effect of digitalis on the myometrium and on the time of onset and duration of labour are questionable. They advance the idea that digitalis has a direct action on the uterus, improving its efficiency.

Digitalis reduces cerebrospinal fluid secretion.¹ Given parenterally in full therapeutic doses it reduces C.S.F. volume as excreted by the choroid plexus by 75%. From my clinical experience, this appears to be relevant to a variety of conditions in which the intracranial pressure is raised. Digitalis is an open steroid and is known to pass the placental barrier.^{2,3} It seems just possible that this important action of digitalis on C.S.F. secretion may be the key factor in improving uterine performance simply by reducing the quantity and pressure of fluid within the fetal skull, thus reducing its size.

This hypothesis could be tested by watching uterine performance in breech presentations in digitalized women.—I am, etc.,

E. BARRY MURPHY

Limerick

¹ Neblett, C. R., Mcheel, D. P., Waltz, T. A., and Harrison, G. M., *Lancet*, 1972, 2, 1008.

² Sherman, J. L., jun., and Locke, R. U., *American Journal of Cardiology*, 1960, 6, 834.

³ Potondi, A., *Journal of Forensic Science*, 1966, 11, 81.

Strategy for Allocating Revenue to Medical Services

SIR,—The paper by Mr. L. J. Opit and Dr. K. W. Cross (*Supplement*, 20 October, p. 13) highlights the difficulty of obtaining accurate statistics. The obvious import of the paper is that the Liverpool Region is more heavily loaded with medical staff and resources than other regions. As a radiologist I am one of the people who would expect to be used more by clinicians than in other regions and I wondered, therefore, how the radiological demand in the Liverpool Region compared with that in the country as a whole. The Liverpool Region contains approximately 4.82% of the population of England. In 1972 the Liverpool regional hospitals performed 4.99% of the radiological work performed by regional hospitals in the country—slightly above the population average but, when it is realized that the Liverpool Region has no rural hinterland, this slight excess is not surprising. Urban areas always produce more work than rural areas for many reasons, ranging from the ease of access to the facilities on the one hand to the relative toughness of city and country dwellers on the other. The inference of the above figures would seem to be that the demand in the Liverpool Region is what would be expected and that possibly a lot of the work being classed as acute might well be classed under other headings in other regions. If this were not so, then surely the total radiological demand would be higher.

It is also interesting to note that the radiological sessions in the Liverpool Region are only 4.3% of the total regional sessions in the country—below the average which the population would justify—and this surely is a supporting figure to suggest that the services provided to the Liverpool Region as a whole are not disproportionate to the population served.—I am, etc.,

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Arteriovenous Fistula and Congestive Heart Failure

SIR,—The long-term use of the Brescia-Cimino fistula for haemodialysis is associated with remarkably few complications¹⁻³ other than the possible danger of congestive cardiac failure.⁴ When congestive failure does occur it is usually due to the superimposition of increased venous return in patients already predisposed by hypertension, sodium and water retention, cardiomyopathy, and anaemia. Recently, however, we have had to close an arteriovenous fistula for a patient who had the following unusual aetiology for her congestive failure.

The patient, a 45-year-old housewife, presented in August 1972 with terminal renal failure due to chronic glomerulonephritis. A Quinton-Scribner shunt was inserted into her right posterior tibial artery and long saphenous vein and haemodialysis commenced. A left radiocephalic end-to-side snuff-box fistula was fashioned, but fistula flow was poor owing to the minute size of her distal radial artery and cephalic vein. Two months later a right radiocephalic fistula was created with a similar poor result. After a further two months a left forearm side-to-side radiocephalic fistula was made and good flow established, enabling her to use the left forearm fistula for haemodialysis and her Quinton-Scribner shunt to be removed.

Over the next 10 months, however, the veins of the right arm became increasingly distended and a thrill could be felt over the lower 12 cm of the radial border. Eventually signs of congestive cardiac failure developed and it was decided to close the right wrist fistula. At operation it was found that in spite of closing the snuff-box fistula the thrill and venous distension persisted and that this could be prevented by pressure over a discrete pulsation 12 cm proximal to the original fistula. This was explored and a second radiocephalic fistula was found and closed, with immediate disappearance of the thrill and venous distension.

It transpired that the patient had used her right forearm for "practice" during her home dialysis training programme. We believe that the patient had created for herself a traumatic arteriovenous fistula in her right forearm (which paradoxically had been difficult to establish surgically) and that the combined flow through both forearm fistulae had then precipitated cardiac failure.—We are, etc.,

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M. C. OAKLEY

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Doctors in South Africa

SIR,—I have read the letter from Mr. I. N. Bernadt (22 September, p. 632) in connexion with salary scales in South Africa. I have also read your footnote stating that the *B.M.J.* "has now stopped accepting advertisements from South Africa unless assured that no discriminatory salary attaches to the post advertised."

Mr. Bernadt's letter is factual as is his comment that the South African Medical Association has for many years condemned the discriminatory scales in South Africa and has constantly and still is pressurizing the Government to change this situation. Many of our universities, including my own, are also attempting to persuade the Government to equalize salary scales for doctors.

In respect of your own action I can understand the motives behind it. I think, though, that you should be aware of the

following: (1) It is doubtful whether your action will have any effect on the Government's attitude towards discriminatory salaries. The pressure that is being exerted from within South Africa may, however, effect a change. (2) An important side effect of your decision is that in the long run it may adversely affect medical services. Our major commitment is to our Negro population so that they will be affected most.

I can illustrate my point by referring to my own department, the department of ophthalmology at this university. We have a 150-bed ophthalmology unit, of which 110 beds are for Negro patients. These patients are looked after on the medical side by two part-time ophthalmologists, two full-time ophthalmic specialists, and five residents. All these doctors have joint appointments to the provincial government and the university. There is a shortage of ophthalmologists in this country and it is difficult for me to fill these full-time posts without drawing from ophthalmologists abroad. In the past a number of ophthalmologists from Britain and Europe have worked in these full-time posts at the St. John Eye Hospital. If your decision means that I am unable to advertise these posts in your journal (and as these are joint appointments to the provincial government there will be a salary discrimination) and as a result of this I am unable to fill these posts, then my department may be forced to restrict its services. This would be tragic. We have worked hard over many years to provide an excellent medical service at the St. John Eye Hospital and it would be sad if your decision forced us to restrict the service. I think you should be well aware that this applies not only to my own department but also to many others and to other provincial hospitals that are not teaching hospitals, so that your action may have quite widespread effects in terms of the medical services provided, especially to our Negro population.

One recognizes that you have taken this decision because you wish to protest against the South African Government's policy of salary discrimination based on racial grounds. We at this university would support your viewpoint, but surely you could have used some other method of showing your disapproval—for example, leading articles in the *B.M.J.*, using your influence with medical bodies in South Africa to protest more vigorously against the Government's policy, and so forth. I accept your motives but feel that your method of protest is a most unfortunate one.—I am, etc.,

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Service in Developing Countries

SIR,—Having just returned from an immensely stimulating, enjoyable, and refreshing short-term (six months) post in an African rural hospital, I would like to mention two points which may be helpful.

Firstly, there can come a time when the opportunity to go presents itself at short notice and then finding the overseas post can be a slight problem. It may be useful to know that there are a number of organizations which liaise with hospitals in developing countries. Among these are: The