both for succeeding years of medical students and for Papua New Guinea itself.

The country has become a firm favourite with students in recent years, being perhaps the best choice for those wanting to experience medicine in a developing country. I doubt that there is one doctor, including Dr Kurer, who has not benefited from a visit to Papua New Guinea. But what the outraged authorities may have forgotten in the heat of their indignation is that they would gain nothing and perhaps lose much by a blacking of British medical students. Our total contributions to health care or research programmes during our short electives are necessarily small, but loss of the interest, concern, good will, imaginations fired, and of the memories we take home with hopes to return would be a heavy price indeed to pay for discouraging visits in future. I hope that a visit to Papua New Guinea will continue to be the outstanding experience in a handful of student careers as it was in mine.

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Early detection of glaucoma

SIR,—The leading article by Mr R P Crick on the early detection of glaucoma (16 October, p 1063) was very informative. The most important finding seemed to be that appreciable neuronal damage may occur even before tests show impairment of the visual fields and before the optic disc shows glaucomatous change.[1]

At the Bristol University Symposium in April 1977 Mr Crick observed: "About 10% of people over the age of 40 years will have intraocular pressure over 20 mm Hg." Mr R A Hitchings of the Moorfields Hospital, who spoke at the same meeting, believed that the incidence of so-called ocular hypertension was even higher: "Assuming a total population of 55 million in the British Isles . . . 9% have ocular hypertension." Up to now ocular hypertension has been regarded as benign and treatment is usually not indicated, but if Galin's work[1] is substantiated there may be up to six million people in the United Kingdom who are susceptible to neuronal damage. This by itself is staggering, but there is another question which remains to be answered: "If the systemic blood pressure is low to begin with (a recognised entity) or if the individual starts with a cupped disc from childhood ("physiological cupping") will the nerve fibres, which are already kinked at the edge of the cup, become compromised even though intraocular pressure is 20 mm Hg or lower (a level which would be tolerated by an individual with a normal blood pressure or a flat optic disc, or both)?" The question can be answered only after a 40-year survey of all children with "physiological cupping." Patients would be required to attend each year for (*a*) measurement of systemic blood pressure; (*b*) measurement of intraocular pressure; (*c*) photography of the optic discs (preferably three-dimensional); and (*d*) charting of the visual fields by an accurate reproducible method.

If it could be proved conclusively that an individual with a cupped disc or low systemic blood pressure, or both, is vulnerable, at a level of intraocular pressure that a normal individual would tolerate, this would put an end to the conventional theory that 20-21 mm Hg is the upper limit of "normal"; as long as this normal limit is maintained the patient does not have to "cross the Rubicon" and start treatment. A basis can also be laid for explaining and classifying the cases of "low-tension glaucoma" which have hitherto been quite puzzling.

This project is under way here at our medical eye centre, and I hope all ophthalmologists with a fundus camera will be able to set aside time for work of a similar nature.

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[1] Galin MA. *Research and Clinical Forums* (in press).

SIR,—The early detection of glaucoma does not depend so much on fancy apparatus as on thinking of the possibility in any patients at risk—primarily the over 40s with a visual difficulty (apart from glasses) or a family history of glaucoma. Some authors—for example, Dr W G Steinmann (16 October, p 1091)—have carefully avoided distinguishing between ophthalmic medical practitioners and ophthalmic opticians, treating them as if they were the same, which they are not. Even the ministry seems to think they are the same except that the opticians do much better on expenses. I will stick to the same policy and call them jointly "eye testers" although there is no question to whom I would go if I wanted to have my eyes checked.

As to pressure tests I have one pet aversion—the non-contact tonometer. It is a machine which is very popular with one group of eye testers, but it is not without discomfort, it is a great worry to the patient and it is not accurate in such circumstances whatever the makers may claim. A year ago my clinics were being flooded by agitated patients on account of such a test, which had often been carried out unrequested as if it were part of a sight test, which it is not. In the five months from the end of October 1981 39 patients were referred with possible glaucoma. Two were narrow angle cases, one having been told a year previously because of this test that he had no glaucoma although it ran in the family and he had symptoms. By the time the tester detected a raised tension and referred him the diagnosis was obvious and the patient was half blind in that eye. Two were referred with cupping of discs which was congenital. One had retinal vein thrombosis in one eye and chronic glaucoma in the other, and so there was a need to refer him anyway. Two had worthwhile hypertonus confirmed, but there were no other signs or symptoms; they may well go on for years without becoming glaucomatous and it would be meddlesome to subject them to a meiotic regimen unless they do, but they are being kept under observation. One was referred correctly diagnosed as having chronic glaucoma by his general practitioner without any pressure test. Of the remaining 31 only six were found to have chronic glaucoma. Twenty-five were erroneously suspected and caused great anxiety on this account, not to mention the waste of clinic time checking these unnecessary referrals. Besides these six cases correctly spotted five were completely missed but referred with other things such as cataract.

I have no objection to cases being sent because of a suspicious disc or a field defect because even if not glaucoma there may be some other important condition, but referral just because of tonometry readings in the lower 20s is ridiculous. Also tonometry, even by accurate machines, may miss low tension glaucoma and narrow angle cases.

Examination of the discs for pallor and cupping is within the scope of general practitioners. If they are to improve their knowledge of the eyes they must be kept in touch and given the opportunity to see the discs before the patient is started on a meiotic regimen. Also cardiovascular disease is of importance in many eye diseases, especially in glaucoma. I fully support Mr P A Gardiner in wishing to have a note about the patient's general health and Mr L Fison and Mr M J Gilkes in insisting on referral being via the general practitioner (6 November, p 1351).

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Management of piles

SIR,—Are piles really as great a problem as Mr J Alexander-Williams would have us believe (23 October, p 1137)? Twenty years ago I rarely had an operating list that did not include at least one haemorrhoidectomy. During the last five years before I retired I hardly did any haemorrhoidectomies at all, and yet the same type of patients were attending my clinic. What had happened? Firstly, there was Peter Lord and his anal stretch, and then there was the discovery of bran. At first I was a reluctant convert to bran, but once converted I found that I was getting far more gratitude from sound advice than I had ever had from sound surgery. Bran, injections, and anal dilatations took care of 90% of my patients with haemorrhoids.

People forget that haemorrhoids are a subjective and not an objective disorder. The size of piles bears no relation to the trouble they cause, and to tell people that their piles are so large that surgery is the only answer is a non-sequitur. I have known patients with enormous piles who have gone on the bran regimen; their enormous piles remained but they no longer bothered about them. Unfortunately, many patients are not prepared for a simple dip in the Jordan, and, even more unfortunately, most surgeons like doing surgery. You can hardly expect surgeons to be keen on giving advice that tends to deprive them of a living. When I was a young medical student many years ago an old surgeon said to me: "The rectum is the bread and butter of a surgeon. Learn all about it, and you can forget about everything else." An exaggeration, perhaps, but in the days before proctologists he may have had a point. And perhaps things have not changed all that much.

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Road-user's eyesight

SIR,—Professor R A Weale (6 November, p 1351) was right to suspect that the law might be an ass after hearing the statement by the Government spokesman in the House of Lords about the proposal to allow the continued use of tinted visors by motorcyclists. What was said in the House of Commons when the Transport Bill returned there on 26 October must surely confirm Professor Weale's suspicion.

In the Commons it was stated that the new amendment sponsored by the Government would enable regulations to be made to ensure that visors—"those devices on which so much safety depends," meet specific