requesting permission for HIV antibody testing some life assurance companies rightly ask proposers to nominate their general practitioner or another named doctor who should be informed in total confidence in the event of a positive result. This doctor need not be the one who obtained the sample, who may be less well known to the proposer and not necessarily in a position to offer long term support. This makes the procedure more personalised and acceptable to the proposer.

My life assurance society does not at present use saliva tests for HIV antibody testing so I have not had to delete references to false positive results in policy holders' documents. In the less likely event of a false positive result of a blood test I would insist that the subsequent negative result was given due prominence. These documents remain strictly confidential to the underwriting team.

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EDITOR,—We endorse Delia F Morris's letter about salivary testing for antibody to HIV.¹ It would be interesting to know if the laboratory concerned was in the private sector since the quality control measures mentioned would already have been implemented in NHS laboratories.

It has also been brought to our attention that salivary testing is being suggested for use in screening people in custodial care (prisons and young offenders' institutions). It has been emphasised that, at the moment, salivary tests are suitable for anonymous surveys of seroprevalence in various populations but should not be considered to be an alternative to testing serum in named patients. We believe that it would be unfortunate if salivary testing received adverse publicity since it is potentially very useful; a foolproof method of obtaining a reliable sample for testing has yet to be identified, described, and assessed.

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Cycle helmets

EDITOR,—The most surprising aspect of the recent debate on cycle helmets is how widely the crucial points were missed.¹⁻³ There is no logical argument against wearing a helmet approved by the American National Standards Institute; it will do no harm and may do some good.

Doctors are whistling in the wind if they believe that public health strategies, schemes, and programmes will change the public's attitude. The considerable increase in helmet wearing over the past five years is due simply to changed perception of its fashion status. For most people the real reason that they do not wear a helmet is that they think that they look "uncool" or stupid (depending on peer group) riding around with a lump of

polystyrene and acrylic on their head. Those of us who are cyclists and doctors and believe in wearing a helmet as one of several self protective techniques must be grateful that manufacturers and retailers clearly understand the group and individual psychology of the disparate population of child, commuter, and recreational and sports cyclists. That they understand their market better than we understand a potential patient population should be a salutary lesson.

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- 3 Trippie HR. Helmets for pedal cyclists. *BMJ* 1992;305:843-4. (10 October.)

EDITOR,—It is interesting how personal experience modifies one's views. I refer to use of cycle helmets.¹⁻³ A cyclist for well over 50 years, I used to share the view expressed by Mark McCarthy.²

Some years ago I was unconscious for a short time, with amnesia, after falling from a cycle and sustained head trauma requiring a fair amount of suturing. Although I quickly recovered from the injuries, I was left with a postural vertigo that lasted for over two years. Cynthia Illingworth states that "head injuries which at first seem to be minor may later prove more serious or lead to sequelae." My experience makes me wonder just how much hidden morbidity there is after head injuries incurred during cycling. In advocating the use of helmets doctors should emphasise their protection against morbidity as much as the life-saving aspects.

Modern helmets are light, well ventilated, and easy to wear. After a week or two of regular use they are on a par with car seat belts because you soon forget that you are wearing one. More use of helmets by adults would have a favourable influence on the more vulnerable young. I am not sure that legislation would be the answer but believe that doctors should recommend use of helmets as part of advice on lifestyle.

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Eradicating *Helicobacter pylori* in patients with duodenal ulcer

EDITOR,—We should like to comment on Shorland W Hosking and colleagues' paper reporting short term treatment for *Helicobacter pylori*.¹

The prevalence of metronidazole resistant *H pylori* before treatment and patients' compliance are major determinants of the eradication rate of treatments including metronidazole.^{2,3} Although we initially reported an overall eradication rate of 87%, subsequent subgroup analysis disclosed a 93% eradication rate for strains sensitive to metronidazole but only 19% for resistant strains.¹ Therefore it would be valuable to see a similar analysis with respect to Hosking and colleagues' data, because only then can the true effectiveness of their regimen be assessed. The importance of metronidazole resistance in determining the outcome of treatment and the emergence of multi-resistant strains of *H pylori* when treatments fail should not be underestimated; this problem makes pretreatment culture and in vitro antibiotic

sensitivity testing important for clinical trials and routine management.

Assessment of compliance is mentioned by the authors, but unfortunately no details of how this was done are given. Informal inquiry at the end of treatment is not adequate.

The usual definition of eradication (confusingly referred to as clearance in table II of their paper) requires all tests to be negative at least one month after the end of treatment. In studies relying solely on culture (for which five days on non-selective media is not sufficient) false negative results may have occurred.⁴ It is also not clear how patients with false positive results on urease tests and the one patient who subsequently regrew *H pylori* were classified. Thus it is possible, on an intention to treat analysis, that the eradication rate was only 64/78 (82%) and not 70/74 (95%).

The inherent problems of biopsy based methods for detecting *H pylori* are compounded in patients given omeprazole (incidentally, the dose used by Hosking and colleagues in their study is not stated) if biopsy specimens from the gastric corpus are not analysed.^{5,6} These problems could have been avoided by using a urea breath test to detect eradication. The breath test accurately detects the low levels of recolonisation often present after failed treatments and also provides the clinical "gold standard" alluded to by the authors in their discussion.^{5,6}

Finally, the design of the study may suggest that rates of duodenal ulcer healing and recurrence were additional end points. Graham *et al* have already shown, however, that ranitidine and a similar regimen against *H pylori* significantly increases the healing rate of duodenal ulcers,⁷ and we and others have shown that short term anti-helicobacter treatment without acid inhibitors is effective primary ulcer healing treatment for bleeding or non-bleeding ulcers.^{8,9}

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AUTHORS' REPLY,—Resistance of *Helicobacter pylori* to metronidazole was not measured in our trial. Logan *et al*'s data showed that 19% of resistant strains were eradicated by their regimen