the prevalence studies would be made less accurate; (iii) testing blood samples anonymously and without consent is already an accepted part of hospital medical practice; (iv) consent for such tests is not legally necessary; (v) consent for such tests is implied in the consent given by the patient in agreeing to have blood taken; (vi) the requirement for consent can be ignored in trivial or minor procedures, including such testing of blood samples obtained for other purposes; and (vii) there is no need because "it could do no possible harm to anyone."

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Too cumbersome?

The cumbersomeness of any procedure proposed on ethical grounds must be as minimal as the desired moral objective permits. Furthermore, if full "informed consent" were required on the American model, with a lot of information having to be personally explained and a need for signed and witnessed consent documents, then the practical difficulties of obtaining consent for prevalence testing would almost certainly rule it out. There is of course no need for such absurdities. Patients need to know only roughly what is intended and to decide whether or not and how they wish to participate. A reasonably simple proposal for doing this is outlined in the box.

Too inaccurate if withdrawal permitted?

It is indisputable that the more refusals there are the more inaccurate the prevalence studies will be. But even as proposed, these prevalence studies will not accurately show HIV prevalence in the general population but will give only rough guides from unrepresentative samples. Nor is it clear that highly accurate prevalence rates in such unrepresentative groups would be of more practical advantage in the fight against AIDS than rough prevalence rates. Surely there would not be sufficient advantage to override the fundamental requirement of consent.

Testing without consent already an established practice

One of the interesting aspects of the ethical issues associated with AIDS is that it raises no new moral issues but focuses our attention on old ones. The fact that a practice already exists is no guarantee that it is morally acceptable, and if such testing is already an established practice perhaps we ought to reassess its propriety. This is surely particularly important when such testing may produce results the knowledge or ignorance of which may be reasonably expected to affect the patient's wellbeing. Doctors often use existing samples for research or even snitch a bit extra (for example, in operations). I believe we should be explicit about this, and while pointing out its potential benefits we should also give patients an opportunity to refuse such non-therapeutic use of their bits and pieces. I am sure few would refuse, but should not those who wish to refuse be allowed to refuse?

Consent not legally necessary?

This is an ethical analysis rather than a legal analysis, and if the moral arguments for obtaining consent prevail there is no legal prohibition against acting ethically and obtaining consent.

Consent implied by allowing the blood to be taken?

This seems undeniably false. If as a patient I give my doctor implied permission to take my blood for testing it is surely on the grounds that such testing can be expected to benefit me. In no way can it be legitimately assumed that I give (morally relevant) consent for testing for any other purpose. At the least I should have to be aware that there is an intention to use the blood for other purposes, for the notion of valid consent, whether explicit or implicit, requires as one of its constituents sufficient understanding of what is consented to.⁴ This argument goes to the heart of the distinction between therapeutic and non-therapeutic medical intervention.

In the context of the normal doctor-patient relationship patients may reasonably assume and understand that any tests they are subjected to are performed in their interests unless otherwise specified. Thus whereas consent to tests that are designed to benefit the patient and are of minimal harm may be properly assumed when patients voluntarily allow doctors to take their blood, no such assumption is justified in the case of non-therapeutic activities. It is

An outline proposal for obtaining implied consent to prevalence studies for HIV antibody

Patients who are in groups that have been selected for prevalence studies of HIV antibody state would be informed about the proposal and the reason for it by leaflets that were clearly and simply written. The intention to do the screening anonymously on "spare blood" left over from ordinary blood tests that have been done for their benefit would be explained, as would the fact that the patient's permission for such testing would be assumed unless explicitly withheld. If permission were withheld, however, the test would not be done. At this point the leaflet might say: "If you do not wish to be told the result of the HIV test and if you have no objection to our doing the test anonymously you need read no further and need do nothing."

The leaflet might then explain that unless patients said when having their blood taken that they would like the results to be given to them their names would be removed from the bottles (after the blood tests for the patient's benefit had been done) and the bottles would then be "shuffled" before HIV antibody testing, so making any positive results totally untraceable by anyone.

Perhaps the leaflet should help patients who carry on reading to consider their decision by pointing out some of the implications of the various alternatives. Permission to test might be described as a contribution to the fight against AIDS to encourage (but not coerce) participation. It might be pointed out that unless patients are in a high risk group (and these could be listed) they as good as know that they are antibody negative and that there is no need to ask for the results of their tests. On the other hand, if they wished to confirm that they were antibody negative they would be welcome to ask for the result, provided they requested this at the time the blood was taken or before. The leaflet might point out that people who asked for the results took the tiny risk of being unexpectedly found to be genuinely positive and even of being falsely found positive because of laboratory or test error, with all the attendant alarm, but that this was extremely improbable. Despite such an explanation it seems likely that some, perhaps many, such people would wish to know (I would myself, if the test were being carried out anyway, even though I would not bother to have my blood tested specially for HIV positivity). On the other hand, if patients did not want to take even tiny risks then they need not ask for the results, and their samples would be tested anonymously, as specified.

Patients in any proposed prevalence testing group who believed themselves to be in a high risk group would be given the options to discuss matters more fully in strict confidence or simply to ask for their HIV antibody results to be given to them or to say nothing, in which case the blood would be tested after being made anonymous. Perhaps a short account should be included of the pros and cons of finding out one's HIV antibody state and of the risks of false negative results, including those resulting from tests done within five to 12 weeks of a possibly infective episode, before seroconversion has occurred.

Perhaps one of the most morally offensive aspects of anonymous prevalence screening for HIV antibody is that when positive results are identified it is by intention and design impossible to convey the result even to those patients who would wish to be told that they were HIV positive—for example, because they wished to protect their future sexual partners. Under this proposal this defect would be remedied, and without the need to ask patients about their sexual habits and whether they took drugs the leaflet would simply give what is now standard health education about groups at increased risk of AIDS.

This proposal is intended to facilitate HIV prevalence studies while obtaining both consent and an indication of whether or not the patient wants to know the results. It respects the patient's decision whichever way it goes. Any such prevalence screening proposal should presumably be backed up with provision for supportive counselling, etc, for anyone found to be HIV positive who has requested to be told the result.

an excellent thing to undertake medical research in the interests of others, and it is an excellent thing if patients and others volunteer to assist in such research by, for example, giving blood in large or small quantities. But such volunteering is not an obligation, and doctors should surely not act as though it were.

Too trivial to require consent?

It was suggested at a conference on AIDS at King's College Centre for Medical Law and Ethics that the moral problems of failure to obtain consent for AIDS prevalence tests might be regarded as trivial. The Royal College of Physicians guidelines for ethics committees suggests (though not in the context of AIDS research) that "the withdrawal of a small extra volume of blood while blood is being taken for a necessary diagnostic process" may be considered as a minor procedure for which consent is not needed.⁵ It seems to me that people are likely to vary considerably in their attitudes towards this sort of proposal; the advantage of obtaining consent is that those who do not regard it as trivial do not have their views overridden. It seems to me far from trivial that doctors should intentionally design a system in which HIV positive samples may be discovered but there is no possibility of informing those patients who would wish to be informed—to protect their potential future sexual partners, for example.

No possible harm?

Finally, what about Sir Richard Doll's point with which I started: "How it can be unethical is incomprehensible, as it can do no possible harm to anyone and could do much good." There are two types of response to this question. The first, favoured by many non-consequentialists or "deontologists," is to say that while assessment of good and bad consequences is an important and necessary part of any moral assessment it is not sufficient. Some sorts of behaviour are wrong even if the consequences are likely to be good and no one will be harmed. Lying is an obvious example: undoubtedly in rare cases the harm to be avoided or the benefit to be obtained is so great that lying is justified, but there is a strong *prima facie* moral principle common to most thoughtful moral life that lying and deceit should be avoided. Similarly, the broader Kantian notion that it is wrong to use people as a means to an end without their consent is also widely accepted as a crucial moral principle. The second type of response is favoured by sophisticated consequentialists, including sophisticated utilitarians, and it states that even if the short term

consequences of breaking a moral rule, such as that against deceit and lying, are good the overall effect on society, including the long term effect, is likely to be harmful, and so such moral rules should in general be supported.

On either basis I believe that something similar applies to the case in point. As doctors we implicitly promise that when we do things to our patients—especially when we cause them some pain and remove bits of their bodies—we do so to benefit them, and it is partly on the basis of that implied promise that patients and society allow us to do the extraordinary things that we are allowed to do. It is important, I believe, to be scrupulous about honouring that promise, and if we want to do things to patients for any other reason than benefiting them then we should tell them so and obtain their permission (however simply). We trade on a deceit—a minor deceit but undoubtedly a deceit—if without either explicit or implicit permission we start using our patients for the benefit of others. The deceit is compounded if in so using our patients we discover important information that they may wish to know and we have deliberately both failed to find out whether or not they would wish to know it and so organised matters that we cannot pass it on even if they did wish to know.

Conclusion

I have argued not only that it is wrong (a minor wrong, perhaps) to do HIV prevalence testing without consent but also that it is unnecessary, for adequate consent seems relatively easy to obtain. Why don't we at least try it?

In preparing this and subsequent articles I spent an afternoon and evening discussing the issues with Dr Charles Farthing, and Dr Don Jeffries, Dr Tony Pinching, Dr David Powell, and Mr Tony Whitehead. They will not agree with all that I have written, but I am grateful to them for raising issues and rehearsing arguments. I should also like to thank the organisers of excellent and informative conferences on AIDS at the King's Centre for Medical Law and Ethics, the Royal Society of Medicine, and the Institute of Medical Ethics, and several anonymous patients.

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- 5 Royal College of Physicians of London. *Guidelines on the practice of ethics committees in medical research*. London: RCP, 1984:13.

How common is impotence as a complication of vasectomy?

There is no organic reason why impotence should occur after vasectomy. Careful detailed preoperative counselling of both partners should detect any marital conflicts and possible sexual disharmony, thereby allowing further discussion if there is a problem. It is unrealistic to expect that vasectomy will improve a sexual relationship that is less than satisfactory unless due to a genuine fear of pregnancy or discontentment with using a condom when the wife has discontinued oral contraception. If these problems are detected and discussed before the operation the incidence of psychogenic impotence purporting to result from vasectomy may be minimised. Occasionally the painful local complications of scrotal haematoma or infection can understandably result in a lack of interest in sexual activity, but this should be temporary. There are a small group of men who after a trouble free operation subsequently develop scrotal pain often exacerbated by ejaculation, which may detract from sexual activity. If a tender sperm granuloma can be detected clinically excision of the nodule cures the problem. There will inevitably be—particularly among older patients undergoing vasectomy—the occasional patient who blames his sexual difficulties on the operation. With careful preoperative counselling, however, it should be possible to detect these and it is reasonable to state that if there are no problems with potency before operation then there should be none afterwards. Evidence suggests that sexual relations are usually improved after vasectomy,¹

although it is unwise to assume that this is necessarily so.—J C GINGELL, consultant urologist, Bristol.

- 1 Jackson LN, Avant P. Vasectomy: a follow-up of 2000 men. *J R Coll Gen Pract* 1982;32:172-3.

Can bran and high fibre foods ever precipitate attacks of diverticulitis?

There is no evidence that bran or any food can precipitate genuine diverticulitis—that is, perforation of a diverticulum with consequent pericolicitis (localised peritonitis or abscess formation). There are, however, occasional patients with symptomatic diverticular disease (which is really diverticular disease with symptoms of the irritable bowel syndrome) in whom bran or high fibre foods cause increased abdominal pain, bloating, or flatus. The same is true of irritable bowel syndrome without diverticular disease. This is not surprising because irritable bowel syndrome is related to stress and suppressed emotion at least as often as it is related to diet. Bran and high fibre diet are most likely to help when there is an element of constipation, which is sometimes detected only by feeling scybala in the rectum on digital examination. Bran is most likely to exacerbate the situation in patients whose bowel disturbance is mainly diarrhoea.¹—K W HEATON, reader in medicine, Bristol.

- 1 Cann PA, Read NW, Holdsworth CD. What is the benefit of coarse wheat bran in patients with the irritable bowel syndrome? *Gut* 1984;25:168-73.