associated with schistosomiasis,¹⁸ and protozoal infection¹⁹ can pre-empt the immune response to viruses; so it is relevant to ask again whether, in a tropical context, the HB antigen is "the driver or the passenger." There remains the challenging anomaly of Ethiopia, whose uplands, free from widespread schistosomiasis or malaria though not from mould-contaminated staples and herbal medicine traditions,²⁰ have an impressive incidence of cirrhosis and hepatoma without a prevalence of HB antigenaemia significantly higher than that of the ambient population.²¹ You are, I would agree, entirely correct in asserting that "the evidence is persuasive enough to add a medical reason to the already pressing socioeconomic indications for improving harvesting techniques and storage conditions for foodstuffs in underdeveloped countries" and, on the next page, that "foreign aid . . . has not always been granted on a basis of real need." Village-level improvement of crop storage is a need best met, as in Ethiopia, by what is now called "appropriate technology" rather than large-scale "agribusiness." A multimycotoxin screening procedure is now available,²² but some resistance to local studies on the part of groundnut-exporting countries will have to be overcome before the extent of the problem can be fully known.—I am, etc.,

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SIR,—Your leading article (21 June, p. 647) states that "throughout the world, a high proportion of HBAG-positive patients with hepatoma have been found to have cirrhosis." The references quoted do not support this contention. In the three papers referred to¹⁻³ a total of 40 patients with hepatoma are described, of whom 22 were Kenyan and 16 Greek. Of the 22 Kenyan patients, three were HBAG-positive and only two, not necessarily HBAG-positive, were shown to have a coexisting cirrhosis. Of the 16 Greek

patients, all with histological evidence of cirrhosis, seven were HBAG-positive.

Hepatoma is common in Africa: underlying cirrhosis is certainly underestimated owing to lack of post-mortem data and the replacement of liver by tumour. Despite the finding of HBAG in a significant number of patients with hepatoma¹ it has rarely been possible to state equivocally that hepatomas in HBAG-positive patients arose in a cirrhotic liver or that hepatomas in HBAG-negative patients arose in a non-cirrhotic liver.

In a series of 31 Gambian patients with proved hepatoma a coexisting cirrhosis was found on biopsy in three. Nineteen of the patients were HBAG-positive, including the three with cirrhosis. If patients with clinical and biochemical evidence of cirrhosis are included in the analysis of these hepatoma patients, then eight out of 19 HBAG-positive patients were cirrhotic compared with two out of 12 HBAG-negative patients. Though suggestive, these differences do not achieve statistical significance ($0.10 > P > 0.05$).

The relationship, if any, between HBAG, cirrhosis, and hepatoma can be firmly established only by longitudinal studies of chronic HBAG carriers.—I am, etc.,

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** We were interested to hear of Dr. Ree's findings in the Gambian patients with hepatoma and would agree that a link between cirrhosis and hepatoma in relation to HBAG positivity is far from proved. As he points out, the diagnosis of cirrhosis during life may be difficult even when needle biopsy is used, owing to the sampling error, and serial longitudinal studies of HBAG chronic carriers and complete post-mortem data on those dying of hepatoma are essential to our further understanding.—ED., *B.M.J.*

Adverse Reactions to Prazosin

SIR,—The new antihypertensive drug prazosin is reported to have a slow onset of action and the antihypertensive effect may take several weeks to reach a maximum. It appears to act as a vasodilator by antagonizing phosphodiesterase in vascular smooth muscle. In view of this 15 outpatients were started on treatment with one 5-mg tablet daily as an addition to other antihypertensive therapy.

Five patients spontaneously discontinued treatment after only one dose owing to a serious adverse reaction. All complained of faintness, weakness, and sweating, and in two patients syncope occurred. All the reactions began within three hours of taking the first tablet and were associated by the patients with the new medication. One patient required emergency admission to hospital, where mild hypotension was recorded for 48 hours followed by a return to pretreatment levels.

Dr. M. J. Bendall and his colleagues (28 June, p. 727) also recorded a high incidence of immediate side effects after a 2-mg dose.

Such serious side effects might be avoided if a test dose of 0.25 mg were used before starting therapy as suggested by Gabriel *et al.*¹—We are, etc.,

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- 1 Gabriel, R., Meek, D., and Ghosh, B. C., *Lancet*, 1975, **1**, 1095.

Early Thymectomy for Myasthenia Gravis

SIR,—Your leading article (2 August, p. 262) presents a fair summary of recent views on the surgical treatment of myasthenia gravis, emphasizing the confirmed value of early thymectomy. However, two statements require correction, one being misleading and apparently due to an error in interpretation, the other being wrong and possibly based on unfamiliarity.

The first point concerns the statement in the second paragraph—"At the Mount Sinai Hospital, New York, with experience of 185 patient with myasthenia. . . ." In fact the experience has been gained from over 1500 myasthenic patients seen at that hospital. Of these, 430 have undergone thymectomy, and it is from this group that 185 (the number has since increased to 230) were operated on by the transcervical approach.

The second point concerns the final sentence—"and the traditional approach retains its advantage—the surgeon can actually see what he is doing." The clear implication is that this boon is not granted to those practising the transcervical approach. This criticism has been made in the past few years by those who have not witnessed the procedure at all. However clear a written description may be, the entirely different technical perspective can be vividly appreciated only by doing the operation or seeing it done. In fact the whole operative procedure, though performed through a small incision, is, with intelligent retraction, under excellent vision at all times; and it is no exaggeration to say that dissection along the pleural lining and the anterior border of the pericardium can be quite easily continued downwards practically to the diaphragm. The innominate vein is, of course, completely exposed and under absolute control by either finger or vascular clamps if necessary. The fear of haemorrhage from this vein or its tributary from the thymus is no more a menace than dissecting any major vein, and its high-lying position immediately behind the sternum makes division of the thymic veins a first and relatively easy step.

The reason for stressing the adequate exposure and completeness of transcervical thymectomy is not simply to proclaim the virtues of a different technique. Rather it is because the classical transsternal approach for non-thymomatous myasthenia is a major trial and, in my view, an unnecessary one for patients. The fact that modern anaesthesia and nursing in intensive care units are able to reduce the mortality to a very low level—and in our series of 111 transsternal thymectomies despite all these advances it was not under 3%—should not obscure the outstanding benefits of the transcervical approach. In the wake of a transsternal incision there is a painful wound, major disruption of the rib cage with its additional respiratory burden in the myasthenic, a significant rate of patchy atelectasis postoperatively, and an

average hospital stay of 10-15 days. Even after the most benign and trouble-free convalescence there remains an ugly, sometimes keloidal, vertical chest scar in young girls and women. This is to be contrasted with a suprasternal incision pain-free post-operatively, a hospital stay of 3-4 days, and an acceptable small thyroidectomy-like scar. In addition the continuing controversy over the timing and dosage of postoperative anticholinesterase drugs is largely eliminated. As soon as spontaneous breathing returns, which it does in a matter of hours because of absence of pain and chest wall disruption, medication is resumed on the identical time and dose schedule as preoperatively. These advantages have been more than borne out in over 200 transcervical operations done in the past eight years.

Furthermore, in our experience one of the main justifications for early thymectomy is based on the ease of the transcervical operation, with its completeness of thymectomy and virtual abolition of morbidity and mortality.—I am, etc.,

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Metastatic Carcinoma Causing Haematemesis

SIR,—On reporting perhaps the first case of haematemesis due to metastatic carcinoma in the stomach, Dr. R. Edwards and Mr. G. Royle (14 June, p. 598), state that "the case demonstrates the necessity for a routine chest radiograph in all cases of haematemesis" apparently because the primary was in the chest. If this is the first reported case, one might guess that this condition occurs once in 100 000-1m. cases of haematemesis. A chest radiograph costs about \$35 in Los Angeles. Accordingly the "marginal cost"¹ of detecting a case of lung carcinoma metastatic to the stomach presenting as haematemesis is \$3½m. to \$35m. (Problems of sensitivity, specificity, and the value to the patient of diagnosis of this lesion have been ignored in this calculation.)

There may well be good reasons for routine chest radiography in haematemesis, but diagnosis of gastric metastasis of lung carcinoma is not one of them.—I am, etc.,

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¹ Neuhauser, D., and Lewicki, A. M., *New England Journal of Medicine*, 1975, 293, 226.

Services Available for Total Joint Replacement

SIR,—I read with interest the article by Dr. J. R. W. Morris (2 August, p. 290) in which he says that the average time in hospital for a total hip replacement was 29 days.

He did not give much prominence to those units which are able to achieve a far higher turnover than this. If the time in hospital could be cut to one-third of 29 days this would treble the number of beds available for arthroplasties. I believe a hospital is not the place to keep an old person after arthroplasty for any longer than absolutely necessary, and often this can be less than a week. Some form of sheltered accommodation may be necessary for a short while

thereafter, but it certainly need not be in an acute ward.

In 1974 the average length of stay for a total hip replacement in this hospital was 13 days, and this has been reduced to 10 days over the past year. By careful management and planned progress I am sure this figure can be lowered further. We have to do this because there are only two orthopaedic wards in this small district general hospital, which are in no way buffered; all accident patients have to be admitted to the same wards.

This approach, shortening the stay in hospital, makes the figures produced by Mr. Morris greatly overpessimistic.—I am, etc.,

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Antibiotics in Surgical Wound Infections

SIR,—Your leading article "Antibiotics in Surgery" (5 July, p. 3) suggests that, in general, there is no rational basis for the use of antibiotics in surgery. However, it would seem that when a surgeon wishes to start antibiotic treatment of a clinically infected wound before bacteriological results are available the "best-guess" antibiotic should be based on recent experience in that surgeon's own hospital both of the organisms most frequently isolated from various types of wound and of the antibiotic sensitivity patterns of these organisms. We have attempted to provide such information for the surgical staff of a local general hospital on the basis of a survey of wound infections there during the year 1974-5. In accordance with a previous report¹ we classified wounds in four groups: clean, clean-contaminated, contaminated, and dirty.

Of the 110 wounds investigated 90 (82%) yielded bacterial growth. The three commonest organisms isolated were: *Escherichia coli* from 38%, *Staphylococcus aureus* from 28%, and *Bacteroides spp.* from 9%. *Staph. aureus* was most frequently associated with clean wounds (19 of 42) and *E. coli* with clean-contaminated wounds (18 of 32) and dirty wounds (14 of 27); the nine contaminated wounds were too small in number for analysis. These findings suggested that clean wounds were most likely to undergo exogenous infection—for example, with *Staph. aureus*—whereas clean-contaminated or dirty wounds were generally endogenous infections—for example, with *E. coli*.

Antibiotic sensitivity results as assessed by disc-diffusion procedures showed that only seven (23%) of the 31 *Staph. aureus* strains were sensitive to penicillin, but all were sensitive to flucloxacillin. Multiple resistance to penicillin, tetracycline, and streptomycin was found in 11 (35%) of the *Staph. aureus* strains, only two of these 11 having the same phage type (85/90W). For the 41 *E. coli* strains the percentage sensitivity against each of the three "first-line" antibiotics was 81% for tetracycline and 73% for both ampicillin and co-trimoxazole, sensitivity to co-trimoxazole being assessed as advised.²

The results of this study indicate that at present, in our area, the "best guess" for treatment of wound infections before the results of sensitivity tests are known would be flucloxacillin for clean wounds; for clean-contaminated and dirty wounds co-

trimoxazole or ampicillin would be preferable to tetracycline since the last is only bacteriostatic and also has a higher risk of toxic side effects. During this study sensitivity tests were not done routinely against "second-line" antibiotics. However, for severely ill patients the "best-guess" antibiotic would generally be gentamicin or tobramycin, though control of therapy involves serum assays. For severe infections following abdominal surgery metronidazole or one of the lincomycins might also be indicated if an infection with *Bacteroides spp.* is suspected.

We wish to thank the consultant surgeons at Kilmarnock Infirmary, Mr. P. D. Livingstone, Mr. J. D. McCardel, Mr. G. J. Ralston, and Mr. J. H. Simpson, for access to their records.

—We are, etc.,

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¹ Report of Committee on Trauma, United States National Academy of Sciences, *Annals of Surgery*, 1964, 160, Suppl., p. 23.

² Garrod, L. P., Lambert, H. P., and O'Grady, F., *Antibiotic and Chemotherapy*, 4th edn., p. 504. London, Churchill Livingstone, 1973.

Pavane pour une Langue Défunte

SIR,—May I, as a professional English technical translator, respond to Professor Philippe Meyer's "Plaint from Paris" (7 June, p. 553) with my own "Lamentation on the Death of the English Language"?

I sympathize with Professor Meyer's predicament and know from my own experience that many Frenchmen share his feelings about the rape of *cette belle langue* at the hands of callous, casual English. But I would ask him to consider how much more traumatic rape must be when perpetrated unwittingly by the would-be lover. For this, in my opinion, is what is happening to the English language as it suffers the daily attentions of French, Japanese, German, etc., not to mention American, authors who must publish or give their papers in English if their work is to make any mark at all. Unfortunately the results are often only barely comprehensible to the native speaker of standard English. If the present trend continues Professor Meyer will require a course in "international sciences" rather than in English (if the two are not by then identical).

I see no feasible cure for the malady. To render the international scientific community bilingual (mother tongue and English) is quite impracticable. The average non-English-speaking scientist will do well to achieve a sound passive knowledge of English plus, perhaps, the basics of oral expression (reasonable pronunciation, simple sentence structure, common verb tenses). The provision of more extensive translation facilities (written and simultaneous) might be a long-term solution, but it would require a massive educational effort to train sufficient translators and interpreters in the requisite linguistic and scientific skills. And governments would presumably not be too forthcoming with financial support since the problem is not really a "national" one.

Perhaps the solution lies after all in an international language of science (but one less "tainted" with overclose association with