Correspondence

Letters to the Editor should not exceed 500 words.

Malaria in Britain. P. Rees, M.R.C.P.ED.; D. C. Prior, L.M.S.S.A. 310

Effects of Nicotine. J. H. Burn, M.D., F.R.S. 310

Requests for Abortion. J. M. Thomson, F.R.C.O.G.; R. G. Bird, D.P.M. 311

Royal Malady. C. E. Dent, F.R.C.P., F.R.S.; T. K. With, M.D. 311

Porphyria. C. J. Watson, M.D. 313

Drugs in Control of Hypertension. K. N. V. Palmer, F.R.C.P., and Audrey A. Dawson, M.D. 313

Hypertension in the Tropics. E. Montuschi, M.D. 313

Prevention of Rh-haemolytic Disease. R. F. Jennison, M.D. 313

Renal Pain of Vascular Origin. R. W. Heslop, F.R.C.S., and others 314

Guinea-worm Arthritis of Knee Joint. B. M. Greenwood, M.R.C.P.; Margaret F. Johnson, F.R.C.S.ED. 314

Malaria in Britain

SIR,—I was very interested to read the letter from Professor B. G. Maegraith and Dr. D. H. Smith (20 January, p. 179). Fortunately there is not always such a delay in making the diagnosis. Three cases of falciparum malaria admitted to the Hospital for Tropical Diseases, London, over the New Year period had been promptly suspected by their practitioners.

It is difficult to believe that in the case described in the Liverpool letter the practitioner did not consider malaria. All doctors have some concept of malaria, but perhaps this illness did not fit in with this doctor's concepts. I suggest that the fault lies in the traditional method of presentation of malaria to medical students. Lectures are soon forgotten and most students rely on the tropical section of whatever textbook of medicine they use. The standard textbooks, with one or two notable exceptions, quite fail to differentiate clearly between benign and malignant malaria. The four parasites (Plasmodium vivax, falciparum, ovale, and malariae) are discussed together. Stress is laid on temperature charts and splenomegaly. The impression may even be gained that P. falciparum infections are a subtertian variant of classical tertian (P. vivax) fever. But there are vital differences between the benign malarias (P. vivax, ovale, and malariae) and malignant malaria (P. falciparum). Benign malaria is virtually non-fatal and relatively unimportant. Parasites are never found in more than 2% of the red cells. In malignant malaria parasitaemia may rapidly reach high levels, and once over 30% of the red cells are parasitized recovery becomes increasingly unusual.

Malignant malaria most commonly presents as an influenza-like illness, though complications may confuse the picture so that the diagnosis should be considered in any ill person who has recently returned from the tropics. The temperature chart is unhelpful,

and the absence of splenomegaly in no way excludes the diagnosis, which can only be made or excluded with certainty by the examination of blood films. Falciparum malaria may lead to death within a few days of the onset, and is still responsible for an enormous annual mortality in tropical populations.

No textbook would be so indistinct in dealing with benign and malignant lung tumours as many are with benign and malignant malaria.—I am, etc.,

PHILIP REES.

London School of Hygiene and Tropical Medicine, London N.W.1.

SIR,—The importance of the early diagnosis of exotic diseases brought to this country cannot be too strongly emphasized. The general practitioner is probably the first to see the majority of such cases, but even so it is surely unfair to single him out for "pressure," as Professor B. G. Maegraith and Dr. D. M. Smith suggest (20 January, p. 179).

On a recent Boxing night a pregnant Englishwoman was admitted to a provincial maternity unit in Lancashire with a history of fever and vomiting for a week. Initially she was labelled "P.U.O.," and an antibiotic prescribed. Next morning she was much improved and her pyrexia had settled; similarly the following morning after a high evening temperature. Over 36 hours she had been seen by three doctors, two of them from overseas countries. A history of travel was available on admission: the patient had left Ghana 17 days previously.

My own (then) recent experience of malaria overseas led me to an immediate diagnosis, and a blood smear showed heavy *Plasmodium falciparum* infection. Without this experience the diagnosis could easily have been further delayed. Looking back, on history alone the diagnosis appears obvious, but it is

easy to be wise after an event, particularly so for the specialist.

Even after confirmation of the diagnosis parenteral therapy was not available and drugs had to be obtained from a teaching centre, causing a further delay in instituting adequate treatment. After a few critical days the patient fortunately recovered, but lost a premature infant in the process.

More pressure is needed, but not only on the general practitioners—on all medical practitioners; on all hospitals, to ensure adequate therapy is immediately available should such cases be admitted; and, above all, on people at risk, who constantly seem to think that prophylactic measures are unnecessary.— I am, etc.,

Mossley Hill Hospital, D. C. PRIOR. Liverpool 18.

Effects of Nicotine

SIR.—As one who in former years has had papers published in your journal describing actions of nicotine in the body, I was interested in the leading article on the effects of nicotine (13 January, p. 73). There is recent work which adds materially to that account and shows that the stimulant action of nicotine is not only definite but useful. Bovet' (a Nobel laureate) has shown that the rate at which a conditioned reflex is acquired can be greatly increased by nicotine. Rats given a shock through the floor of the cage escape the shock by jumping up a wooden pole. They are given warning of the shock by a light five seconds previous to the shock. The rate at which they learn to jump when the light appears is increased by 100% in slow learners after an injection of nicotine. Morrison² has shown that the rate at which thirsty rats press a lever to get water is also increased by an injection of nicotine. The number of times the lever is pressed in 90 minutes may go up by as much as 70%. Thus the rats work harder.

by Armitage and Hall's that nicotine injected into the ventricle of the brain of a cat causes a fall of general blood pressure. This action persists after section of the vagi and after atropine. The fall may have a bearing on the view that in states of excitement, nicotine has a calming effect, though under ordinary circumstances a rise of blood pressure predominates.

Your article mentions that nicotine may act by releasing acetylcholine. This is important, since the formation of acetylcholine which can be measured in cups placed on the surface of the brain is greatly increased when nicotine is injected into the ventricle.4-I am, etc.,

Oxford.

J. H. Burn.

REFERENCES

Bovet, D., in Tobacco Alkaloids and Related Compounds. Proceedings of the 4th International Symposium. Edited by U. S. Von Euler, p. 125. Oxford. 1965.
 Morrison, C. F., Internat. J. Neuropharmacol., 1967, 6, 229.
 Armitage, A. K., and Hall, G. H., ibid., 1967, 6, 1143

143. 7. Physiol. (Lond.), 1967, 191, 115P.

Requests for Abortion

SIR,—I share Mr. W. G. Mills's anxiety regarding the increased number of patients referred to outpatient clinics for consideration of termination of pregnancy (30 December, p. 802). In this area the number of such referrals has trebled in the past year. The report of the B.M.A. Committee on the Indications for Termination of Pregnancy (20 January, p. 177) was timely and provided useful guide lines. I will not comment on the psychiatric indications, about which I have reservations, but I would like to draw attention to two of the physical conditions mentioned in the report.

I have always considered termination of pregnancy to be indicated in cases of carcinoma of the breast—both in patients in whom the neoplasm is diagnosed early in pregnancy and in patients with a history of treated carcinoma. I am surprised the report should state, with certain reservations, that "pregnancy is harmful neither before nor after removal of the tumour." Is there statistical evidence to support this statement? The report also recommends that "termination may very rarely have to be considered in cases where there is a history of extensive vaginal repair-for example, for stress incontinence." Surely the treatment of choice in cases of this kind is not termination of pregnancy but delivery at term by elective caesarean section and sterilization? These are relatively minor criticisms. I welcome the report as a whole.

I hope the deliberations of the medical defence organizations will be equally helpful. The great increase in demand for abortion has resulted in several cases being seen in which the gynaecologist finds himself at variance with the opinions of his general practitioner and psychiatric colleagues. The position of the gynaecologist who conscientiously feels unable to agree to perform termination in these cases should be protected. A middle course must be found for those of us who are conservative but not bigoted, and who are willing to undertake termination of pregnancy for reasons which, in consultation with our colleagues, we be-

An important observation has been made lieve to be good and proper, but who are unwilling to abort on demand.-I am, etc.,

> I. M. THOMSON. Taunton

SIR,—With reference to the letter of Dr. W. T. Mackie (13 January, p. 120), his conclusions and remedies would lead to an increase in the cost of the N.H.S. at a time when the financial burdens of the country are to the fore. Much more economical would be either to train doctors to perform abortions, since if performed early enough the operation needs no great skill and the Act does not specify that only a consultant can perform it, or to allow for, say, senior registrars to hold abortion operating sessions. Bearing in mind the expense of caring for the disturbed unmarried mother and the unwanted child, abortion clinics

might well prove to be more economical for the country generally.

The gynaecologist's time likewise could be saved by referral for the second opinion to a specialist in that field (using this term in its widest meaning), the gynaecologist then performing the operation provided for in the Act. Since the increase in abortion cases will be those presenting as social and/or psychiatric problems, and since the gynaecologist usually has not the experience for the former or the knowledge for the latter, then a general practitioner or psychiatrist respectively (and not medical and ancillary staff) seem to be the choices.

As for educating the public, the Act in one respect is for abortion on demand: demand by pregnant women who want to be assessed to see if their cases are reasonable.

-I am. etc..

London W.1.

R. GEOFFREY BIRD.

Royal Malady

SIR,—May I state my objections to certain statements in the two papers1 2 on the occurrence of porphyria in the Royal Family? I have discussed them already with Dr. Ida MacAlpine and Professor C. Rimington. As we still agree to differ, we thought it would be better if I wrote my objections down for the judgement of our colleagues. I would especially like to invoke opinions here from experienced clinicians. My objections can be grouped under several headings.

Clinical

The authors describe in both papers a very severe disease. Because of its severity, with various mental and physical manifestations, it is implied that it has affected the course of history. My first objection here in broad terms is that neither of the two common forms of porphyria have been really serious diseases until this century, since severe attacks, especially when associated with paralysis and mental changes, have usually followed administration of modern drugs. The best authenticated cases of porphyria followed through the ages, whether of the Swedish variety (acute intermittent porphyria) or of the South African variety (variegate porphyria), suggest that the disease in the past was not particularly crippling nor damaging to the vigour or judgement of the people concerned. Indeed, Dean,3 in his discussion on variegate porphyria, has argued that there might even be an advantage in having the gene in the family before the period of modern medicine.

The second objection concerns the difficulty of diagnosis on purely clinical grounds. I think everybody agrees that this is difficult without proper confirmatory tests. I am surprised that in the differential diagnosis only lead poisoning was discussed in either paper, except for the mental aspects. The symptoms can mimic a host of other diseases. Hence, while it is not possible to say that the cases in the Royal Family did not have a form of porphyria, it is possible that they could have had a lot of other things producing similar manifestations. Most clinicians are handicapped here in the vital question of the distinction between the two relevant forms of porphyria. Much of my experience, for instance, is on cases we had admitted and studied before this distinction was made and which have not all been reinvestigated by modern means to tell whether they originally had the variegate form or the other. Certainly I have known some proved cases of variegate porphyria and also many more cases which could have had either, and my smaller experience is identical with that of Dean-namely, that when patients come in with a very severe attack it can nearly always be related to the taking of certain drugs. If we can get them out of this attack and then tell them and their general practitioners (and also make a suitable comment in their hospital notes) that certain drugs must never be given to them again, then we hardly ever see these patients again, except perhaps with a minor symptom.

My own difficulty in making precise retrospective diagnoses of patients seen before variegate porphyria was eventually distinguished from the commoner form is of course shared by all other older physiciansand, I might add, especially by those whose patients lived 200-300 years ago, or whose present-day patients are not easily accessible for study. This is well illustrated in the two papers I am criticizing, 12 for the authors used the group diagnosis, porphyria, in the title of both. One has to read the text to realize that in the first paper they are describing George III as being a "typical" case of acute intermittent porphyria, whereas in the second paper in the text they have changed their minds on clinical as well as biochemical grounds in favour of the variegate form. This change of diagnosis seems to have been based mainly on the discovery of skin fragility and photosensitivity. The additional evidence seems rather weak in places. Dean makes the point that the skin fragility is usually on the exposed areasnamely, on the backs of hands and the face -but one of the historical cases is described as having it on the shoulders, neck, elbows, and knees, where his armour rubbed.

There are other clinical difficulties against the possibility of either form of porphyria. It looks, for instance, as if several of the suspected patients recovered from their paralysis a little too quickly on occasions for this to have been due to a porphyric neuritis. Could they have had low potassium paralysis