have been widely quoted. We should like to make several comments on these figures and to emphasize the caution needed before drawing conclusions based on small samples.

The Glasgow authors kindly allowed us access to the dates of transplantation of each of the 33 patients and this has enabled us to check their basic data. Several small transposition errors were noted relating to graft survival of patients 23-28. There was one further error in the graph showing "actuarial survival of 33 renal transplants (calculations by method of Barnes)" in that the dip at month 5 corresponding to the rejection of patient 31 was omitted. Re-calculating transplant survival using the adjusted data gives:

	All 33 Transplants	29 Cadaver Transplants
1 year	79%	75%
2 years	79%	75%
3 years	79%	75%

In each case survival remains constant in the second and third years since no patient rejected a kidney after the first 12 months. In fact, the three-year figures were not emphasized in the summary but did appear in the graph mentioned above; presumably they were not quoted because they were based on two patients. We suggest that the two-year figure should be excluded on similar grounds as it is based on eight patients. Our own studies have led us to discount figures at two and three years as they become quite inaccurate with small samples of the Glasgow size. We prefer to plot the monthly survival, calculated by dividing the number of grafts surviving for the given number of months by the number of grafts that could have survived that number of months. This calculation gives results that differ from those given by the actuarial method, but when the two methods are compared using very large series the differences disappear.

Our calculations of monthly survivals can be further refined by using computer calculations to construct a negative exponential curve to fit the data; a weighting system is incorporated into the programme which attaches more importance to those results where the sample size is larger. The monthly survival calculations and the computer-fitted survival curve have been applied to the Glasgow results, giving the following figures:

	All 33 Transplants		29 Cadaver Transplants	
	Calculated Value	Computer-fitted	Calculated Value	Computer-fitted
1 year	78%	79%	71%	74%
2 years	67%	69%	56%	59%

The results which we feel should be more widely quoted are the survivals at one and two years of the 29 cadaver transplants. We would suggest that it is these figures which are more meaningful than those in the Glasgow paper, which makes no allowance for the extremely small sample size.—We are, etc.,

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Integrated Child Health Service

SIR,—May we please reply to some of the comments on our recent article (*Supplement*, 20 January, p. 20). In suggesting that there should be 24-hour paediatric dispensaries it was not our intention to cause more fragmentation of services but to face the regrettable reality in some urban areas. Such a scheme could, however, be used to promote integration, since staffing would have to be jointly by family doctors and paediatricians and would offer the former the "foot through the hospital door" that they have justifiably wanted for so long.

We are grateful for the comments of Dr. Helenor F. Pratt (24 February, p. 489) and of Dr. K. S. Holt (10 February, p. 352). It seems to us to be unnecessary to create a new journal of child health and development since the present excellent journal *Development Medicine and Child Neurology* already provides a focal point for multidisciplinary activity in this field.

We share the view expressed so well by Dr. C. S. Smith (17 February, p. 415) that the service should be staffed by established specialists with the area medical officer acting as a general co-ordinator. In our view the hierarchical administration within which the social and preventive child health services have operated in the past has been very damaging.—We are, etc.,

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Unconventional Publication

SIR,—It was gratifying for those involved in planning the medical sciences section of the International Research Communication System to see that you feel the project important enough to warrant comment in a leading article (17 March, p. 631). You asked a number of questions. As chairman of the executive editorial board, I hope I may be permitted to reply.

The ultimate, admittedly ambitious, aim of the I.R.C.S. is to set up a central information bank which will contain author-prepared 500-word reports of all biomedical research performed throughout the world. Reprints of these reports will always be available. Most of the research will also be published in conventional journals; some items and in particular negative reports which often now go unpublished, will appear in the I.R.C.S. and nowhere else. Few would deny that the aim is worthwhile, and the names of the outstanding medical scientists who are acting as consultant editors indicate the level of academic support already obtained. There is room for considerable discussion as to the methods by which the aim may be achieved, and the I.R.C.S. editors and management stress that they are fully prepared to modify the system in the light of informed comment by scientists and editors.

Apart from the concept of a single central information bank, the most important aspect of the I.R.C.S. is its speed of operation, with a maximum of six weeks' delay between receipt of a report and publication. Thus within about two months of material being written up medical research workers anywhere in the world will be able to receive from a single source information about all research going on. Those associated with the four leading English language medical weeklies may be unaware of just how slow many journals are, with delays of 6-18 months between receipt and publication, and further delays of 3-18 months before the titles appear

in the *Index Medicus*. Those who have ready access to major libraries may be unaware of the advantages of obtaining information from a central source. But the majority of scientists who neither publish most of their work in the weeklies nor have daily access to a major library will have little difficulty in seeing the potential advantage of the I.R.C.S.

If an author submits a report to the I.R.C.S. at the same time as a full paper to a journal, the report will usually be reproduced in the I.R.C.S. before it has even been refereed by the journal. Such speed raises the question of quality control. In this respect we emphasize purely objective criteria such as the numbers of cases or experiments described and the presence or absence of statistical treatment of the results. Unlike almost all other journals, we do not before incorporating a report into the system attempt to assess the "importance" or "triviality" of a piece of work. We believe that it is impossible for one or two individual referees to give any valid assessment of the "significance" of a piece of work which other individuals have felt important enough to carry out. One wonders, for example, what most referees would have made of the importance of Mendel's tall and short plants! We feel that all pieces of work which meet basic objective criteria should be made available for assessment to the scientific community as a whole.

Journal editors may also be unhappy about the appearance of work in the I.R.C.S. before conventional publication. It is our informed belief that material in most conventional papers has, long before publication, been made available, often by means of meetings, to an "in-group" of research workers in the field. The idea that conventional publication is still a form of exclusive transmission of material never previously revealed to anyone is largely a myth. The slowness of most journals has forced scientists to disseminate their results in other ways. Such informal "publication" is often in media not routinely purchased by even large libraries and it leads to unpleasant priority disputes. We think that by formalizing a very rapid method of publication which is backed by the highest academic authorities we can deal satisfactorily with the problems. The information will be available not only to the "in-groups" but to any interested person anywhere. The detailed classification will ensure that each individual looks at reports only in areas in which he is interested.

We hope that journal editors will not refuse to consider full papers describing work which has previously appeared in the I.R.C.S. Journals now publish papers on work which has already been briefly reported either in correspondence columns of weeklies such as the *B.M.J.* or in conference proceedings. We can see no difference in principle between this and the publication of material which has been reported in the I.R.C.S. The I.R.C.S. simply makes the procedure more systematic and universally available. Brief report and full papers perform two quite distinct functions. It is impossible for any scientist to read in full all the papers relating even to a very narrow field. All read the summaries of papers whose titles seem of interest, but only in a few cases is the paper then read in detail. Advances in printing techniques now enable author-prepared reports to be circulated almost immediately without waiting for the publication of the full paper. It would be unfortunate if the much slower techniques required for conventional publication were to delay the circulation of the brief reports which in most cases are all that most readers require. We have informed about 100,000 biomedical research workers about the I.R.C.S. and the overwhelmingly favourable response indicates that this is a desirable and much-needed scheme. Contrary to what the editorial implied, librarians especially seem to welcome the formalization of what is now a chaotic rapid publication situation. They see no problems in citing in bibliographies classified and numbered reports which are on microfilm or microfiche. The

long-term availability of reprints means that the reports will be more accessible to a wider audience than much work which is conventionally published.

One important feature of the I.R.C.S. is that it will provide ready access to work done in non-English-speaking parts of the world. At the moment scientists from such countries are usually fully aware of what is published in English language journals. The reverse is unfortunately rarely true, and many English speakers seem to assume arrogantly if subconsciously that "if it's not in English it can't be good." The I.R.C.S. offers an ideal method for the communication of results from non-English-speaking countries and there are already clear indications that it is being very warmly welcomed in Europe, the Soviet Union, and Japan.

Finally, I should like to emphasize that at this stage the detailed application of the I.R.C.S. is flexible and open to modification. Informed criticism should be addressed either to myself or to I.R.C.S., P.O. Box 500, Lancaster. All suggestions will be welcomed and seriously considered.—I am, etc.,

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Strikes by Hospital Ancillaries

SIR,—I am certain that many ordinary members of the B.M.A. feel mystified as to how and why the Association decided to lend their weight to the demand for an inquiry into the wages of hospital workers.

The present strikes seem to many of us less about wage betterment than an effort to force the Government to back down and be discredited. That we should aid this effort makes one wonder whether the left wing has had a victory in our Council. This seems the more likely in that the B.M.A. has produced, over many years, no similar support or demand for inquiry into the salaries and service conditions of physiotherapists, occupational therapists, and others closely allied to us in our work and who are, considering their training and skills, much more deserving of our support and protest than many of those on whose behalf our name has been used—without our permission or preknowledge.—I am, etc.,

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Locally Advanced Breast Cancer

SIR,—In your leading article (17 February, p. 372), after describing Sonneland's recent paper¹ concerned with the destruction of a fungating carcinoma of the breast by means of zinc chloride paste, you mention that this is a technique of chemosurgery which has been used over the centuries. You add, however, that "this apparently first reported case of the use of chemosurgery in the primary treatment of advanced breast carcinoma is encouraging enough to warrant further serious consideration."

We would like to point out that a clinical trial of this method which included 60 patients with malignant disease, many of them with carcinoma of the breast, was reported in 1857.² In the Bland-Sutton Institute of Pathology at the Middlesex Hospital there is preserved in a specimen jar a

breast treated with this technique. Some limited benefit was obtained but the method was soon discarded. Coupland wrote of this study in 1902, "To us the lesson of this inquiry lies in the demonstration that the remedy, of which so much had been expected, which had long been kept a secret, was found to be no remedy at all and the fact that the practice of removal of growths by the slow and painful plan of mineral cauterization has not become established, except in isolated instances where no other procedure is available, goes to show that the hopes excited by this plan were soon falsified, and another method consigned to the limbo of discarded cures of this baffling disease."³

An occasional carcinoma of the breast where the tumour, though large, does not show wide infiltration of the surrounding tissues may be totally removed by any method which causes necrosis of the tumour. Such cases are limited in number and alternative methods of treatment which are less arduous for the patient are usually available. At a time when it is realized that clinical trials are major undertakings if significant conclusions are to be reached it is surely wrong to suggest the diversion of effort into a discarded field of treatment and wrong to subject patients to remedies of dubious value.—We are, etc.,

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¹ Sonneland, J., *American Journal of Surgery*, 1972, 124, 391.

² *Report of the Surgical Staff of the Middlesex Hospital to the Weekly Board and Governors upon the Treatment of Cancerous Diseases in the Hospital on the Plan Introduced by Dr. Fell*. London, Churchill, 1857.

³ Coupland, S., *Reports from the Cancer Research Laboratories, Middlesex Hospital*, 1902, 1, 1.

Hyperinfection with Strongyloides in Lymphomas

SIR,—Viral involvement in lymphomas may be secondary to chronic inflammatory states. The patients described by Dr. Malcolm Adams and others (3 February, p. 264) had overwhelming infection with strongyloides and also lymphomas. One had received immunosuppressive drugs, and conceivably this therapy later produced Hodgkin's disease. The two other patients had no treatment, and the lymphomas were therefore considered to have altered their immune responses. But why then did the reticuloses appear? Had the filariform larvae so thoroughly irritated the reticulo-endothelial system that normal contact-inhibition of the cells was lost? Such a mechanism locally may explain the increased incidence of bladder tumours in patients with bilharziasis. Hyperinfection with strongyloides is, however, rare, although the infestation is relatively common in the tropics. The infection more likely became "opportunistic" in the reported cases because of an earlier immune contest.

Candidiasis or aspergillosis often occurs in patients with "acquired immune deficiency," and recently infestation with *Giardia lamblia* was found in a case with severe hypogammaglobulinaemia.¹ Raised immunity may have in fact preceded both the hyperinfection and the lymphomas in these un-

usual examples of strongyloidiasis. Sensitized lymphocytes in lymphomas may be both the prop and the butt of an aggression, beginning years before. "Many immune responses confer unpleasant and even dangerous sensitivity on subsequent exposure to the provoking (or other) antigens."² Chronic malaria² and the prolonged cell-mediated immunity found in tuberculosis and particularly sarcoidosis³ are probably important factors in the aetiology of both reticuloses and other neoplasms. Cellular immunity to malaria may perhaps sometimes induce Burkitt's lymphoma; patients who have had tuberculosis more often develop gliomas than those who have not,⁴ while renal carcinoma,⁵ chronic lymphatic leukaemia⁶ and Hodgkin's disease⁷ have been reported following sarcoidosis.

A connexion exists between autoimmune diseases and neoplasms⁸ and this may be why malignancy occurs more often also after organ transplantation.⁹ Tumours have been found in patients with Hashimoto's disease, Sjögren's syndrome, and coeliac disease who had had, significantly, no immunosuppressive drugs. Hyperthyroidism, chronic thyroiditis, parathyroiditis, and Addison's disease are sometimes associated with sarcoidosis,¹⁰ probably more often than is realized. Erythema nodosum may be the only indication that sarcoidosis is present, and probably subcutaneous granulomas do not always occur in the legs. The infectious mononucleosis occasionally found in Hodgkin's disease may result from chronic immune alterations reactivating the Epstein-Barr virus. A similar reactivation may account for the occurrence of herpes zoster in patients with reticuloses and spinal metastases. The sustained immune stimulation of sarcoidosis may, for instance, excite anamnestic reactions and reactivation of viruses, leading sometimes to organ failure and later to neoplasms. The alternative proposal that virus infections induce sarcoid lesions does not sufficiently allow for the time factor.—I am, etc.,

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¹ Webster, A. D. B., *Proceedings of the Royal Society of Medicine*, 1972, 65, 589.

² Shaper, A. G., Kaplan, M. H., Mody, N. J., and McIntyre, P. A., *Lancet*, 1968, 1, 1342.

³ Caspary, E. A., and Field, E. J., *British Medical Journal*, 1971, 2, 143.

⁴ Ward, D. W., Mattison, M. L., and Finn, R., *British Medical Journal*, 1973, 1, 83.

⁵ MacGregor, G. A., *British Medical Journal*, 1972, 1, 375.

⁶ Ganpule, M., and Garretts, M., *British Journal of Dermatology*, 1971, 85, 587.

⁷ MacGregor, G. A., *Lancet*, 1973, 1, 322.

⁸ Fairley, G. H., *British Journal of Hospital Medicine*, 1971, 6, 633.

⁹ MacGregor, G. A., *Lancet*, 1973, 1, 200.

¹⁰ Karlish, A. J., and MacGregor, G. A., *Lancet*, 1970, 2, 330.

Breech Management with Fetal Blood Sampling

SIR,—Any obstetrician must welcome a system that could provide reliable warning of asphyxia during a breech labour. The changes in fetal pH in the second stage of a breech delivery, described by Dr. B. W. Eliot and Mr. J. G. Hill (23 December, p. 703), and the management that they have derived require careful consideration.

We have reviewed 46 unselected cases of breech presentation managed in labour by continuous fetal heart monitoring and, when indicated, by fetal blood sampling. Forty-