of ours who is in long-term remission after chemotherapy of acute myeloblastic leukaemia in childhood. He is now married and has two normal children.

In September 1963, when aged 9 years, he was found to have acute myeloblastic leukaemia, was treated with prednisone and 6-mercaptopurine, and went into remission. He relapsed in January 1965 and was then treated with prednisone and methotrexate, achieving a further but short remission and relapsing in July 1965. This second relapse was treated with prednisolone and cyclophosphamide and was followed by complete clinical and haematological remission which has been maintained ever since. Treatment was stopped at the end of 1967.

The patient married in 1972 and has a daughter aged 4 and a son aged 2 years, both clinically well. He was last seen (with his family) in June 1976 and found to be in continued haematological remission. Between her two normal pregnancies his wife had a miscarriage, but nothing is known about the condition of the fetus.

There are presumably other children who have achieved long-term remission after chemotherapy of acute leukaemia and have grown up to raise a family.

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The myth of phenelzine acetylation

SIR,—The assertion was made by Rawlins¹ and again in your leading article on monoamine oxidase inhibitors (10 July, p 69) that phenelzine is metabolised by acetylation. That this acetylation can be either fast or slow is the rationale behind the clinical studies with phenelzine in which patients are classified according to their acetylator phenotype. Evans *et al*² showed that slow acetylators complain of severe side effects but found no difference in improvement between fast and slow acetylators. On the other hand Johnstone and Marsh³ and Johnstone⁴ found that slow acetylators are more likely to improve but that there was no difference between the phenotypes in terms of side effects. The results from these studies are clearly conflicting.

In view of the possibility that acetylator phenotype is an important prognostic indicator for treatment with phenelzine perhaps it is time that the biochemical evidence for acetylation of phenelzine be considered.

A possible pattern for the metabolism of phenelzine (see figure) is based on the metabolism of isoniazid in man as outlined by Hughes⁵ and Peters *et al*.⁶ A necessary prerequisite for the polymorphic acetylation of phenelzine is the formation of acetylphenelzine, which has not been demonstrated in man or animals.

The pathway from phenelzine to phenylacetic acid has not been demonstrated in man although it is known to exist for mice.⁷ Whether metabolism proceeds by way of acetylphenelzine or directly to phenylacetic acid is still in question.

Clineschmidt and Horita⁸ have shown that in rat liver preparations phenelzine produces phenylacetic acid but suggest this to be by way of oxidative dehydrazination by monoamine oxidase (MAO), producing phenylacetaldehyde. The possibility exists that MAO activity has a bimodal distribution similar to slow and fast acetylation. Our studies in which pre-treatment MAO levels and acetylator phenotypes were measured in patients before treatment with phenelzine suggest that this possibility is unlikely.⁹

A third possible metabolic route has been described¹⁰ in which phenelzine is oxidised by MAO to a hydrazine, phenylethylidene hydrazine (PEH). This could, in fact, be the first step in the pathway suggested previously.⁸

Such studies with phenelzine on animal tissues may be criticised on the grounds of species difference, but claims that phenelzine is acetylated in man ought to be derived from evidence that acetylphenelzine exists and that it is synthesised polymorphically. The question remains not whether polymorphic acetylation exists but whether phenelzine is acetylated.

Meanwhile continued clinical investigation into the effectiveness of treatment with phenelzine based on acetylator phenotype must be considered only in the knowledge that the case for phenelzine acetylation is not yet proved.

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- ² Evans, D A P, Davison, K, and Pratt, R T C, *Clinical Pharmacology and Therapeutics*, 1965, **6**, 430.
- ³ Johnstone, E C, and Marsh, W, *Lancet*, 1973, **1**, 567.
- ⁴ Johnstone, E C, *Psychopharmacology*, 1976, **46**, 289.
- ⁵ Hughes, H B, *Journal of Pharmacology and Experimental Therapeutics*, 1953, **109**, 444.
- ⁶ Peters, J H, Miller, K S, and Brown, P, *Journal of Pharmacology and Experimental Therapeutics*, 1965, **150**, 298.
- ⁷ Leverett, R, Leeson, G A, and Dubnick, B, *Abstracts of the American Chemical Society*, September, 1960, p 65C, quoted by Clineschmidt and Horita.¹¹
- ⁸ Clineschmidt, B V, and Horita, A, *Biochemical Pharmacology*, 1969, **18**, 1011.
- ⁹ Marshall, E F, and Campbell, I C. Unpublished observations.
- ¹⁰ Tipton, K F, and Spire, I P C, *Biochemical Pharmacology*, 1972, **21**, 268.
- ¹¹ Clineschmidt, B V, and Horita, A, *Biochemical Pharmacology*, 1969, **18**, 1021.

Postoperative pain

SIR,—If the recommendations in your leading article on postoperative pain (18 September, p 664) were more widely implemented much suffering would be prevented. In this hospital a technique is being developed that may improve the comfort and convalescence of patients following major thoracic and abdominal operations.

When postoperative pain first requires relief papaveretum is injected in boluses of 2 mg each minute intravenously until adequate analgesia is produced. This is assessed by the patient saying that he is comfortable and confirmed by the ability to cough effectively without pain. An hour later double this dose is injected intravenously over 12 hours by a Handley clockwork pump or a Lund lymphangiogram pump.

Since the technique is at present confined to the intensive care unit no adequate comparisons can be made with patients treated with conventional analgesia routines. But it is hoped to extend the facility to general surgical wards in the near future. Observations indicate that the initial dose varies within wide limits and shows little correlation with age, weight,

or severity of pain. But once established, the initial dose provides a safe and reliable guide to subsequent continuous intravenous infusion during the next two days. After the first 24 hours the 12-hourly dose may be reduced by one-quarter each 12-hour period.

The patients are comfortable, alert except during periods of natural sleep, cough and move about the bed, and even out of bed, in comfort, suffer no respiratory depression and remarkably little nausea and vomiting, and in particular experience fewer and less severe spasms of the rectus muscles. On two occasions only out of more than 50 cases so treated analgesia has been insufficient during the maintenance period. In both relief was obtained by emptying a distended bladder. It is pleasant to be able to record that this work has received the enthusiastic support and encouragement of the surgeons and gynaecologists of this hospital.

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Hysteria today

SIR,—In your leading article "The search for a psychiatric Esperanto" (11 September, p 600) there is the interesting comment that hysteria is "virtually a historical curiosity in Britain."

This kind of statement depends very much on what one means by hysteria. The notion of the disorder has changed in that now we believe there is usually some underlying nosological entity, but this new attitude cannot by itself imply that hysterical behaviour has subsided. Hysteria may be occurring less frequently in young women, but it appears perhaps even more often in older women, among whom in the last couple of years I have seen at least nine patients with hysterical ataxia, collapsing, pseudocyesis, and hemiparesis.

This change in distribution carries some interesting sociological connotations. Possibly younger women as they become more emancipated in progressive societies react to stress in ways other than hysterical, such as becoming depressed and behaving violently to themselves and others, not to mention losing their sexual drive, whereas their older sisters respond according to the mores of their upbringing.

Among males, those who are in some kind of submissive role and therefore like the young women of the last generation seem to be no less subject to hysteria.

Even in developed countries hysteria will, in the words of Sir Aubrey Lewis, outlive its obituarists.

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Burning feet

SIR,—Professor G A Fitzgerald and his colleagues (8 May, p 1149) have provided a full and interesting case report of their patient with "burning feet" associated with polycythaemia rubra vera. They may not, however, be correct when they state that this condition has not been described before. Whitby and Britton¹ draw attention to erythromelalgia accompanying polycythaemia rubra vera. I have mentioned it also in my book *Arterial Surgery*.²

The condition may be combined with an ischaemic form of erythromelalgia, as in the

patient described on p 58 of my book who responded dramatically to combined treatment by lumbar sympathectomy and radioactive phosphorus. It is interesting that the patient described by Professor Fitzgerald and his colleagues responded so well to phlebotomy.

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¹ Whitby, L E A, and Britton, C J C, *Disorders of the Blood*, 10th edn, p 503. London Churchill, 1969.

² Eastcott, H H G, *Arterial Surgery*, 2nd edn, p 213. London, Pitman, 1973.

Oxytocin and neonatal jaundice

SIR,—In his study of neonatal jaundice following the use of oxytocin to accelerate labour (4 September, p 564) Dr P Boylan obtained results which, as far as they go, agree with our own.¹ His conclusions are, however, at variance with ours. One would not expect the mean bilirubin concentrations to differ significantly between the study and control groups while the frequencies of hyperbilirubinaemia ($>170 \mu\text{mol/l}$ (10 mg/100 ml)) are as low as 10.2% and 7.3% respectively (Dr Boylan's figures). This fact we have pointed out previously.²

Because his study was restricted to patients receiving less than 10 units of oxytocin to accelerate labour it is hardly surprising that he was unable to demonstrate an increased incidence of hyperbilirubinaemia following its use. In our own study the incidence of hyperbilirubinaemia was directly proportional to the total dose of oxytocin used to induce or to accelerate labour but was not related to the duration of labour. Hyperbilirubinaemia occurred least often in those babies whose mothers had received less than 10 units of oxytocin to accelerate labour but affected one-third of babies when more than 20 units of oxytocin had been used. This association was statistically significant. However, in an identical study³ in which prostaglandin (PG) E₂ was substituted for oxytocin there was no evidence of a relationship between the incidence of neonatal hyperbilirubinaemia and the dose of PGE₂ used to accelerate labour.

We cannot therefore agree with Dr Boylan's conclusion that "oxytocin does not have a deleterious effect on bilirubin metabolism in the newborn." The balance of evidence currently available is weighted firmly in favour of a positive association between neonatal jaundice and the use of oxytocin in labour.

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¹ Beazley, J M, and Alderman, B, *British Journal of Obstetrics and Gynaecology*, 1975, **82**, 265.

² Alderman, B, and Beazley, J M, *British Medical Journal*, 1974, **3**, 624.

³ Beazley, J M, and Weekes, A R L, *British Journal of Obstetrics and Gynaecology*, 1976, **83**, 62.

Clinical academic staff and new NHS consultant contract

SIR,—Meetings are now taking place in all districts to discuss proposals for a new NHS

consultant contract. We urge all clinical academic staff of honorary consultant status to attend these meetings to give their views.

If broad parity of remuneration between NHS and honorary consultants is to be achieved quickly and effectively we hope that only minor changes to the final form of a new NHS consultant contract will be needed to suit the requirements of university clinical academic staff. Clinical academic staff therefore should play a full part in the current discussions if they wish to achieve a comparable and satisfactory contract for themselves.

A discussion paper has been prepared by the Central Committee for Hospital Medical Services (11 September, p 655) and all clinical academic staff are urged to obtain it without delay. Supplies of the paper have been posted to the office of every dean of a medical school or postgraduate institution.

Your opinion on the discussion paper or on the nature of an ideal contract for clinical academic staff holding honorary consultant contracts will be welcome and useful in our discussions with the University Grants Committee; it should be addressed to Dr John Dawson, Secretary of the Full-time Medical Teachers and Research Workers Committee at BMA House.

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Splinter organisations

SIR,—How right Dr D L Gullick (18 September, p 701) is to echo Marlene Dietrich, "When will they ever learn?"

In my experience, of my fellow consultants who are loudest in their complaints against the BMA few have taken any active part at divisional level and none has offered himself for election to office. They think and speak of the BMA as an inefficient "them" rather than as an "us" with claims on a loyalty and financial support that is withheld. (The relative sizes of the two defence trusts reflect sadly on consultants' self-interest and political maturity.)

The excuse used to be that the BMA was a general practitioner-orientated organisation. Since the restructuring of the Annual Representative Meeting this has become untenable and if it ever did have any substance it was only because, in the absence of adequate consultant interest, GPs naturally filled the void thus left. It may be true that doctors, individualists by training and inclination, find it difficult to rally under one flag, but our GP colleagues have done it and enjoy corresponding influence. There is still some time left for consultants to achieve the same unity—but very little.

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SIR,—As, two years ago, I received perceptive and courteous replies from Dr D L Gullick to several queries I am surprised by the content of his letter (18 September, p 701).

Membership of the BMA, Hospital Consultants and Specialists Association, or National Health Service Consultants Asso-

ciation is not, of course, mutually exclusive, but disenchantment with the policies of the first two organisations has, in fact, called the third into being. All will agree that successful negotiation with the Department of Health will depend on unity of the profession. Such unity will only be achieved if our negotiators are seen to be acting for all sections of the profession; in the negotiations of two years ago the interests of the whole-time consultant seemed forgotten. I would suggest that the BMA could ratify its claim to represent all major interests by adding the following item to the Central Committee for Hospital Medical Services' discussion paper on the consultant contract (11 September, p 655).

Whole-time commitment—In consideration of a formal agreement by a consultant to restrict his or her professional services to NHS work an additional two NHDs will be applied to the basic contract.

Inclusion of such a provision, which can be amply justified, would protect the interests of those many consultants whose specialty is essential to the hospital service but does not lend itself to remunerative private practice. Its inclusion would go far to ensure that the consultant body would be truly united behind its negotiators and could also increase BMA membership among the currently disaffected.

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Consultant contract

SIR,—The arguments about the consultant contract and medical remuneration continue to rage. The public largely consider the consultants to be rich and greedy and those consultants undertaking private practice to be richer and greedier than their "whole-time" colleagues. We are shy of admitting that our discontent lies not only in our terms and conditions of service but also in the poor level of our remuneration.

Some years ago, the BMA in their wisdom negotiated the current "maximum part-time" contract. How many people outside the profession, even among other hospital staff, know that this is a complete misnomer? The so-called maximum part-time consultant is committed to exactly "the same amount of NHS work as his whole-time colleague." Many consultants opt for this form of contract not only for the right to private practice but to maintain a degree of independence even though they know that they will have to work longer or harder than their "full-time" colleagues in order to earn the same income. Surely it is time to make the true salary position clear—as do our Australian colleagues. The basic rate of pay for consultants should be stated as £6165 with private practice privileges or with an additional £1371 in lieu of private practice. At present the Health Service is getting a marvellous bargain in its numerous "part-time" consultants who in fact work full time and fulfil an on-call commitment for a salary which is less than the highest basic rate for a senior registrar and now commonly less than the total salary earned by many senior registrars or some registrars.

If the current state of affairs is allowed to persist there will be even fewer junior medical