rather than acrocentric. In our patients no such deviation was observed.

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—We are, etc.,

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Intravenous Plastic Catheters

SIR,—The timely warning by the Secretaries of the three Medical Defence Societies (19 December, p. 1600) regarding the hazards associated with the use of intravenous plastic tubing does not mention one predisposing factor—viz., the methods of sterilization employed. At present the majority of plastic catheters are sterilized by gamma radiation to an extent of 2.5 megarads. It is perhaps insufficiently known that some of the plastics employed in their manufacture change their molecular structure if exposed to irradiation of 5 megarads or, in some cases, lower dosages, becoming brittle in the process. This change is unfortunately very difficult to detect if the catheter is supported by a needle or stilette, and if it is to be kept sterile subsequent fracture within the lumen of the blood vessel may occur and emboli result.

It is important, therefore, that the degree of radiation given should be stated by the manufacturers on the package, together with the maximum permitted dose for the plastic concerned, thus indicating not only the safety margin but whether or not the plastics can be resterilized by this means if so required.

Case reports by Udwadia and Edwards[1] and Lewis[2] stressed the necessity of radio-opacity in such tubing, but by no means all manufacturers have yet introduced this. While there are no doubt production difficulties in changing the actual composition of the plastic, as an interim measure perhaps a contrasting coloured tip to the catheter might be incorporated, thus indicating to whoever takes the tubing out that it has all been removed. Although this in itself would not prevent cases of fracture it should stop their going undetected at the time and make speedier intervention possible than waiting for symptoms to develop.—I am, etc.,

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Longer Training for Radiographers

SIR,—My daughter is one of several impending leavers from her school who have been critically looking at possible careers and who are attracted to radiography, because of the (at present) reasonably short two-year training. These girls are well aware of the advantages of getting quickly trained for a job in a world where early marriage gives so little time for most women to use the training they have laboriously acquired.

I have yet to find a radiographer who thinks there is any point in raising the training course to three years. Let us hope that the radiographers themselves can resist the attempt to foist on them an unwanted, and as we can conclude from your correspondence columns unnecessary, prolongation of studentship.—I am, etc.,

DOUGLAS GAIRDNER.

Addenbrooke's Hospital,
Cambridge.

Plight of Hospital Junior Staff

SIR,—Following the recent revelations regarding the 25% brain drain and the crash in the number of Indians now reaching these shores, I have been waiting with considerable interest to observe what steps the now enlightened Minister will implement to assure continued hospital staffing.

As an unsubsidized member of the Commonwealth contingent myself and one fascinated by the current situation within the Health Service, I have been more than aware both of direct economic pressures to stay at home and of the complete absence of material incentives to stay here, since arrival here two years ago.

To the best of my knowledge, no relief is offered to hospital junior staff in that category, such as taxation modifications, non-payment of national or even health insurance, unemployment benefits while attending post-graduate courses (remembering that in most instances our primary reason for being here at all is postgraduate education, in one form or another), or passage assistance.

Consequently, it is with considerable amazement that I now see that the Minister has allowed himself to lose even more ground in being beaten to the punch by the new deterrent terms of the Royal College of Surgeons. While the elevation of the College's standards cannot be challenged, this news can come as nothing more than a further figure in the debit column in the minds of those gravitationally opposed gentlemen now contemplating joining your ranks from far away places—I am, etc.,

GRAHAM MYLNE.

London W.12.

SIR,—I read the letter from Dr. S. Gallannaugh (23 January, p. 254) with interest. I feel that hospital junior staff suffer from a great disadvantage in that there is no one to represent their interests at Ministry level. The Royal Colleges are interested only in the affairs of consultants—especially those employed by London teaching hospitals—and the B.M.A. is primarily an organization to represent general practitioners. Thus it is easy to understand how the exploitation of junior hospital staff has continued year by year. For example, the deduction for residence is almost unique in this country—in industry employees are reimbursed for meals and lodging undertaken in the course of their work in most instances. In many hospitals the management committees frankly agree that the accommodation is well below standard—yet the full deduction for residence is still taken with the approval of the B.M.A., who will not support any demand for a reduction for the astonishing reason that these hospitals would have difficulty in obtaining staff.

No one, anywhere, considers that he is paid enough, but hospital junior staff would appear to have a better claim than most. Many graduates enter industry now at salaries between £900 and £1,000 a year—a glance at the "situations vacant" in "quality" Sunday papers will confirm this. The newly qualified doctor starts at £770 a year, less £175 for residence. If he stays in the hospital service he will be earning £1,710 as a first-year senior registrar at the age of 33–35—a highly skilled man with considerable responsibility and long hours. Meanwhile, his contemporaries in industry will probably by this time be running a car on the firm with perhaps an expense account and be earning between £2,000 and £3,000 a year —and good luck to them. It is their good fortune to work in an open market—hospital junior staff must needs work for a monopoly.

It is hardly wise to exploit every doctor who first joins the National Health Service. I understand that in the secluded halls of the Ministry of Health they have proved that doctors aren't emigrating to better conditions —all I can say is that two more will be joining the "ghost drain" next year—my wife and myself.—I am, etc.,

DONALD MACKENZIE.

Cheriton Fitzpaine,
Devon.

Complaints Against Doctors

SIR,—Sixteen months after a complaint against me by a patient, 12 months after the case was dismissed without a hearing by a medical service committee, and four months after a hearing by the tribunal of the complainant's appeal I was informed that the Minister was satisfied that there was no substance in the complaint and that there were no grounds for supposing that I "had fallen from the highest standards to which [my] profession could aspire." The Minister further stated that my attempts to render the best possible care were frustrated through no fault of my own.

My relief at such a complete acquittal was mixed with a bitterness which prompts the following reflections. Why should I and my family have been disturbed by this affair for sixteen months ? How much more disturbing must such a delay be for doctors whose cases are not so clear cut. Apart from the costs incurred by my medical defence society and the incalculable cost to me in anxiety and in the time spent in preparing my case, I was £20 out of pocket. I understand that the complainant was assured in advance that she need not worry about costs. But, I ask, if costs are not demanded from the complainant in a case in which there is found to be no substance, in what sort of case

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