	No. of Cases	No. per 10,000 Deliveries
Superficial venous thrombosis	1	0·25
Deep vein thrombosis	2	0·5
Pulmonary embolism	3	0·7
Cerebral thrombosis	1	0·25
Total	7	1·7

the Mayo Clinic[1] indicated a prevalence of 134·7 per 10,000 deliveries. This apparent low prevalence of thromboembolism in the Thai series could be due to one or more of the following factors. (1) The period of postpartum hospitalization in Thailand is only two to three days. No cases occurring three or more days after delivery would be detected. The Mayo Clinic study showed that 34·4% of cases occurred three or more days after delivery. Thus the present study may have underestimated the prevalence of thromboembolism. (2) There may have been a failure to diagnose or record thromboembolism owing to diagnostic bias on the part of the physicians, especially in mild cases. It is noteworthy that the prevalence of superficial venous thrombosis was only 0·25 per 10,000 deliveries in the Chulalongkorn study, whereas it was 118·1 per 10,000 deliveries in the Mayo Clinic study. This suggests under-notification of mild cases. (3) The prevalence of postpartum thrombosis may be lower in Thailand owing to nutritional or ethnic factors.

The results indicate that while postpartum thromboembolism does occur in Thai women, the prevalence is lower than in the United States. However, the prevalence shown in the table is undoubtedly an underestimate owing to the short period of hospitalization and diagnostic artefacts. Studies are in progress to detect clinical and occult postoperational thromboembolism in Thai women using the ^{125}I-fibrinogen uptake test.—I am, etc.,

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1 Aaro, L. A., and Juergens, J. L., *American Journal of Obstetrics and Gynecology*, 1971, **109**, 1128.

Breast Milk Substitute

SIR,—The recent article by Dr. A. T. Willis and others on a planned "breast milk substitute" (13 October, p. 67) is an example of the type of tunnel-vision simplicism which can only amaze and dismay.

This group's earlier investigations into the protective functions of human milk in the maintenance of a *Lactobacilus bifidus* flora, a low faecal pH, the inhibitory effect of lactoferrin, etc. are very important contributions to the rapidly increasing knowledge concerning host resistance factors in breast milk.[1] From this background, Dr. Willis and his colleagues have pursued the valuable, but circumscribed, holy grail of a breast milk substitute (or cow's-milk-based "formula") geared to the production of acid stools and to a bifidogenic effect on intestinal flora. These aims are indeed important and desirable. At the same time, they represent once again an attempt to "humanize" a cow's milk formula based on one or two considerations only. In the past such ventures have often been related to major proximate principles or to mineral balance. The present authors approach the problem mainly from an anti-infective point of view, and, as they concede, the nutritional and metabolic implications of this particular mixture are left rather indefinite. One wonders, for example, if they are aware of the outbreak of pyridoxine-related convulsions that occurred in infants fed on another "formula" some 20 years ago[2] or of the vitamin E haemolytic anaemia story.[3]

The type of study described in this paper does have importance, as perhaps introducing a degree of artifical chemotherapy into artificial feeding, which may have particular value in some circumstances, especially where environmental hygiene is poor and the risks of diarrhoea and other infections are great. However, the dangers of an approach geared to the solution of a single problem need stressing. Human milk is an exceedingly complex mixture of over 100 different nutrients and of large numbers of protective substances. Research work into the least inappropriate cow's milk formula invariably poses problems because the investigators almost necessarily focus on trying to reach a "solution" of one problem, whether this be a bifidogenic effect or a reduction in curd-tension or increased calcium absorption.

The fact is that all mammal milks are both highly complex and differ greatly from one another—their numerous constituents are species-specific and in balance with one another. Planned alterations of ingredients in the mixtures that constitute cow's milk formulas to achieve a particular specific purpose are only too likely to lead to further unappreciated metabolic imbalances and other interference phenomena. The literature is full of such examples—pyridoxine-dependent convulsions have already been mentioned. The manufacturers of so-called "breast milk substitutes" kid themselves. There is no way at all for cow's milk to be transmuted into human milk. Minor changes and tinkering can certainly make cow's milk formulas more acceptable, safer, and metabolically tolerable. However, these modifications are inevitably at partial and gross levels, as becomes increasingly evident as recent scientific work continually adds to knowledge of the complex nature and species specificity of the very large number of interrelated constituents and nutrients found in all mammalian milks.[4]—We are, etc.,

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1 Hanson, L. A., and Winberg, J., *Archives of Disease in Childhood*, 1972, **47**, 845.
2 Coursin, D. B., *Journal of the American Medical Association*, 1954, **154**, 406.
3 Ritchie, J. H., Fish, M. B., McMasters, V., and Grossman, M., *New England Journal of Medicine*, 1968, **279**, 1185.
4 Jelliffe, D. B., and Jelliffe, E. F. P., (editors), *American Journal of Clinical Nutrition*, 1971, **24**, 968.

Rheumatoid Arthritis

SIR,—Your leading article on rheumatoid arthritis of the temporo-mandibular joint (18 August, p. 369) credits Sir Archibald Garrod with the introduction of the term rheumatoid arthritis. This, of course, is incorrect by one whole generation, since it was Sir Archibald's father, Sir Alfred Baring Garrod, who coined the term and nicely described the disease in 1859.[1]—I am, etc.,

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1 Garrod, A. B. *The Nature and Treatment of Gout and Rheumatic Gout*. Walton and Maberley, London, 1859.

Possible Hazard of Methacrylate Monomer

SIR,—The letter from Dr. R. Routledge (24 February 1973, p. 487) on a possible hazard to workers manufacturing contact lenses may be relevant to orthopaedic surgeons. The author suggested that the inhalation of methyl methacrylate monomer might be potentially dangerous. The increasing use of this material in the insertion of artificial joints subjects not only the orthopaedic surgeon but the anaesthetist and, especially, the scrub nurse to repeated inhalation of the monomer. Its sweet smell is already well known in our theatres.

As a result of the warning we have adopted the simple expedient of applying suction to the air immediately about the bowl of methacrylate while the monomer is being mixed with the polymer. It has proved easy to remove the smell of the vaporized monomer almost completely by this means. The introduction of a Charnley tent into the orthopaedic theatre of Frimley Park Hospital will allow us to include a small sterile exclusion cupboard with vacuum extractor at its apex within the tent. We hope by this means to reduce the inhalation of monomer by the theatre staff to a minimum. —I am, etc.,

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Preleukaemic Syndrome and Marrow Hypoplasia

SIR,—Your leading article (22 December, p. 691) mentions that a hypocellular bone marrow has been found in about a quarter of the reported cases of preleukaemia. We have recently seen two patients with marrow hypoplasia in whom there were haematological features resembling those of acute leukaemia.

The first patient was an 8-year-old boy who presented with prolonged bleeding on dental extraction and was found to have pancytopenia, haemoglobin 4·7 g/100 ml, leucocytes 2,000/mm^3 (neutrophils 20%), and platelets 10,000/mm^3. The blood smear showed lymphoid cells with atypical features, some containing nucleoli and resembling lymphoblasts. Bone marrow aspiration showed marked hypocellularity, the predominant cell being the atypical lymphoid cell seen in the peripheral blood. He was treated with blood transfusion, steroids, and antibiotics and over a period of 18 months underwent remission. There has been no further clinical or haematological evidence of leukaemia.

The second patient was a 20-year-old woman who developed pancytopenia while being treated with sulphasalazine for ulcerative colitis. She presented with a haemoglobin 10·8 g/100 ml, leucocytes 2,600/mm^3 (neutrophils 20%), and platelets 40,000/mm^3. Bone marrow showed an increased cellularity, myeloid:erythroid ratio 7:1 and 30% atypical promyelocytes, some with nucleoli. Three days later the peripheral blood leucocyte count had risen to 4,000/mm^3 and platelets to 120,000/mm^3. Repeat bone marrow aspiration still showed increased cellularity but with a myeloid:erythriod

ratio of 0·5:1 and only 6% promyelocytes. It was considered that the patient was undergoing a spontaneous remission of marrow hypoplasia and that no treatment was necessary. A month later both peripheral blood and marrow were normal.

These cases emphasize the importance of differentiating between acute leukaemia and marrow hypoplasia. If there is any doubt, cytotoxic therapy should be delayed.—We are, etc.,

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Autoimmune Reactions in Chronic Liver Disease

SIR,—The report by Dr. Senga Whittingham and others (1 December, p. 517) agrees with our own observations. Though we have found antimitochondrial antibody in all of seven cases of primary biliary cirrhosis, other autoimmune markers are very seldom found in chronic liver disease in Spain. In our series, recently reported,[1] of 41 cases of chronic persistent and aggressive hepatitis, only one patient showed smooth muscle antibody and none had antinuclear or antimitochrondrial antibodies, while Australia antigen was present in 18. These figures are not changed if we include 52 further cases not yet reported.

Our findings support the theory of Dr. Whittingham and her colleagues that there may be some differences in the racial prevalence of the autoimmune type of active chronic hepatitis, which seems to be very rare in our country.—We are, etc.,

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1 Torruella, M., *et al.*, *Medicina Clinica*, 1973, **61**, 373.

B.M.A. and R.H.C.S.A.

SIR,—I understand from the juniors' observers on the Central Committee for Hospital Medical Services that that committee does not wish to stand firm in the face of the Regional Hospitals' Consultants and Specialists Association's declared intention to go to the Industrial Relations Court but is again inviting the "other" association to talk with a view to finding some sort of compromise.

What does the C.C.H.M.S. fear? I have heard mutterings about the indignity of the profession's washing its dirty linen in public—but surely the B.M.A.'s linen is clean? The Association has nothing of which to be ashamed; distasteful though involvement in industrial court action may be, if the R.H.C.S.A. initiates it we must not shrink in horror. Is the B.M.A. afraid of losing members—those 800-plus resignations which presumably will materialize in the near future? All the more reason, surely, to remain adamant. One of the cogent arguments at present to persuade the regional consultant to continue to pay the larger B.M.A. subscription is that the smaller sum to the R.H.C.S.A. gives no direct access to the negotiating table. (The many other personal services which the B.M.A. offers are unlikely to sway large numbers in the present economic circumstances.) In the long run the B.M.A. stands to lose many more members if it gives way.

The sorry state of the working regional consultant is being blamed on the B.M.A. Why then are the general practitioners (and even the juniors), whose negotiations are also performed through the B.M.A., relatively so much better served? All that the B.M.A.—or any other association—can do is provide the *machinery* for negotiations; the outcome depends on the individuals operating the machine. The Department of Health and Social Security must know the C.C.H.M.S. had so little confidence in its representative machinery that it felt obliged to allow every consultant in every region to comment on, and seriously delay, it proposed new contract for consultants, despite the obvious advantages it contained for the majority, especially of consultants of the future. The resultant chaotic disagreement was apparent to all, and one must expect that at least some of those in positions of power as employers would have recognized the opportunity to "divide and rule." The consultants of the nation will obviously not pull together and fight; why then should the Department yield to their negotiators, who have no strong, united backing? Would the R.H.C.S.A. do any better, representing the same constituents?

If individual members of the C.C.H.M.S. honestly have no confidence in their ability to represent their constituents, they ought to resign and publicize regional meetings to elect replacements. More particularly, those who hold active dual membership *must* at this time resign from the R.H.C.S.A. if they pretend allegiance to the B.M.A. If they do not, one must seriously question their loyalty.

No doubt many C.C.H.M.S. members will now be asking indignantly what concern this is of the juniors, who are now autonomous and have no membership of the C.C.H.M.S. But (apart from the fact that juniors are, one hopes, future consultants) this is *not* an internal C.C.H.M.S. matter; the future of the entire Association and its representation of every sector is at stake. I "happened" into medical politics quite by chance, but over the past four years have acquired a great respect for the B.M.A. machine, as I have been in a position to observe the volume and range of work with which it copes. But it seems to me that those who are not in its "corps de ballet" have, like the ballerina's audience, no idea of the vast and unremitting effort behind its apparently effortless public movements.

Let us have some fighting talk from the leaders of the B.M.A. If the R.H.C.S.A. is determined to dissipate in battle energies and talents which could be used through the standard B.M.A. machinery to put united pressure on the Department, then this is a battle which we can and must win, and it is in the long-term interest of the Association and the profession to show that we are confident of doing so.—I am, etc.,

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Transfer of Registrars

SIR,—It is clear from statements made at a recent conference at the Royal College of Physicians that there are dangers that the redeployment of trainees will not now take place. This would be disastrous, for it is an educational exercise in which there is a unique opportunity to enhance both postgraduate education and patient care.

As things stand at present, training arrangements concentrated on university hospitals often result in a newly appointed regional consultant suddenly being confronted with individual responsibility for a much larger number of patients than he has ever encountered before. Moreover, the staff:patient ratio in the regional hospital is so different from that in the university hospital (where there are many more staff per patient) that it cannot be claimed that the present pattern of training is a sound one for future regional hospital consultants. The university hospital is deficient in two main essentials for postgraduate medical education—namely, readily available patients and a broad representative spectrum of illness in sufficient quantity. These, however, are present in abundance in regional hospitals. and the proposed redeployment will provide a greater opportunity for the trainee to acquire confidence and experience in clinically based techniques, as medical students have discovered. Training programmes will therefore become more realistic.

University hospital staff need to recognize that by a joint exercise with the regional consultant in assessing and taking part in training programmes a new dimension in medical education will be introduced, resulting in the university having a much wider and more realistic involvement in postgraduate education. An increase in consultant establishment in both university and regional hospital will be necessary. With redeployment the medical students in the university hospital will fare much better, for access to the patients will be easier. Any adjustment in university hospital staff in so far as medical student training is concerned is a matter for the University Grants Committee. It will be some time before all university hospitals have a full district community commitment. Furthermore, as redeployment can be justified only on educational grounds it is indefensible to exclude any specialty, particularly those which have been less supported by universities and medical schools for so long.

For redeployment to be possible adequate funds for housing, educational facilities, and research must be available, so that paragraph 122 of the National Health Service Reorganisation Plan[1] must apply to both the area health authority and the area health authority (teaching).—I am, etc.,

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National Health Service Reorganisation, England, Cmnd. 5055. London, H.M.S.O., 1972.