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Malaria prophylaxis and epilepsy

Drs D R Fish and M L E Espir reported on tonic-clonic seizures (27 August, p 526) in four women taking chloroquine for malaria prophylaxis either alone or in combination. They concluded that a specific inquiry should be made for a history of epilepsy when malaria prophylaxis is being considered and that patients with epilepsy should be advised about the risk of antimalarial drugs provoking seizures.

The cases reported are briefly described. In three of them the time between the last dose and the seizures is not stated. We believe that many epileptic patients are seen annually at the Institute of Neurology, where the authors work. It would hardly be surprising to find a small percentage among these who take antimalarial drugs as well. The time span during which the four patients were seen and the annual number of epileptic patients at the institute are not stated. Therefore the likelihood of a causal relation between the seizures and the antimalarial prophylaxis cannot be estimated.

In Sweden, as in the United Kingdom, there have not been any reports to the Adverse Drug Reaction Committee about convulsions during chloroquine treatment or prophylaxis. It is very difficult to estimate how many Swedish travellers have used chloroquine for malaria prophylaxis. It is estimated from official sales statistics (National Corporation of Swedish Pharmacies, 1987) that 12 000 rheumatic patients undergo maintenance treatment with chloroquine each year, many of whom have certainly had a history of seizures. Furthermore, the dose given and the chloroquine concentrations are much higher in these patients than in travellers undergoing malaria prophylaxis. Considering the nature of epilepsy with spontaneous recurrence and the lack of reported adverse reactions we do not regard it necessary to ask travellers receiving chloroquine alone about possible previous seizures.

It may be noteworthy that chloroquine was combined with pyrimethamine and a sulphonamide in three of the four cases reported and that one of these had no evidence of a low seizure threshold. This might indicate a risk for convulsions when these drugs are taken in combination. Nevertheless, the number of cases is small and the pattern of prescription of malaria prophylaxis in the catchment area is not stated in the report. Rather than recommending restrictions in malaria prophylaxis or travelling for people with epilepsy, the authors' report should alert prescribers to look for and report possible further cases of seizures in connection with malaria prophylaxis.

URBAN HELLGREN
LARS ROMBO

Department of Infectious Diseases,
Karolinska Institutet,
114 89 Stockholm,
Sweden

AUTHORS' REPLY,—The seizures in the four women reported on occurred during once a week antimalarial prophylaxis and were seen by us within a 15 month period. With regard to the intervals between the seizures and the last dose of the drugs shown in our original table, these were as follows: case 1, 5 days; cases 2 and 3, 1 day; and case 4, two tonic-clonic seizures during the week after the second dose of chloroquine and fifth dose of Fansidar. Although in case 1 the subsequent electroencephalogram showed generalised 3 Hz spike and wave activity, only the second and third patients had a history of epilepsy.

Like other neurologists, we see numerous patients with epilepsy, some new referrals, others for review. The prevalence figures in the United Kingdom vary, depending on definitions, from 0·5 to 2·0%, but we do not know how many patients have taken antimalarial drugs prophylactically or how many also have rheumatoid arthritis treated with chloroquine. We suspect that these numbers are small and that an increase in fit frequency may not be recognised as an adverse drug effect. We think that the association between malaria prophylaxis and the tonic-clonic seizures in our four patients is unlikely to have been due to chance for the reasons given in our report. Our third patient took chloroquine alone, but combinations of drugs might carry a higher risk, although this is speculative in view of the small numbers reported so far.

We did not conclude that restrictions should be placed on patients with epilepsy. We suggested that an adequate history should be taken before prescription and that patients with epilepsy should be warned that there may be a risk of seizure provocation. The action taken would depend on the destination, reasons for travel, and the implications for the patient if a seizure occurred. We agree it would be helpful if the statistical risk could be determined and a population based study would be interesting. This may not, however, be the best way of detecting an adverse drug effect if this occurs in only a small proportion. Our paper was intended to bring the cases to the notice of prescribers and alert them to the possible danger for patients known to have epilepsy. We agree that further cases of seizures in connection with malaria prophylaxis should be reported.

Since our paper was published we have been informed about two further examples, both young men with no previous or family history of epilepsy. Firstly, a 17 year old man (reported by Professor W I McDonald) had a tonic-clonic seizure on the first day of his holiday in Egypt this August, 24-36 hours after taking a second weekly dose of chloroquine (two tablets) and Maloprim (1 tablet). His subsequent electroencephalogram was normal. Secondly, a 19 year old seaman on service (reported by Dr T D L Thomas) lost vision, developed urticaria, and then had a tonic-clonic seizure 10 minutes after taking a first dose of chloroquine alone in July. He was said to have an inherited food allergy.

D R FISH
M L E ESPIR

Institute of Neurology,
Queen Square,
London WC1N 3BG

Chlamydia: One step forward or two backwards?

Dr Ian Alexander (24 September, p 791) highlighted the need for both diagnostic facilities and contact tracing in specialised departments and primary health care teams if chlamydial infections are to be correctly managed.

The general practice team at Llanederyn Health Centre has been using the fluorescein labelled monoclonal antibody test MicroTrak (Syva) for nearly two years.[1] Its use in general practice has been documented.[2] The diagnosis of two cases of neonatal chlamydial conjunctivitis within a short time led us to look more closely at the problem of chlamydia in the practice with this new technique.

During the past 12 months we investigated 260 women presenting at the health centre with vaginal symptoms, of whom 15 (6%) had positive results with MicroTrak tests. The practice list size is about 7000 in a mixed council and private suburban housing estate, with the population being predominantly white of social class III manual and below.

Though our detection rate is 6% for chlamydia in women with symptoms and not as high as that in genitourinary medicine clinics, in view of the potentially serious sequelae of chlamydial infections we consider it important that primary health care teams have access to diagnostic facilities such as MicroTrak.

We agree with Dr Alexander that contact tracing is not easy, but we think that it is in danger of being overcomplicated and general practitioners may be given the impression that contact tracing is something they should not be doing. At the heart of all contact tracing is the provision of information to patients about their infection. For chlamydia they will need to know about its potential long term complications, that it may be asymptomatic, and that their current and recent sexual partners may well be infected without knowing it and therefore still be a source of infection. The necessity of investigating their partners will be discussed, either by referral to the local genitourinary medicine clinic or by the general practitioner. Ultimately it is the patients' responsibility, once they have all the necessary information, to ensure that contacts are traced and the chain of infection broken.

If contact tracing has not been successful the general practitioner can discuss this with patients when they reattend the surgery for other problems: continuous care of patients is one advantage of contact tracing by family doctors.

If sexually transmitted diseases, particularly chlamydia, are to be dealt with more successfully than they are at present genitourinary medicine specialists will need to continue the educational service they provide to primary health care teams. Only with improved cooperation between primary and secondary health care services and patients may we hope to bring one of the major health problems of the 1980s under control.

PENNY OWEN

Department of General Practice,
University of Wales College of Medicine,
Llanederyn Health Centre,
Cardiff CF3 7PN

JULIA MUNRO

Public Health Laboratory Service,
Cardiff

ROBERT WEST

Department of Epidemiology and
Community Medicine,
Cardiff

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Fertility and legal abortions as performance indicators

Professor Michael Clarke (1 October, p 832) suggests the use of total period fertility and abortion rates as performance indicators. The weakness of this follows from the assumptions about the meaning of different rates to different cohorts of women at different stages in their lives, and I suggest that it makes unnecessarily complicated what are basically simple issues.

We know from various studies of abortion and family planning that the group at greatest risk of services not meeting their needs is the 15-19 age group[1-3] and that from a numerical point of view the 20-24 age group accounts for the biggest number of abortions, reflecting the experience of a population that is very sexually active but not yet