primigravidae) one wonders how your contributors define toxæmia.

There are several non sequiturs in the text which others among your readers will doubtless wish to question. I would only ask why, when they show themselves to be so progressive in their approach to the active management of labour, your contributors are so adamantly retrogressive in their attitude towards the management of pain in labour?—I am, etc.,

J. SELWYN CRAWFORD

Birmingham Maternity Hospital,
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1 Crawford, J. S., *Principles and Practice of Obstetric Anaesthesia*, 3rd edn. Oxford, Blackwell, 1972.

2 Pearson, J. F., in *Proceedings of Symposium on Epidural Analgesia in Obstetrics*, ed. A. Doughty, p. 16. London, Lewis, 1972.

3 Crawford, J. S., Davies, P., and Pearson, J. F., *British Journal of Anaesthesia*, 1973, 45, 148.

Intensive Care in a District General Hospital

SIR,—The article by Dr. A. R. Tanser and Mr. B. G. Wetton (28 July, p. 227) on their experience with a multipurpose intensive care unit underlines not only the quality of care that it is now possible to provide in a district general hospital but also the stimulating effect that such a unit has on the nursing and medical care in the rest of the hospital.

A similar four-bedded unit has now been running at Kettering General Hospital since 1963, and our experience with such a unit was described after two years.¹ The admission rate has risen steadily from 217 in 1963 to 503 in 1972, the average length of stay having been reduced from 4 days 21 hours to 2 days 8 hours (56 hours)—very similar to the average length of stay (57 hours) in the unit at the St. Martin's Hospital, Bath, as reported by Dr. Tanser and Mr. Wetton. Another remarkable similarity is their finding that 62% admissions are for "Medical" conditions, our corresponding figure in 1971 being 63%. There is such remarkable correspondence between the percentage of total admissions for different conditions in the two units that it seems worth while to record them:

	Bath, 1968-71	Kettering 1972
Myocardial infarction	31.1	30.2
Other cardiac disorders	6.4	Not available
Self-poisoning	13.3	16.1
Respiratory disorders	12.4	Not available
Surgical	11.1	9.3
Trauma	10.3	14.1
Others	15.4	9.9

It would seem, therefore, that those thinking of setting up such multipurpose units in district general hospitals could take these figures as a fair prediction of the cases they will admit in the course of a year, and plan accordingly.

From our system of recording each admission to the unit, which is separate from the usual hospital records, we have determined that 22% of patients are unconscious on admission and that 8.5% are admitted as a result of road traffic accidents. The overall mortality is 15%. One in 20 of all hospital admissions pass through the intensive care

unit. The cost of each patient's stay is £60, a small price to pay for a life, for if admitted to any other ward they would almost certainly die. Of this £60, the majority of the cost is in nurses' salaries—£46; £12 goes for drugs and dressings and the remaining £2 for heating, lighting, and food. Nothing extra is allowed for doctors' salaries, which would be the same were there no intensive care unit.

I hope there are few district general hospitals in the United Kingdom without such a unit. If there are, I would strongly urge them to get on with building one on the lines of the unit at Bath. The impetus to build the unit must come from the medical staff, and some enthusiasm must be found to be in administrative charge; "for nothing great was ever achieved without enthusiasm" (Emmerson²).—I am, etc.,

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1 Crockett, G. S., and Barr, A., *British Medical Journal*, 1965, 2, 1173.

2 Emmerson, R. W., *Essays*, ed. J. Morley. London, Macmillan, 1883.

Radiological Evaluation of Pulmonary Metastases

SIR,—In the report by the Clinical Screening Group of the European Organization for Research on the Treatment of Cancer (28 July, p. 199) two chest radiographs were reproduced (fig. 3) purporting to show complete regression of a pulmonary metastasis from a renal carcinoma.

It is our view that from the reproductions printed it is not possible to make this claim. It would appear that the first radiograph shows multiple metastases in both lung fields with what appear to be bilateral basal effusions and a large area of consolidation adjacent to the right heart border. In the second reproduction, after treatment, the effusions have cleared and there is a reduction in size of the "consolidated area" near the right hilum, but this resolution is not complete. The multiple metastases are still present though they do not coincide exactly with those on the first film.

It would seem that while there has been considerable improvement with treatment the caption indicating "complete regression of a pulmonary metastasis" is misleading.—We are, etc.,

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Tests of Acupuncture

SIR,—As a means to prevent pain in surgery I have no doubt that acupuncture works—But (with a capital B) only in a limited range of surgery, and in a very, very limited number of patients; and in this respect it differs not at all from hypnotism, mesmerism, suggestion, animal magnetism, call it what you will. The idea that acupuncture can be grouped with general anaesthetics and local analgesics, or that currently it "is em-

ployed for most of the major surgery that is undertaken on the Chinese mainland nowadays" (Dr. P. E. Brown 30 June, p. 780) is, in my opinion, nonsense.

At the suggestion of Mr. J. S. Horn, F.R.C.S., I had the good fortune to be invited by the Chinese Medical Association and spent eight weeks in the autumn of 1959 on an anaesthetics lecture/demonstration tour in that country. I travelled extensively, visiting Peking, Changchun, Shenyang (Mukden), Anshan, Sian, Chungking, Wuhan, Shanghai, Hangchow, and Canton. I had with me a dictating machine of which my hosts approved, and which indeed on one occasion they repaired though they were unfamiliar with it. I made on-the-spot notes and dictated freely from these on my return to the hotel. Transcription of the dictation belts was made in England as the result of which I have a diary of 430 typewritten quarto pages. I had the advantage of having the same personal interpreter throughout, Dr. Shang, senior anaesthetist at the Peking Chest Hospital who had in 1948-9 spent 12 months with an internationally known anaesthetist in mid-America. He proved helpful, pleasant, and well informed. I received the most courteous and considerate treatment everywhere and came away, like every other visitor I have heard of, enormously impressed by what had been accomplished in that great country. This visit of mine changed most of my preconceived ideas about China, but not about acupuncture, of which, at my request, I saw quite a lot, and made full notes.

In brief, I saw nothing done under acupuncture more remarkable than the surgery described and illustrated in the book by Esdaile¹ published in 1846, just before the introduction of ether.

All these operations were carried out with the help only of mesmerism. I could cite many other contemporary references. A quite recent article in *Anaesthesia*, the official journal of the Association of Anaesthetists, was entitled "Surgery under Hypnosis."² In this we read that in Britain two impacted wisdom teeth requiring incision of gum and use of bone chisels "were removed completely painlessly under hypnosis." Also in the same patient, but on a different occasion, a bilateral mammoplasty was successfully carried out under hypnosis. At one point the patient "remarked that she was thirsty and was given a drink with a feeding cup while the operation continued." During surgery under acupuncture munching orange segments is currently more favoured.^{3,5} It is noteworthy that the above article excited no comment. Were the procedures to be repeated now, with benefit of acupuncture, I have little doubt they would hit the headlines both lay and medical.

In China I formed the impression that specific acupuncture points, at any rate those unrelated of gross anatomy, were phoney, and that the same results, good and disappointing, would have followed had the needles been inserted elsewhere. And I have no doubt that my views were shared by my Chinese colleagues who had received an orthodox ("Western" to them) medical training. But my colleagues were loyalists. They were not concerned whether the procedure was well founded scientifically; what mattered was whether it was good for their country. The more I learnt about the recent history

of China, the more I came to understand and sympathize with that point of view.

To me the idea of studying the location where needles should be placed is misconceived. If you want to make acupuncture work, attention will have to be directed not to the acupuncturist, but to screening patients and popping needles at random into those susceptible to hypnosis and who have a strong motive for it to be successful. It must be remembered that the Chinese people are, with good reason, intensely grateful to Chairman Mao, and that he has throughout championed traditional medicine, the only medicine available at the time for the masses who supported him during his years of turmoil. Understandably, motivation for acupuncture to be successful is great.

It would be an easy matter to test whether accurate siting of the needles or the mental approach of the patient is the more important factor in achieving success. There would be no difficulty in obtaining the necessary expenses for a leading acupuncturist to travel to Britain and exhibit his skills at any emergency operation, or at any routine operating list for general surgery in the country. If the patients are chosen at random, I confidently predict a success rate of nil. I believe that faced with cholecystectomy, acupuncture needles bear a similar relationship to ether as does a bottle of coloured medicine to penicillin in the treatment of septicaemia.

I would stress that I write not to denigrate acupuncture—far from it—but to express my belief that, if someone can explain hypnotism to me, I am confident that the secret of acupuncture will be revealed at the same time. I concur entirely with the view that "acupuncture is an effective use of hypnosis. This in no way dismisses the value of acupuncture, but it does place it in a class of phenomena with which we are partly familiar."⁶—I am, etc.,

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- ¹ Esdaile, J., *Mesmerism in India and its Application in Surgery and Medicine*. London, Longmans, 1846.
- ² Mason, A. A., *Anaesthesia*, 1955, 10, 295.
- ³ Brown, P. E., *Lancet*, 1972, 1, 1328.
- ⁴ Rutherford, K., *China Now*, 1972, 24, 7.
- ⁵ *Observer Review*, 1972, 30th April, p. 29.
- ⁶ Wall, P., *New Scientist*, 1972, 55, 129.

Surgical Wound Infections

SIR,—The design of surgical wards probably has a profound influence on the rate of wound infection, but this has not been the subject of a controlled clinical trial. Sequential review of the infection rate in Aberdeen after moving from a pavilion-type ward to one with single rooms and plenum ventilation has shown a reduction of wound infections, even of endogenous type by intestinal organisms.^{1 2}

In the course of two trials on the prevention of surgical wound infection by cephaloridine^{3 4} we have found that the infection rate in comparable wounds is less in the War Memorial Hospital, Whitby, than in Scarborough Hospital. The latter is a district general hospital with large, open, "Nightingale" wards, each of 30 beds, in which all types of surgical patient are nursed. The Whitby hospital is a cottage

hospital with several wards for one or two patients and eight-bedded male and female wards for both medical and surgical patients.

In wounds with no potential for endogenous infection ("clean") there were no infections among 117 Whitby cases compared with 20 (5.1%) among 388 Scarborough cases ($\chi^2 = 6.25$, $P < 0.02$). In contaminated cases (involving the opening of hollow viscera or the excision of infected lesions) the infection rate was lower in Whitby (11/91, 12.1%) than in Scarborough (53/349, 15.9%), but the difference was less significant ($\chi^2 = 0.55$).

It is unlikely that the better results in the Whitby hospital are due to the design of the operating theatres (which is similar in the two hospitals) or the nature of the operations (complicated operations were excluded from the comparison because they were done in Scarborough). The contrast is more likely to be in the size of the wards, which are much bigger and busier in Scarborough.

Probably the ideal milieu from the point of view of avoidance of exogenous wound infection is the patient's own home. We have recently operated (for hernias, varicose veins, etc.) on 111 patients who stayed in Scarborough Hospital for only 24 hours altogether. There were no wound infections in this series.—I am, etc.,

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- ¹ Smylie, H. G., Davidson, A. I. G., Macdonald, A., and Smith, G., *British Medical Journal*, 1971, 1, 67.
- ² Davidson, A. I. G., Smylie, H. G., Macdonald, A., and Smith, G., *British Medical Journal*, 1971, 1, 72.
- ³ Evans, C. M., and Pollock, A. V., *British Journal of Surgery*, 1973, 60, 434.
- ⁴ Evans, C. M., Pollock, A. V., and Rosenberg, I. L., to be published.

Late Advertising of Hospital Posts

SIR,—Professor R. S. Illingworth (4 August, p. 289) asks for more consideration for junior doctors in the timing of advertisements for hospital posts. The contents of many such advertisements leaves much to be desired. Relatively few give any indication of the nature of the job (apart from medical or surgical, etc.), the experience required, or the experience to be gained while doing the job. Postgraduate facilities are rarely mentioned. It may be argued that a telephone call to the hospital secretary is all that is required to obtain further details. The last time I rang a hospital secretary for information about a post, in particular the number of junior staff on the firm, I was given quite incorrect information. Professor Illingworth also points out that sometimes applications have to be sent in almost within hours of the advertisement appearing. Some hospital administrators do not seem to think that such haste should apply to them. One teaching hospital took three months to write and tell me that I had not been offered a post.

If hospitals wish to attract high-quality junior staff, then the standard of advertising must improve. I feel that hospital consultants have an important part to play in this. They should vet all advertisements for

their junior staff and insist that administrators should place comprehensive advertisements. After all, it is the consultants and their junior staff, not the administrators, who suffer if only unsuitable candidates apply. Some hospitals place exemplary advertisements—why can't the rest?

Another problem is whether a post is resident or not. There seems to be no consensus of what constitutes a resident post. I have just been offered a locum registrar post which is non-resident—yet I am compelled (by the administrators, not the consultants) to live in when on call. This is every other night and alternate weekends. If one is to be resident for the maximum recommended time, then surely the post should be resident. Alternatively, if one is forced to buy a house, with the inevitable heavy mortgage, then one should be allowed to go and live in it. I feel that distinctions between resident and non-resident posts are often made for administrative convenience as opposed to medical requirements.—I am, etc.,

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SIR,—Professor R. S. Illingworth (4 August, p. 289) complains that (1) many junior hospital posts are "out of step" and (2) many senior house officer and preregistration posts are advertised very late and within a few days of the start of the appointment.

With regard to the first complaint he will be pleased to know that real efforts are being made to synchronize the junior hospital appointments throughout the U.K., with growing success. With regard to the second there is a reason why some preregistration appointments are advertised late and it is difficult to see how it can be avoided. Preregistration appointments are taken up by the newly qualified doctor and the posts are allocated by computer or otherwise before the final examination in June. Inevitably a few students fail the exam and are therefore unable to take up their appointments in August, so that they then have to be advertised in July. This does not apply of course to S.H.O. appointments, but here I am sure Professor Illingworth knows that not a few S.H.O.s leave their posts before termination through having obtained a registrar post or for other reasons, so that a late advertisement is not necessarily evidence of "administrative inefficiency and incompetence" or "thoughtlessness for the doctors."—I am, etc.,

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Promotion of Research on Deafness

SIR,—According to the Chronically Sick and Disabled Persons Act, under section 24, the Department of Health and Social Security was charged in 1970 with the responsibility of collating and presenting to the Medical Research Council information on the case for an institute of hearing research with the function of co-ordinating and promoting research on hearing and assistance to the deaf and hard-of-hearing. This report, compiled by Dr. Annette Rawson using information