inguinal glands on both sides were easily palpable but were neither tender nor enlarged. There was no constitutional disturbance.

These rather unpleasant-looking lesions slowly resolved without treatment, and had disappeared six weeks from the date of referral.—I am, etc.,

J. R. E. JAMES.

Cardmarthen.

Cerebral Malaria

SIR,—I am interested in the recent correspondence (27 July, p. 250; and 14 September, p. 680) regarding cerebral malaria.

I spent some nine years in East Pakistan where *P. falciparum* is endemic and was able to treat a fair number of cases during that time. The most striking thing about a case of the disease is the rapidity of its deterioration once coma has set in. Many patients may come to a remote country hospital or dispensary from some distance in extremis. Need of treatment is paramount. Delays while lumbar punctures and drips are prepared may be fatal.

My earlier experience of using intravenous quinine as the sole parenteral medication was frightening. Two cases on successive days died. However, Manson-Bahr in his invaluable *Tropical Diseases* advocates the use of intramuscular adrenaline. From then onwards the standard treatment in our small hospital was as follows: Intravenous quinine dihydrochloride 10 gr. in 10 ml. distilled water given slowly over 10 minutes. Immediately thereafter 1 ml. 1:10,000 adrenaline intramuscularly over five minutes. We treated probably about a dozen cases without a single fatality by this method. It would appear that just as the steroids have supplanted adrenaline in bronchial asthma so they are doing in cerebral malaria.

The rationale of the adrenaline treatment would appear to be threefold. (1) It causes the spleen to contract, expelling parasites into the blood stream and facilitating the action of the quinine; (2) it causes peripheral vasoconstriction, and this aids the resuscitation of the patient who is always collapsed, with poor

peripheral circulation; and (3) it has an effect on the cerebral oedema mainly because of its vasoconstrictive action. Needless to say, other supportive measures such as ice bags and drips are necessary, but my experience would suggest that the consistent use of quinine and adrenaline saves time. The other measures will aid recovery.

Dr. T. Harding need not fear his budget will be stretched. Adrenaline is an essential item of equipment in every general practitioner's bag, let alone in a small hospital, and it is relatively cheap, compared with dexamethasone.—I am, etc.,

Bilton,
Rugby.

I. T. PATRICK.

Chemotherapy of Malaria

SIR,—I have to-day received the *B.M.J.* (13 July, p. 71) and read with interest the leading article on chemotherapy of malaria. It is certainly true that in Tanzania at least there have been no substantiated cases of malaria resistant to 4-aminoquinolines. There have, however, for a long time been many areas where there has been resistance to both pyrimethamine and proguanil, so much so that for many years we have completely given up using these drugs in any form of malaria, either for treatment of an acute attack or for chemoprophylaxis.

I think, therefore, it might have been best if this was explained in the second paragraph of your leading article, from which one would understand that pyrimethamine and proguanil should still be used as chemoprophylaxis. I would also have preferred the use of the word chemoprophylaxis or causal prophylaxis rather than chemosuppression. I feel sure that if proguanil and pyrimethamine continue to be used as prophylactics where resistance to these drugs has developed this will not only cause an increase in the incidence of resistant strains of *P. falciparum* but also considerable morbidity and loss of work. The literature is also clear that there have been a not-negligible number of fatal *P. falciparum* malaria in those who have used the above drugs as chemoprophylactics.

So far as our experience goes, we have continued to use the 4-aminoquinolines in both prophylaxis and treatment of malaria and have run into no trouble as a result of this. The position as regards malaria in Tanzania has been fully documented.—I am, etc.,

JOSEPH TAYLOR.

Mvumi Hospital,
P.O. Dodoma,
Tanzania.

REFERENCE

- ¹ Clyde, D. F., *Malaria in Tanzania*, 1967. London.

Stress and Bronchitis

SIR,—Dr. A. C. Stenhouse (3 August, p. 287), reporting on acute exacerbations of chronic bronchitis, reports on 22 episodes of "non-specific bronchitis" confined to a few of the patients under study. We would like to point to an emerging factor of significance in the study of upper respiratory infection and other illness that may account for the selection of this and other subgroups,

given equivalent virological data and knowledge of their endocrine state. Though the age of the particular patients in question is not given, the data of Dr. Stenhouse's prior study (19 August 1967, p. 461) would place them above the age range of our study; however, this would appear to make the concept no less valid, given the state of knowledge about geriatrics.

Acute upper respiratory infection has come under closer scrutiny with current virological, epidemiological, and endocrinological study. Observation has shown that the average number of colds per person each year is remarkably constant, but that considerable variation is noted in the number of colds experienced annually by both individuals and families.¹ It has been postulated that genetic factors might govern innate susceptibility or resistance.¹ Host susceptibility, of whatever origin, appears to be a factor in the relative frequency of subclinical and clinical infections.² A mechanism of susceptibility involving endocrine function on a cellular level has been hypothesized.^{3,4} The recent endocrine balance study of Mason *et al.*⁵ showed a number of pre-illness hormonal changes, including an abrupt spike of 17-OHCS, epinephrine, and norepinephrine, and a gradual drop in butanol-extractable iodine. Sick subjects with upper respiratory infections differed from less sick by having a greater number of extreme values. The psychoanalytic literature has presented dynamic formulations that may bear on susceptibility, especially related to conflict situations,⁶ and M. Jackel before the fall 1967 meeting of the American Psychoanalytic Association implicated depression, as had others previously.

The menstrual cycle has well-documented phasic hormonal changes.⁷ As part of an ongoing study at this laboratory it was found that levels of characterological anxiety, or anxiety trait, were associated with physical-emotional-social impairment during the premenstruum. Inquiry as to the incidence of upper respiratory infection in the studied population of 161 female student nurses showed a significantly greater number of acute upper respiratory infections in the "high" trait anxious group than in the "low" anxiety group. This relationship to trait anxiety, as measured by the Taylor Manifest Anxiety Scale, was significant at the 0.01 level. Measures of situational anxiety, or anxiety state (the Scheier Cattell Anxiety Battery), and of depression (the "D" scale of the Minnesota Multiphasic Personality Inventory) were not significant in differentiating the populations with and without colds. There was not a significant correlation between colds and impairment independent of anxiety.

A synthesis of the data from various fields indicates that there should be a discriminating factor in the incidence of upper respiratory infection. The study of premenstrual tension has provided a naturally occurring "stress" that has documented hormonal changes that fit with previously delineated mechanisms of infection. Since all women undergo hormonal changes during the menstrual cycle, the factor of significance, however subtle it may be, is the influence of psychic response to such "stress." Response characteristics may accentuate or modify the pattern of hormonal change in the menstruum, thereby enhancing susceptibility. This accentuation or modification in the individual may be based on a characteristic response to acute stress of defined type. The observation of a significant relationship between trait anxiety and the incidence of upper respiratory infection represents a start toward the better definition of individual difference as a significant factor in the onset of illness. This finding can aid in understanding such findings as those of Dr. Stenhouse, where appar-

ently unaccountable subpopulations appear. Awareness and reporting of similar findings may lead to a better understanding of an important aetiological factor in clinical illness and perhaps aid the cause of preventive medicine.—We are, etc.,

MYRON L. BELFER.
RICHARD I. SHADER.
ALBERTO DI MASCILO.
JEROLD S. HARMATZ.
JEREMY P. NAHUM.

Harvard Medical School and
Massachusetts Mental Health Centre,
Boston, Mass., U.S.A.

REFERENCES

- Dingle, J. H., *Med. Tms (N.Y.)*, 1966, 94, 186.
- Stuart-Harris, C. H., *Israel J. med. Sci.*, 1966, 2, 255.
- Rytel, M. W., and Kilbourne, E. D., *J. exp. Med.*, 1966, 123, 767.
- Nicol, T., Vernon-Roberts, B., and Quantock, D. C., *J. Endocr.*, 1965, 33, 365.
- Mason, J. W., et al., *Psychosom. Med.*, 1967, 29, 545.
- Saul, L. J., *Int. J. Psycho-Anal.*, 1938, 19, 451.
- Reichlin, S., *New Engl. J. Med.*, 1963, 269, 1246.

Licence to Practise in the U.S.A.

SIR,—There has never before been such great geographical mobility as there is today in the medical profession. And the shortage of medical personnel available to the public has been coming into sharp focus, particularly with the wider availability of public-funded care in the United States.

Surely it is an anachronism that in that country—so abundantly committed to fair practices and non-discrimination—that some States still refuse medical licensure to foreign graduates. Nevada, Oklahoma, and Arkansas freely admit to this policy, while some other States simply set unreasonable examination requirements or other qualifications to exclude the physician trained elsewhere.

Until such time as the various States rectify obvious unjust licensing practices, the recent overseas graduate should check very carefully on licensing details before planning on spending much time practising in America.—I am, etc.,

Boston, Mass.,
U.S.A.

A. MOORE.

Tobacco Habit

SIR,—Mr. L. J. Temple (24 August, p. 499) wonders why surgeons do not grasp the opportunity to warn their patients with peptic ulcer to stop smoking. I too am amazed at the complacency of the profession and our failure to grasp numerous opportunities to discourage the tobacco habit. Besides withholding gastric surgery from smokers, we should insist that all sufferers from chronic bronchitis and heart disease give up smoking forthwith. It is no use advising patients to cut down smoking. We must show conviction and galvanize the patient with an enthusiasm for the challenge of self-discipline. Even orthopaedic surgeons like myself can play their part. All sufferers from disc prolapse can be legitimately told to stop smoking because of the harmful effects of coughing. No doubt many other avenues of persuasion are open. For example, anaesthetists could insist that all patients for admission from the waiting-lists for operation must stop smoking for two weeks prior to coming into hospital.

If patients could see that we, by example and precept, show genuine concern about this problem they would begin to take us seriously. The medical profession bears a large share of the blame for the lack of public response to the known hazards of smoking.—I am, etc.,

A. W. FOWLER.

Bridgend General Hospital,
Bridgend, Glamorgan.

Adoption

SIR,—In your leading article on adoption (31 August, p. 509) you state: "One is too conscious of the need shown by children for their natural parents with all their numerous inadequacies even within a stable marriage to be very ready to support greater powers to override parental consents."

It is fashionable to assume that the natural parent has some ill-defined advantage which the adoptive parent can never acquire, but I suggest that where the neonate is concerned there is no physiological or psychological basis for this assumption. We have a clear duty to give a lead to both jurist and judiciary on this point, more especially at a time when further legislation is anticipated. It would be unfortunate if our advice were based on supposition rather than observation.—I am, etc.,

A. J. S. JAMES.

Gloucester.

Fate of Discharged Schizophrenics

SIR,—The disturbing fate of over 60% (45% untraceable, 17% unoccupied) of schizophrenic patients discharged from psychiatric hospitals, as reported by the King Edward's Hospital Fund,¹ confirms the fears many of us have felt as a result of experience with individual cases from time to time. The worthy motive of rehabilitating as many remitted schizophrenics as possible into the general community must be balanced against the careful consideration of what will happen to the discharged patient, and what arrangements can be made to ensure his proper care from every angle.

There is no virtue in reducing the overcrowding of psychiatric hospitals if the end result involves a large percentage of the discharged wandering about aimlessly in streets and parks, sleeping on embankments, or, still worse, ending up in prisons and special hospitals.—I am, etc.,

I. ATKIN.

Weybridge,
Surrey.

REFERENCE

- Industrial Therapy in Psychiatric Hospitals*, 1968. King Edward's Hospital Fund, London.

Long Leg Plasters

SIR,—Closed reduction and plaster of a lower leg fracture is awkward because of the weight to the leg, the time for which it must be supported, and the need for controlling position of heavy, mobile parts. Doubtless many techniques have been described over the years, including a recent one by L. E. Vine.¹ The merits of the one to be described are simplicity, lack of special equipment, and use in the ward without transporting the patient or taking up theatre time.

With a fracture board under the mattress the patient is supported under the buttocks by bed-blocks or a carton of plaster covered with several towels. A cot side is supported over the patient by the head of the bed at one end and a transfusion stand at the other. The cot side is secured in place with bandages and the drip stand tied to the foot of the bed. The patient is anaesthetized and stockinet threaded over the leg. Three or four wide linen bandages are looped under the leg and tied over the cot side-rails so that the leg is aligned. A plaster back-slab is applied to the leg and held in position with a single layer of bandage (Fig. 1). With the malleoli padded the plaster is then completed, and as it hardens the linen loops are cut (Fig. 2), the gaps being smoothed in.

FIG. 1

FIG. 2

This method has been far less traumatic to patient and staff than others previously used. While no originality is claimed, it may be of interest to those unacquainted with the technique.—I am, etc.,

MICHAEL PATKIN.

Dungog and District Hospital,
New South Wales, Australia.

REFERENCE

- Vine, L. E., *Med. J. Aust.*, 1968, 1, 1127.

Kwok's Quease

SIR,—The question concerning the effect of repeated small doses of monosodium glutamate, raised by Dr. M. Goldman (14 September, p. 682), may be answered as follows.

Glutamic acid is so widely distributed in foods, albeit as a component of protein, that man has always been taking repeated small doses of this amino-acid. Many manufactured foods—and these have for many years formed part of most people's normal diet—contain hydrolysed protein and therefore monosodium glutamate as such. Metabolism