tumour and regional lymph nodes whether they are involved or not. These trials are therefore unlikely to advance our present knowledge to any great extent concerning the management of the regional nodes. We consider the time has come for a new approach to this problem.

It has been suggested that lymph node metastases are merely a reflection of the unfavourable biological characteristics of the tumour and not a determinant of prognosis,¹ and that they are commonly a local manifestation of a systemic disease. At the same time the question whether these lymph node metastases themselves act as a source of further spread is by no means resolved. But Crile's studies² suggest that this would happen only late in the course of the disease. Furthermore, treatment of the nodes may reduce survival if they are histologically free of cancer³⁻⁵ or even if they are involved.⁵ The reverse side of the coin may be true: avoidance of treating involved nodes seems to carry no worse a prognosis.⁶

For this and other reasons a controlled clinical trial is under way⁷ to determine the effect of treatment of the regional nodes in patients with apparently early carcinoma of the breast. In particular, an assessment will be made of the biological behaviour of the tumour and the host response to that tumour, to determine if there are any clinical or pathological features which may influence the choice of treatment of patients in the future. This is a national enterprise and it is anticipated that more than a 1,000 patients a year will be involved, and we hope to be able to answer some of these fundamental questions within a few years. Full details of the trial are given elsewhere.⁷—We are etc.,

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Birmingham and the Rhodesian Medical School

SIR,—Most people dealing with health problems in Rhodesia heard with great sadness the decision of the governing body of Birmingham University to terminate its connexion with the Medical School in Salisbury. This decision seems to have been based on emotional rather than intellectual considerations, and in addition it appears to be yielding to pressures from certain elements in the Birmingham student body.

The quality of the motives behind these pressures may be judged from the quoted remark of a student spokesman "We want Birmingham sponsorship to be withdrawn immediately and African students currently studying for Birmingham degrees to be offered places in other universities, most likely in Britain." This quotation indicates an arrogant misassumption that the African students would be happier and better trained 6,000 miles away from their homes and from an excellent medical school which trains its students with special emphasis on conditions pertaining in sub-tropical Africa.

The racialism of the Birmingham students' demands is further underlined by their disregard for the welfare of the remaining 140 students in the Salisbury Medical School, Asian, coloured, and European. If the decision of Birmingham University is implemented, Salisbury will have no alternative but to go to a South African university such as Stellenbosch or Cape Town for sponsorship. Despite the well-known liberal record of Cape Town University, inevitably such an affiliation would bring the Medical School and eventually the whole University further and further under the influence of the South African Government's domestic policies; an event which one believes to be entirely contrary to that wished for by Birmingham University authorities.

It is hoped that Birmingham University's decision is not irrevocable and that it will be reconsidered in the light of reason rather than emotion.—I am, etc.,

J. CHARLES SHEE.

Bulawayo,
Rhodesia.

Children with Peptic Ulceration

SIR,—Children with peptic ulceration (7 March, p.584) form an interesting group. A study of the literature on this subject reveals the importance of a strong family history, often on both sides. This must reflect the genetic factors in this disease—factors such as blood group and blood group secretor status. There are probably many other genetic factors of which we at present know nothing.

When we inquire carefully into the history of patients in their twenties with duodenal ulceration, not infrequently we find a history dating back to childhood. There is, as you say, and rightly so, a reluctance to operate on these patients during childhood. However, it must be remembered that there is no curative medical treatment for this relentless though intermittent disease.

You mention "satisfactory development and nutrition" after gastric resection in children. Surely this operation must be avoided in childhood as indeed many of us believe it must in the adult. Particularly in children would it seem undesirable to perform a 75% gastric resection. Selective vagotomy is undoubtedly now best performed at any age without any drainage operation. Unfortunately, because these patients are young, their disease is allowed to progress to organic fibrotic narrowing. They come then to the surgeons with

advanced duodenal stenosis too late for vagotomy alone. Medical treatment to alleviate symptoms should certainly be used until it is evident that the disease is established and recurrent. Then bilateral selective vagotomy without drainage should be performed.—I am, etc.,

HAROLD BURGE.

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London, W.6.

Misuse of Drugs Bill

SIR,—As doctors responsible for the supervision and treatment of the majority of narcotic addicts attending drug dependence treatment centres in the London area, we would like to comment on the recently published Misuse of Drugs Bill 1970.¹ Among other provisions, this Bill gives a degree of control over the prescription of a wide range of drugs liable to abuse. However, we are disturbed by the fact that no proposals for the control of barbiturates and other hypnotics are included. In our experience the abuse of hypnotics, particularly by intravenous injection, now presents a problem as serious as any in the field of drug abuse among young people.

While recognizing the undoubted value of many hypnotics, we feel that the present alarming increase in their abuse by young people suggests that a review of the regulations controlling their prescription may be necessary, although we appreciate that to frame satisfactory legislation without infringing the reasonable right to prescribe hypnotics might be difficult.—We are, etc.,

J. L. REED. GISELA B. OPPENHEIM.
M. M. GLATT. ELIZABETH TYLDEN.
H. DALE BECKETT. CHRISTINE SAVILLE.
KATHLEEN LOTINGA. PAMELA AYLETT.
J. DENHAM. S. DAS GUPTA.
JANE BUCHANAN. DOROTHY HASSALL.
J. W. MACK. MARGARET TRIPP.
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REFERENCE

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Severe Dermatitis and "Biological" Detergents

SIR,—The letter from Drs. Elizabeth and Nariman Bamji (7 March, p. 629) on biological detergents calls for some comment. They claim that 30 cases with a wide variety of skin manifestations were caused by the use of enzyme-containing washing powders. I would submit that this claim is entirely lacking in scientific proof, being based solely on circumstantial evidence, and so is very much open to question. It has been recognized that seven out of 10 women attending a doctor's surgery are likely to have used biological detergents at some time during the last six months, so it is easy to jump to the conclusion that because these products were a common factor in the patients who had skin trouble they were responsible. Of the 30 cases

described, probably nine would fall into the category of true primary irritation, but whether any of these are due to detergents or, more particularly, are the same as the cases described by Dr. N. E. Jensen (31 January, p. 299) could only be established by a careful investigation into the aetiology.

The manufacturers of detergents are only too conscious of their responsibility to the public and to housewives in particular. A vast amount of research is done and many thousands of tests are carried out with the willing co-operation of housewives before any new product is put on the market. A description of the testing on enzyme detergents carried out by Procter & Gamble in the U.S.A. is given by Griffith and *al.*¹ A similar amount of skin testing on housewives and babies, with which I have been associated, has been done in Britain. Between the two countries a total of more than 12,000 housewives and 600 babies have participated in home usage tests. Full details of this skin-testing programme are available to any interested person.

In the whole of this work no examples of dermatitis specifically attributable to the enzyme products were encountered, and the effects of these detergents were no different from those of comparable detergents without enzyme. Such cases as have been reported of dermatitis attributed to these products represent an insignificant number compared with the many millions of housewives who use them (28 February, p. 518).

Just why cases have been reported at Sheffield and Nottingham, and not to any significant extent elsewhere, is an interesting problem, and it is to be hoped that the careful investigation in progress at Sheffield will throw some light on the special circumstances of the cases reported there and at Nottingham. Discussions I have had with dermatologists at leading centres throughout the country indicate that apart from these cases reported at Sheffield and Nottingham there have only been isolated cases which might be attributed to enzyme detergents, and the feeling is that there has been no increase in housewives' dermatitis since the introduction of these products.—I am, etc.,

R. MASON BOLAM.

Newcastle upon Tyne.

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- 1 Griffith, J. F., Weaver, J. E., Whitehouse, H. S., Poole, R. L., Newmann, E. A., and Nixon G. A., *Food and Cosmetics Toxicology*, 1969, 7, 581.

SIR,—I read the paper by Drs. Christina F. J. Ducksbury and V. K. Dave (28 February, p. 537) on contact dermatitis, and the leading article (p. 518) on biological detergents with great interest.

I was, however, surprised that the latter did not mention the contact dermatitis due to wearing clothing washed in these enzyme detergents. Such reactions are not common, but I have observed several in recent months. In the acute phase the reaction appears as an intense oedematous erythema, particularly marked on the upper and inner thighs, the sides of the neck, the antecubital fossae, the axillary folds, the waist, and sometimes on the dorsa of the feet. When seen in a later stage, these areas show desquamation and desiccation of the skin, not unlike the reaction caused by benzyl benzoate.

After such severe reactions, the applications of patch-tests was deemed unwise, but one patient, when he had recovered, was bold enough to have his clothes again

washed in the biological detergent, and endured a typical recurrence. I have also suspected that several patients have developed a nummular eczema precipitated by the desiccating action of the detergent.—I am, etc.,

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SIR.—Drs. Elizabeth and N. Bamji (7 March, p. 629) described the enzymes in washing powders as "remarkably stable" and relate this to the possibility that enzyme may persist not only in washed garments but also in rivers and seas. The description "heat-stable and alkali-stable" given to the enzyme in the reference quoted¹ is relative only. In fact, the enzyme in these washing products starts breaking down as soon as the product is dissolved in water, the process speeding up with increasing temperature, and being extremely rapid at temperatures above about 150°F. (66°C.). Furthermore, it is relatively stable in alkaline solution only, so that any enzyme remaining after a low temperature wash would break down rapidly in the plain (non-alkaline) water used for rinsing and during the drying and ironing that follow. Finally, even if all this were not so, the enzyme would be deactivated by contact with the acid of body sweat.

With regard to the possibility that effluent from sewage treatment of enzyme detergent waste water could have some effect on aquatic life, it should be recognized that bacterial enzymes are present naturally in domestic sewage and natural waters at very low concentrations. There is ample evidence² that in conventional sewage and septic tank systems the detergent enzymes are first deactivated by the pH change and the aerobic conditions, and the resultant protein is then totally and irreversibly degraded by the bacteria in the treatment. By the same token, any detergent enzyme that might otherwise get into the rivers and coastal waters would also be rapidly destroyed by the natural bacterial fauna of the water.—I am, etc.,

L. T. BOWERMAN,

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Product Development Department,
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REFERENCES

- 1 *Nature*, 1968, 220, 526.
- 2 Swisher, R. D., *Bioscience*, 1969, 19, 1093.

Holiday Typhoid and T.A.B.

SIR,—Your leading article on holiday typhoid and T.A.B. (28 February, p. 515) is both interesting and timely. You refer to one-dose prophylactic vaccination against typhoid proving effective in Guyanese children, this being attributable to the endemicity of typhoid in that country, with the consequent probability that its inhabitants may ingest subinfective doses of typhoid and related organisms, so that one dose of typhoid vaccine acts like a booster rather than as a primary vaccine dose.

You warn your readers, however, of the dangers of extrapolating results in Guyana to situations obtaining in Great Britain, and add that there "can be no justification

for assuming that in Britain there is a basal immunity to enteric infections. Two doses of T.A.B. vaccine are therefore necessary for protection, and three doses are even better."

There is a close parallel with this as regards cholera prophylactic vaccination, where one dose has been accepted by W.H.O. for the purposes of international certification and travel and also stated by many workers to be protective. The populations (except for the very young) of far eastern countries may well become sensitized to the cholera vibrio antigens under various circumstances. Reinfections with cholera vibrios are common in endemic areas but recurrent disease is rare; this can be shown by the prevalence of vibriocidal antibodies which increase in titre *pari passu* with age. Hence a single dose of a cholera vaccine to such a population acts more like a booster provoking a secondary response; but here again results of the efficiency of single dose vaccination in an endemic area would not necessarily be applicable to inhabitants of a non-endemic area.

Nevertheless, the inhabitants of non-Asian countries, in Europe and America, may have significant titres of vibriocidal antibodies in their blood. This may be best explained by recognizing antigenic affinities between *Vibrio cholerae* and other genera of bacteria like *Brucella* and *Pseudomonas*, and indeed adults from countries as far apart from the far east as Czechoslovakia and the U.S.A. have reacted with a secondary-type response to a single dose cholera vaccine. Now many "normal" sera examined by the Widal test may show antityphoid antibodies. Thus in Great Britain a titre of *Salmonella typhi* 'O' antibodies, and *Salmonella paratyphi* A 'O' antibodies up to 1 in 50 is commonly interpreted as being within normal limits and without significance so far as diagnosis of enteric fever is concerned, but nevertheless it may be taken to mean that the individuals concerned have become sensitized to typhoid antigens. This need occasion us no great surprise, since there must be wide intergeneric antigenic relationships amongst the great family of Enterobacteriaceae, and beyond that family as well.

Therefore, though I am all for two doses (preferably three doses) and in complete agreement with the views expressed in your leading article, in any primary vaccination programme for the prophylaxis of typhoid, or indeed any other bacterial disease utilizing inactivated non-adjuvanted bacterial vaccines, the possibility must be entertained, until proved otherwise, that travellers from Great Britain with no previous history of primary immunization or enteric infection may well be afforded protective cover by a single dose of a potent (? acetone-inactivated) typhoid vaccine for the duration of a holiday or short stay abroad.—I am, etc.,

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SIR,—Your leading article (28 February, p. 515) is most surprising, coming only a few weeks after an Any Questions discussion giving entirely different advice on the same topic (7 February, p. 354). First we are told that unimmunized "Persons going abroad