operation and no unpleasant effects follow."

This report thus appeared over a year before Morton's demonstration on the use of ether, and I think it is only right to point out that nitrous oxide was in use during the period between Wells's unsuccessful demonstration and Morton's successful one.—I am, etc.,

VICTOR GOLDMAN

London W.1

Ketamine for Burns Surgery

SIR,—The leading article "Analgesia for Burnt Patients: A Symposium" (20 May, p. 418), gives much needed publicity to a hitherto neglected facet of anaesthetic practice.

The sentence on the paper and discussion on the use of ketamine as an anaesthetic agent for burns surgery is somewhat biased. It is strange to mention one of the less common and least dangerous side effects of ketamine, without making any reference to the drug's unique advantages, especially in the field of burns surgery.—We are, etc.,

S. M. LAIRD
M. SAGE

Plastic and Reconstructive Surgery Centre,
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Discharge from Psychiatric Hospitals

SIR,—In years past the present hospitals for the mentally ill and mentally handicapped served a social, welfare, and custodial, in addition to a medical, function. Scrutiny of the records of older patients in these hospitals reveals that many were admitted at the instigation of their local authorities because they had nowhere else to go or had committed an offence, relatively minor by standards today, or in the case of women, had given birth to illegitimate children. Such people would not be admitted to psychiatric hospitals today.

Unfortunately these patients have remained in the hospitals frequently abandoned or outlived by their relatives and overlooked by the local authorities in whose areas they resided. They continue to occupy expensive hospital beds and obstruct the admission of more urgent cases with a greater and more justifiable need for hospital care. Requests to local authorities for alternative placement will receive sympathetic acknowledgement, but most authorities still have a lack of sufficient alternative lodgings, hostels, or group homes.

It is sometimes contended that it is unkind to move many of the older patients who appear happy and settled in hospitals. The reverse argument that a person should not be admitted to hospital because he has lived most of his life in the general community is rarely cited.

This situation should prompt psychiatric hospitals to compile waiting lists of the patients in their wards who do not need medical and nursing care and who could be discharged to homes or hostels. These waiting lists should be kept up to date and regularly circulated to social service departments, the regional hospital boards, and the Department of Health and Social Security. This would also serve to emphasize the point that it is not doctors and nurses who

are keeping people in psychiatric hospitals, but community outside which is failing to accept them.—I am, etc.,

D. A. SPENCER

Meanwood Park Hospital, Leeds

Intestinal Parasites and Epidemiology of Australia Antigen in Africa

SIR,—Several recent studies have shown that the incidence of Australia antigen carriers is definitely higher in Africa than in Europe and the U.S.A. While studying the patient records of 94 antigen carriers (black adult Africans) who had been detected in the course of a systematic study of 1,069 randomly chosen subjects at Hôpital Principal of Dakar, we noticed a high incidence of strongyloidiasis and ancylostomiasis in carriers of the antigen. In fact, out of 34 parasitological studies carried out during the hospitalization of these patients we identified eight carriers of *Strongyloides* and two carriers of *Ancylostoma*, whereas the average incidence of these parasites, as shown by a control study of nearly 10,000 stool specimens over a period of two years, is 2.5% for strongyloidiasis and approximately 1% for ancylostomiasis. In spite of the small number of stool analyses done on carriers of the antigen the difference appears to be very significant ($P < 0.001$).

Concomitantly, we discovered that out of 75 of those subjects who had blood counts done there were 13 cases of eosinophilia—above 10%. In a sampling of adult subjects tested during the period of the study an eosinophilia higher than 10% was found in 56 cases out of 600. Once again the difference is statistically significant ($P = 0.05$).

One can thus find in adult African Australia antigen carriers a statistically significant incidence of intestinal helminthiasis characterized by active cutaneous penetration of larva, and this is corroborated by an equally significant incidence of marked eosinophilia.

Several authors^{1,2} have suggested that the Au antigen is excreted in faeces and urine. Because of its great stability and of its resistance to chemical agents this antigen is able to survive in the external environment under the same ecological conditions as those associated with the larvae of *Strongyloides*, *Ancylostoma*, and *Schistosoma*. Inoculation of the antigen could take place at the site of the excoriation produced in the course of active cutaneous penetration of the surface of the skin by these larvae.

This hypothesis would explain the frequent co-existence of the Au antigen with an intestinal helminthiasis characterized by active cutaneous penetration of the larvae, as noted during the course of our study. It contributes toward an understanding of the particularly high incidence of the Au antigen in tropical areas, along with other reasons which have been set forth: tattooing (which is not common at the present time in Senegal), ritual practices (such as circumcision), and transmission by arthropod vectors.—We are, etc.,

M. BARBOTIN
Hôpital Principal, Dakar

J. L. OUDART
Institut Pasteur, Dakar

Senegal

¹ Runcan, V., State, Z., and Dumitrescu, M., *Medicina Interna (Bucarest)*, 1970, 22, 1183.
² Tripatzis, I., and Horst, H. G., *Nature*, 1971, 231, 266.

Oral Prostaglandins and Amniotomy

SIR,—Mr. W. Barr and Dr. W. C. M. K. Naismith (22 April, p. 188) describe the first results of using oral prostaglandins to induce labour in centres in the United Kingdom. The results from this department (22 April, p. 191) were an evaluation of amniotomy and oral prostaglandin E₂ titration in both primigravid and multigravid patients, while that of Mr. Barr and Dr. Naismith mainly assessed the use of prostaglandin E₂ and F₂ α in multigravida. In the latter amniotomy was not undertaken until the "active phase" of labour was established.

I would like to stress the value of undertaking amniotomy at the onset of induction in accelerating the progress of labour when used in conjunction with these agents. From consideration of the results of these studies it is apparent that even in multigravida the time to delivery was considerably shorter when early rupture of the membranes was performed. For those with a singleton pregnancy the mean induction delivery interval was 7 hours 26 minutes for the 16 multigravid patients in the former study, compared with 11 hours 9 minutes for the 22 out of 24 patients in whom induction of labour was successful in the latter.

The advantage of using the combined regimen is seen in the Table where the induction delivery interval for multigravid patients having amniotomy and oral prostaglandin E₂ is compared with that of an unselected group in whom labour was induced by amniotomy alone. The difference between these times is significant ($t = 2.24$, $P < 0.05$).

Induction of Labour in Multigravid Patients

	Induction-delivery Interval Mean ± S.E.M.
Amniotomy and Oral Prostaglandin E ₂ (n=16)	7 hr. 26 min ± 1.24
Amniotomy Alone (n=23)	12 hr. 31 min ± 1.34

While it is appreciated that the protocol followed by Mr. Barr and Dr. Naismith was deliberately planned so that the effectiveness of using oral prostaglandins as a uterine stimulant for the induction of labour could be evaluated in detail in the absence of amniotomy, such a practice would appear to have limitations for routine clinical use for the time to delivery reported above from this study is not much shorter than that described here for amniotomy alone.—I am, etc.,

IAN CRAFT

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Rheumatoid Arthritis and Malabsorption

SIR,—In your leading article on "Rheumatoid Arthritis and Malabsorption" (22 April, p. 181) you note that the drug treatment of malabsorption in this situation requires further investigation.

With G. Andrews I described¹ the use of D-penicillamine 1.8 g per day in conjunction with pyridoxine 50 mg per day in a desperately ill patient with rheumatoid arthritis, malabsorption, and amyloidosis, who had responded to no other therapy.

There was a striking cessation in the steatorrhoea and a concomitant rise in some other parameters of malabsorption, particularly in the serum albumin and haemoglobin. However, there was no change, as expected, in the high IgM levels.

While penicillamine therapy is not entered into lightly, it is suggested that this may prove useful in management of such cases where standard therapy has made no headway.—I am, etc.,

BERNARD LAKE

Sydney N.S.W.,
Australia

¹ Lake, B., and Andrews, G., *American Journal of Medicine*, 1968, **44**, 105.

Coal Workers' Pneumoconiosis

SIR,—Dr. P. D. Oldham and Mr. G. Berry (29 April, p. 292) suggest that we still do not appreciate that cases included in an unselected post mortem series are sampled from the general population at rates proportional to their risk of dying. We do appreciate this and we have discussed it at length.^{1,2}

We drew attention to the similarity between our findings relating pulmonary function to x-ray category in simple pneumoconiosis and the finding of Carpenter *et al.*³ and Cochrane *et al.*⁴ in order to prompt others to follow our example and to study emphysema in this context. We regret our failure to persuade our compatriots to do so.

Our second conclusion, "The presence of emphysema accompanying simple pneumoconiosis was a more important factor in determining the impairment of ventilation than the radiological category," may be deduced from several of the tabulations in our papers, but it was unfortunate that the subscripts to the figures were not available to us when you, Sir, sent us the proofs for checking and a printer's devil had amended the subscript to Figures 2 and 3. We selected the tables and figures for publication from over 200 tabulations prepared from the study and did not exclude any tabulation which

even more clearly than does the original figure (Fig.).

Those patients with radiological category 0 or 1 at the last x-ray before death have always been a source of difficulty to us and we have discussed at length why we consider that these men were nevertheless suffering severe pulmonary handicap which was pneumoconiotic in origin. However, despite our repeated assertions to the contrary, Dr. C. M. Fletcher (6 May, p. 353) insists on concluding that these cases were not suffering from pneumoconiosis. We repeat again that the majority of them were, in fact, so suffering and that many of them had been diagnosed as category 2 or more, albeit often on earlier films, by the Panel. Many had more dust foci and more emphysema with the associated dust related parenchymal changes described in our paper than category 2 and 3 cases. We postulate that these morbid anatomical changes so frequently encountered in our more disabled category 0 and category 1 cases are probably responsible for the irregular opacities of which the 1958 International Labour Office Radiological Classification was a poor reflector. Similar cases would presumably have been excluded from epidemiological studies based on this classification, which are thereby biased and may have confused the issue in the past.—We are, etc.,

J. P. LYONS
H. CAMPBELL
R. RYDER
J. GOUGH

Cardiff

- ¹ Ryder, R., Lyons, J. P., Campbell, H., and Gough, J., *British Medical Journal*, 1970, **3**, 481.
- ² Ryder, R., Lyons, J. P., Campbell, H., and Gough, J., *British Medical Journal*, 1970, **4**, 305.
- ³ Carpenter, R. G., Cochrane, A. L., Gilon, J. C., and Higgins, I. T. T., *British Journal of Industrial Medicine*, 1956, **13**, 166.
- ⁴ Cochrane, A. L., Moore, F., and Thomas, J., *Tubercle*, 1961, **42**, 64.

Future of Postgraduate Medical Centres

SIR,—The leading article (3 June, p. 547) and the letter from Drs. J. Lister and D. Ferriman (p. 589) may arouse unjustified anxiety about the development of postgraduate education in England.

The Department of Health and Social Security has no doubt at all about the need for education facilities which are for the use of doctors whether they work in hospital, general practice, public health, or one of the other medical fields. The Department has contributed on a large scale through hospital authorities to the provision of such facilities and pays the major part of the cost of their maintenance. There is neither the wish nor the intention to divert them and no need to start a "hands off" campaign.

Guidance on postgraduate medical centres was last issued in October 1968.¹ This is now being revised in consultation with the profession, including the Association of Clinical Tutors. The proposals that have been made suggest for centres at new hospitals lecture theatres of 1,500 sq ft (150 m²) and good-sized libraries which would have a specifically medical area, but would also be used by professional staff other than doctors, so making it possible to provide appropriate librarian staff. The space allocated for the sole use of medical staff

allows for seminar and tutor's rooms, as well as for more social activities. There is plenty of scope for flexibility in planning centres as well as in using them and hospital authorities are not required to adopt a particular layout, but may fit in with local wishes.

Some existing centres "built by doctors for doctors" have been opened to other professional staff entirely on local volition with apparently happy results (as at Corbett Hospital, Dudley). Lecture theatres and libraries can be larger and better equipped and staffed if they are more fully used, without intruding in any way on the separate organization of postgraduate medical education or the areas doctors rightly want to reserve to themselves. Whatever decision may be reached on sharing of staff or some space there must be a clear identity for the postgraduate medical centre or medical institute without, one hopes, treating the other health professions as if we in medicine failed to recognize shared interests in both service and some aspects of education.

Doctors who have attended medical functions in many hospitals as I have done over the last 30 years must recall that many of them have taken place in rooms borrowed for the purpose from nurses and I find it difficult to believe that doctors who have a good lecture theatre at their disposal would begrudge its use at other times by their colleagues.

The remarkable development of postgraduate medical education in regional hospitals in the last 10 years is perhaps the most encouraging advance since the National Health Service was introduced. It has been consistently supported by my Department and that will continue. The clinical tutors have given their time and energy without stint and the real achievement is almost wholly theirs. The discussions now in progress with the Council for Postgraduate Medical Education should ensure that the planning of facilities is on agreed lines. It does seem a little premature to launch a crusade in the middle of the consultation which should lead to that. The most recent letter on this subject from the council was received only about a week before your article was written.—I am, etc.,

G. E. GODBER

Chief Medical Officer,

Department of Health and Social Security

London S.E.1

¹ Ministry of Health. *Postgraduate Medical Centres: A Design Guide*. London, 1968.

Overstimulation of the Brain

SIR,—Dr. William Cowan ("Personal View" 20 May, p. 462) is quite right that young people are subjected to intolerable noise levels, but he does not quite realize the full significance of this.

It is assumed that the human brain has an almost limitless capacity to absorb new knowledge and mental stimulation. This capacity, however, varies greatly from person to person, and in some people is quickly exhausted. It is a fact that the brains of our children are inundated with visual and auditory impressions from the most tender age onwards, and by the time they reach adolescence many youngsters are quite incapable of absorbing any more theoretical knowledge, from books or otherwise.

Mean emphysema count by final FEV (l.0) for cases of simple pneumoconiosis and for cases of progressive massive fibrosis (Categories B+C).

might have thrown doubt on our main thesis. We have available, however, a figure showing the relationship between FEV (l.0) before death with emphysema seen in the lungs after death for both radiological simple pneumoconiosis and complicated pneumoconiosis. This demonstrates the conclusion