

all seem to have derived some benefit from the exercise, since the librarian informs me that the students concerned used the library more fully and effectively than students usually do, a fact which bears out Professor Pickering's observation that the average medical school library is a place where the student reads only his textbook or his lecture notes.

The correction of these tasks, which may number from 30 to 45 in each three-month period, takes up a fair amount of one's time, and, although written corrections and comments may suffice, I am sure that the student would derive much more benefit if he could have spent half an hour or so discussing his written work with me; I, too, would have a better idea of his problems and difficulties, and would be the better able to guide him in his further reading or correct erroneous notions.

It seems quite clear from the brief discussions I have had with some of the students concerned that the curriculum of the Final M.B. of London University does not allow enough time for such teaching methods to be adopted on a wide scale, apart altogether from the problem of providing each teacher with a room of his own where he can discuss the work with each student. This tyranny of the London M.B. is resented by the more thoughtful students from the older universities, in particular Oxford, where it would seem that a less narrow view of medical education obtains.

I agree with Professor Pickering that the time has now passed when the student had to be packed full of facts before he was considered fit to be loosed on the world, and this should be reflected by a change in the attitude of his teachers and examiners. Students continually remind me that they must satisfy examiners, who still ask questions of the type mentioned by Professor Pickering, and, as long as examiners do so, who can blame the student if he looks upon exercises of the character I have described as intellectual luxuries which his timetable can ill afford?

With regard to Professor Pickering's comments on the contents of the curriculum itself, I think it would be a great pity if botany were to be excluded on purely utilitarian grounds. It is important for the undergraduate to learn to view life whole, and that means the whole of life, not just the animal half, but I agree with him that the student could do with much less anatomy, leaving the more detailed study to his postgraduate specialist training. I am not sure that some training in nuclear physics should be a part of all higher education, but I am certain it is needed by every doctor: most of us know so little about radioactivity and the effects of radiation that we, as users of radiation in diagnosis and treatment, have already added appreciably to the load of mutations that humanity carries. The greatest single need, however, is for further training in mathematics, at least to include the binomial theorem, elementary calculus, and an introduction to probability theory. Much biological work is now statistical, and some knowledge of statistical methods would seem to be desirable if the student is to be capable of critical appraisal of much of the results obtained in clinical trials and investigations into the alleged relationships between diet and disease, personal habits and lung cancer, to mention just one or two topical problems. I recently set some simple probability problems of the type represented by the question, "What are the chances in favour of the England captain winning the toss on all five occasions in a Test series if he always calls 'heads'?" Only one student in the group offered a solution, and that was wrong. This despite preliminary advice about looking up the binomial theorem or Pascal's triangle before attempting the answer.

There are several subjects in the final curriculum which I think are overdue for transfer to the postgraduate stage of training, and I would place anaesthetics high on this list, as modern anaesthesia is now so complicated as to require fully trained and skilled anaesthetists if the maximum safety is to be achieved for the patient.

The introduction of the pre-registration year gives us a great opportunity to revise the curriculum, so that the doctor

can once again find his place in the learned community of the university, and thus lessen the danger of turning him into the indoctrinated technician which Professor Pickering so rightly fears may be the case.—I am, etc.,

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Soap and the Skin

SIR,—The eulogy upon a neutral soap by my friend, Dr. Ian Martin-Scott, and Mr. A. G. Ramsay (*Journal*, June 30, p. 1525) appears at first sight to be justified by the scientific observations on the skin-fat factor and the pH and also by the clinical trials. It is known that keratin is more readily damaged by alkalis than by equivalent acid concentrations, and the work of Anderson¹ mentioned by Scott was but part of a research project in my clinics to evaluate the practical importance of treating the skin with buffered lotions and creams adjusted to its normal pH. In this project we had the assistance of J. W. Hadgraft, F.P.S., F.R.I.C., and I am indebted to him for further technical advice. We were disappointed that the skin failed to appreciate our concern for its acid mantle, and we found that our buffered preparations with a pH ranging about 5 were rarely better tolerated than the official creams and lotions, which are usually mildly alkaline in reaction. It is notable from the data given by Ramsay that, although the pH of the skin is increased to 8 after washing with toilet soap, 25 minutes later the pH has dropped to 5, so that the acid mantle is fully restored. Even if this is partly due to the adsorption of fatty acids from the soap, these acids are unlikely to irritate the skin, which normally has oleic acid in its oily secretions. Vanishing creams with a high proportion of free stearic acid are in common use and do not produce dermatitis, or, if they do, the causative irritant is usually the emulsifying agent, which may be triethanolamine.

The reported chemical and biophysical hazards of using common soaps fall into a proper perspective if one considers how often tablets of this alkaline irritant are rubbed into the hands with impunity, and even delicate skins tolerate the sparing use of a good toilet soap. Many patients with skin diseases tolerate and often benefit from the cautious use of soap and water, and the harmful osmotic effect of the latter upon broken or damaged skin is prevented by the addition of 1% of common salt. Few dermatological patients need more skilful nursing and the avoidance of external irritants than those with infantile eczema, but daily saline baths and the sparing use of a good soap have been part of our long-established routine and are well tolerated. The theoretical advantages of a neutral soap induced us to give it a clinical trial in the treatment of patients with infantile eczema. The results were no better than those obtained by the use of a toilet soap or one medicated with a mercurial salt which has been of value in infected eczema. The neutral soap was less soapy and appeared to irritate the skin in two patients. It may be significant that two instances of cutaneous sensitivity to triethanolamine were reported by Curtis and Netherton.²—I am, etc.,

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REFERENCES

- Anderson, D. S., *Brit. J. Derm.*, 1951, **63**, 283.
- Curtis, G. H., and Netherton, E. W., *Arch. Derm. Syph.*, 1940, **41**, 729.

Involvement of Bronchi by Metastatic Pulmonary Tumours

SIR,—In discussing my report of a case of massive tumour embolism from Sully Hospital (*Journal*, February 25, p. 435), Dr. R. C. Jennings (*Journal*, March 17, p. 630) has raised the important point of bronchial involvement by metastatic pulmonary tumours. I agree that the presentation of an adrenal cortical carcinoma as an intrabronchial neoplasm is rare, but in our case the pathologist thought that this pleomorphic tumour was far more like an adrenal carcinoma than a primary bronchial tumour. It had an unusual and distinctive appearance which, in our pathologist's experience,