structural damage to the temporal bone, and that the underlying mechanism is clearly understood.

The literature on the skull pathology in Paget's deafness is admirable and full of instances of careful, meticulous work.²⁻⁵ Devoted as it is, however, to instances of widespread skull involvement it is forced to speculate on possible mechanisms for the deafness. The issue therefore remains in doubt, which is why we regret our lack of foresight regarding impedance audiometry and the unavailability of temporal bone tomography. From the viewpoint of advancement of knowledge it would seem more valuable to study minimal lesions than to concentrate on the distortive and destructive end-stage result.

Our patient improved with calcitonin therapy and recent audiometric examination shows further improvement in respect of voice perception. At his age (73 years) and with his degree of crippling deafness it is unlikely that this improvement could have been achieved had there not been some, as yet undefined, link between that deafness and Paget's disease of bone.—I am, etc.,

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Greenisland Hospital,
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1 Moffatt, W. H., Morrow, J. D., and Simpson, N., *British Medical Journal*, 1974, 4, 203.

2 Anson, J. B., and Wilson, J. G., *Archives of Otolaryngology*, 1937, 25, 560.

3 Clemis, J. D., et al., *Annals of Otolaryngology and Rhinology*, 1967, 76, 611.

4 Tamari, M., *Annals of Otolaryngology and Rhinology*, 1942, 51, 170.

5 Henkin, R. I., Lifschitz, M. D., and Larson, A. L., *American Journal of the Medical Sciences*, 1972, 263, 383.

Society's Responsibility

SIR,—We, the undersigned, also clinicians practising general psychiatry from a peripheral hospital, fully endorse all Dr. B. W. Durrant's observations (21 June, p. 683). It is to be hoped that the social self-deceptions and euphemisms of the 1960s, which were also reflected in some mental health policies, will now yield to a return to the reality being forced upon society by the increasingly colder realism of the present period.—We are, etc.,

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J. D. YOUNG
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Hormonal Pregnancy Tests and Congenital Malformations

SIR,—While I accept the possibility of teratogenic effects as a result of the use of hormones for the diagnosis of pregnancy (leading article, 30 November 1974, p. 485) and the valuable comments by Dr. Isabel Gal (28 June, p. 749), it is surely wrong to emphasize these drugs to the exclusion of many others. The pharmaceutical industry markets a multitude of drugs that should be avoided during pregnancy and especially the first trimester. Yet how many practitioners consider that patients taking these preparations should also be advised against pregnancy? The danger of a pregnancy occurring

while currently on drug therapy, which would normally have been avoided if the patient was already known to be pregnant, should not be forgotten. Is there a case for advising patients against a pregnancy during the course of treatment which the manufacturers have stated should be avoided during pregnancy or must this come as a result of litigation for negligence?

It is now standard radiological practice to x-ray female patients in the first half of the cycle lest an early pregnancy be inadvertently irradiated. While the concept of refusing dangerous drugs for non-emergency conditions to patients who cannot provide proof of adequate contraception would be unacceptable, the consequences of indiscriminate prescribing without offering contraceptive advice may be equally unacceptable to the patient.—I am, etc.,

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Sexual Life after Hysterectomy

SIR,—Mr. A. G. Amias (14 June, p. 608) has usefully stressed some ways of avoiding precipitating sexual difficulties after hysterectomy. "Newspaper medicine" arouses some anxieties, but does try to answer questions that over-hasty consultations leave unanswered.

Hysterectomy is still seen by women as an operation in which "everything is taken away," including the patient's femininity and sexuality. Psychologically it is a mutilation. It will alter the way she sees herself and possibly the way her husband sees her. Pronouncement of the need for hysterectomy induces psychological shock in most women, and this will be succeeded by feelings of deprivation and resentment unless adequate time is given to a full discussion of exactly what the operation is for, why no alternative is feasible, what it will involve in pain, disability, and time, and what her health, appearance, and sexual feelings will be like later. She should be asked her anxieties and given truthful answers. A further discussion after the sense of shock has eased is often helpful.

If her personal history has been unrewarding it should be anticipated that hysterectomy will precipitate breakdown, and careful evaluation of the absolute need for hysterectomy should be made. If there is no alternative on medical grounds, then skilled psychotherapeutic support should be obtained and continued after the operation.

It is my impression that a good deal of distress could be avoided if attention could be given to these points.—I am, etc.,

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Epidemiology of Disappearing Diseases

SIR,—Poliomyelitis provides one example of the modern problem of epidemiological surveillance of a formerly epidemic infection which has almost disappeared as a result of effective control measures. Reduced awareness of this now unfamiliar disease may not only encourage neglect of the immunization that is essential for continued control of

poliomyelitis but can also decrease the accuracy and speed of clinical recognition of cases. Notifications could then give a falsely optimistic impression of the degree of control of the disease. Virological data from diagnostic laboratories will not reveal the true situation unless clinical suspicions have caused specimens to be sent to the laboratories.

During the five years 1970-4 11 cases of paralytic poliomyelitis were detected in Scotland. Polioviruses were isolated from three incompletely or unvaccinated adults, two type 1 and one type 2—the last being vaccine-recipient-associated. From the other eight no virus was isolated because faecal specimens were submitted too late or not at all—in one case not until an orthopaedic surgeon was consulted about weak and wasted thumb muscles. Serological tests were too late to detect diagnostic rising antibody titres, but unusually high titres suggested recent poliomyelitis in all. Provisional diagnosis had included multiple sclerosis, neurological complication of rubella vaccination, and various other neurological and psychiatric disorders. The patients diagnosed serologically included four children (three preschool) and four adults. One illness started in Majorca and one shortly after return from Spain, both involving adults—a reminder that immunity to poliomyelitis may be as important as that to typhoid for visitors to our usual warm, sunny vacation resorts.—We are, etc.,

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Duodenal Obstruction due to Abdominal Aortic Aneurysm

SIR,—We noted with interest the recent report of a case of duodenal obstruction due to abdominal aortic aneurysm by Mr. H. M. Adair (28 June, p. 727). We should like to report a case of oesophageal obstruction due to a thoracic aortic aneurysm.

An 85-year-old woman presented with a three-week history of dysphagia and recurrent vomiting. On examination she appeared emaciated and grossly dehydrated. A chest x-ray film suggested the presence of a dilated and calcified aorta. A barium swallow showed a dilated oesophagus with a smooth termination and complete obstruction at the gastro-oesophageal junction with virtually no barium seen beyond this point. Oesophagoscopy confirmed the narrowing of the oesophagus, but no mucosal lesion was present and the instrument passed easily into the stomach, which was normal. Unfortunately, the patient's condition deteriorated and she died before further investigation and treatment could be undertaken. At necropsy the proximal two-thirds of the oesophagus was dilated and the distal third was compressed by the descending thoracic aorta. No intrinsic oesophageal lesions were present. Both the thoracic and abdominal parts of the aorta were dilated, measuring up to 6 cm in maximum diameter, and histological section confirmed the atheromatous nature of the large aortic aneurysm.

Aneurysmal dilatation of the thoracic aorta is an uncommon cause of dysphagia because the oesophagus is readily displaced to the right.¹ Radiological studies showing displacement of the oesophagus by a dilated aorta

have been reported,² but complete obstruction is unusual. We feel that the reason for its occurrence in the case reported here is the unusual length of aorta involved, which prevented any displacement of the oesophagus. Unless the existence of this phenomenon is appreciated it may lead to a mistaken diagnosis of achalasia or carcinoma of the oesophagus.—We are, etc.,

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¹ Martin, P., and Sellwood, R. A., in *Clinical Surgery*, ed. B. W. Taylor and J. F. Wilkinson, vol. 14. London, Butterworths, 1967.

² Mucklow, E. H., and Smith, O. E., *Journal of the Faculty of Radiologists*, 1954, 6, 88.

Faecal Fibre Fortunes

SIR,—The only firm evidence for the use of bran in treatment is that concerning diverticular disease of the colon.^{1,2} In 70% of patients 12-13 g of bran a day will control the symptoms of pain or alteration of bowel habit. I know of no way of predicting which patients will respond well. It does not appear to be related to age, sex, or anatomical changes on barium enema. I have become aware in the past 12 months that after seven years' experience with this treatment symptoms can return. A few people continue to deteriorate even, apparently, when taking the bran conscientiously.

The epidemiological evidence is very much against diverticular disease being a bran deficiency.³ In Britain two generations passed between the latest date for white bread becoming generally available and the recognition of diverticular disease as common. It has become epidemic only in the past 20-30 years.

It also appears to me that the alteration in colon function is qualitative as well as quantitative and is poorly explained merely as a work hypertrophy. In the extreme case of the defunction colon there is loss of muscle bulk in the wall, and I have seen no description of diverticulosis developing in such a colon. This manoeuvre is used to treat the complications of diverticular disease!

A better explanation of the facts given by the hypothesis is that diverticular disease is caused by some chemical in the faeces active in interfering with the autonomic plexuses of the colon and deactivated by bran. The bile acids probably fulfil these conditions.

(1) The bile acids are very powerful stimulators of colonic contraction. The effect is produced through an intact mucous membrane. Conversely, the most annoying complication of the use of bile-binding agents of low bulk such as polidexane (Secholex) is constipation.

(2) With the exception of the ion-exchange resins (cholestyramine), the effective bile-binding agents are long-chain carbohydrates (polidexane, pectin, guar gum). Bran is a variable mixture of complex carbohydrates with some lignin. The amount of carbohydrate remaining in the bran depends upon how it has been handled and possibly explains the variable results obtained in using bran to fix bile acids.

(3) The over-adequate diet did not become common in this country until after the first world war. The break in the rise of diverticular disease produced by the second world war is as satisfactorily explained by generalized dietary restriction as by a minor increase in vegetable fibre.

(4) The principal criticism of this hypothesis appears to be a satisfactory explanation of why this disease affects principally the left colon. Concentration of free bile acid in the left colon could occur if the bile-binding carbohydrates present in a modern diet were degraded by the bacteria in the bowel.

Nevertheless, I do not wish in any way to detract from the use of bran in the conservative management of diverticular disease. It represents a major advance which is above all safe. But the remainder of the extrapolation about bran deficiency, and in particular the vast amount of publicity, represents what Professor Richard Scorer has called "environmental jitters."¹⁻⁴—I am, etc.,

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¹ Plumley, P. F., and Francis, B., *Journal of the American Dietetic Association*, 1973, 63, 527.

² Painter, N. S., Almeida, A. Z., and Colebourne, K. W., *British Medical Journal*, 1972, 2, 137.

³ Robertson, J., *Nature*, 1972, 238, 290.

⁴ Scorer, R., *New Scientist*, 1975, 66, 702.

SIR,—Your leading article entitled "Faecal Fibre Fortunes" (14 June, p. 580) did not present a balanced view concerning the value of fibre in the diet. It concentrated almost exclusively on one of the more difficult subjects—namely, whether dietary fibre is protective against cancer of the large bowel. This review did not refer to the recent communication from eminent bacteriologists, who have spoken about "a possible protective action of dietary fibre against mucosal damage by potential carcinogens."¹ Sir Francis Avery Jones (7 June, p. 566) has alluded to the possible reduction of carcinogens by fibre.

Those who wish to study the difficult question of dietary fibre are recommended to read "The Importance of Fibre in Human Nutrition"² or study the implications of the Committee on Medical Aspects of Food Policy (Nutrition) of the Ministry of Health and Social Security, which has already stated that "populations who eat a diet rich in fibre (particularly fibre from cereals and legumes) have a lower serum cholesterol concentration and a lower ischaemic heart disease mortality than those who eat a western type diet relatively low in this kind of fibre."³—We are, etc.,

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DENIS P. BURKITT

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¹ Walters, R. L., et al., *British Medical Journal*, 1975, 2, 536.

² Agricultural Research Council and Medical Research Council, *Food and Nutrition Research*, p. 141. London, H.M.S.O., 1974.

³ *Diet and Coronary Heart Disease*, p. 18. Report on Health and Social Subjects, No. 7. Report of the Advisory Panel of the Committee on Medical Aspects of Food Policy (Nutrition) in Diet in Relation to Cardiovascular and Cerebrovascular Disease. London, H.M.S.O., 1974.

Prazosin in Treatment of Hypertension

SIR,—We were interested to read the paper by Dr. M. J. Bendall and others (28 June, p. 727) on side effects due to treatment of hypertension with Prazosin. We have completed a clinical trial of Prazosin in the treatment of hypertension in 50 patients and have seen two patients who developed syncope as a severe side effect immediately

after taking 2 mg of the drug. Both were nursing sisters, aged 35 and 40 years respectively, and they stated that the syncope was preceded by a bout of severe palpitations. The pulse rate was 120/min and the blood pressure 160/120 mm Hg in one patient and 160/min and 150/110 mm Hg in the other. Thus, unlike the syncope after Prazosin, which is recognized to be due to hypotension,¹ in both our patients it was probably due to a severe bout of sinus tachycardia or paroxysmal auricular tachycardia.

We agree with Dr. M. J. Bendall and his colleagues that the initial dosage of 2 mg thrice daily is too high and would suggest that it should be 1 mg twice daily. Like Okun *et al.*² we have found that there was no limitation of therapeutic effects when the dosage frequency was reduced from thrice to twice daily. This dosage schedule may be more convenient for outpatients and therefore more acceptable.

We think that the side effects of Prazosin could be reduced by encouraging the routine use of a thiazide diuretic with a daily dosage of Prazosin of 4 mg or more unless there is a contraindication to the use of thiazide—for example, a gouty diathesis. It would be prudent to combine Prazosin with a beta-adrenergic blocking agent and a thiazide diuretic if the daily dosage of Prazosin exceeds 10 mg or should side effects due to Prazosin occur at a lower dosage. Prazosin may be a useful alternative to hydralazine, a vasodilator, which is often combined with beta-adrenergic blocking agents in the treatment of hypertension. Details of our results will be published in a separate report.³—We are, etc.,

Y. K. SEEDAT

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University of Natal,
Durban, South Africa

¹ *Adverse Reaction Series*, No. 12. London, Committee on Safety of Medicines, 1975.

² Okun, R., *Excerpta Medica International Congress Series*, 1974, No. 331, 82.

³ Seedat, Y. K., North-Coomes, D., and Rampono, J. G., *South African Medical Journal*. In press.

Sheep as Grass-cutters

SIR,—Dr. A. M. W. Porter's interesting Personal View (12 July, p. 96) made admirable suggestions for educating boys in-expensively at private schools run on monastic lines. However, one of the suggestions should be reconsidered lest the bad results of adopting it might weaken the rest. The bad one is the suggestion that on playing fields sheep may be used to shorten the grass "far more effectively and productively" than men using mowers.

Alas! Sheep will eat only the best grasses, leaving the coarser ones to predominate. Sheep will also soon make the ground deficient in lime and they will not trample bracken heavily enough to keep it under control if it once gets in. The resulting sward will be useless for games. The sheep could be accompanied by cattle, of course, to prevent all of these misfortunes, but special arrangements and local rules would then have to be devised to keep the sports clean as well as manly. I have been told that Chinese geese are excellent grass-cutters, but I have no first-hand experience of their work.—I am, etc.,

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