

## LETTER TO THE EDITOR

## MALARIA IN BRITISH TROOPS RETURNING FROM OVERSEAS

SIR—Because of our experience with malaria in Australian troops returning to Australia from malarious areas I was particularly interested in Lieutenant-Colonel D. E. Worsley's paper on "Malaria in British Troops Returning from Overseas" in the Journal (Vol. 115, No. 2, 1969).

I would agree with him that the figures he published do not justify the administration of a course of an 8-amino-quinoline drug to British Troops returning home from overseas.

I would like to make the point, however, that the necessity for such a course depends very much on the malarious areas from which the troops are returning or to put it more accurately, on the strain of *Vivax* malaria to which they have been exposed.

In the period June 1952 to July 1953 (inclusive), there were 396 cases of malaria in Australian troops in Australia. The infections were almost entirely contracted in Korea; the only other malarious area in which Australian troops were serving at that time was New Guinea and the numbers there were very small. The average monthly strength of Australian troops in Korea during the period was 2,500; the tour of duty was twelve months. I have no figures on the rate of "turn-over" so cannot say what the population at risk was.

In the period August 1953 to November 1954 (inclusive), the number of cases of malaria amongst troops in Australia was 84; the strength in Korea was the same as in 1952-1953. The decrease in numbers is probably due to the fact that the truce in Korea came into effect in July 1953. Exposure to malarial infection would decrease considerably with the cessation of active operations and there would also have been a smaller "turn-over" of troops with a consequent decrease in the population at risk.

A fourteen-day course of primaquine, 15 mg daily, was introduced in October 1954 for British Commonwealth troops leaving Korea. Whilst this did have some effect on the incidence of malaria in troops returning to Australia the Force in Korea decreased rapidly in strength after November 1954 and the matter ceased to be of major importance.

The incidence of *Vivax* malaria in troops in the United Kingdom 1951 to 1958 is given in "Reports on the Health of the Army", War Office as:—

1951—0.6 per 1000/annum	1955—0.6 per 1000/annum
1952—2.6 " " "	1956—0.3 " " "
1953—2.1 " " "	1957—0.2 " " "
1954—1.2 " " "	1958—0.2 " " "

I do not know what these figures represent in numbers of cases but imagine that the numbers for 1951-1955 would be fairly considerable and suggest that the higher incidence compared to the later years was due to *Vivax* infections contracted in Korea.

At present in the Australian Army we give a course of chloroquine (3 days—total 1500 mg) and primaquine (14 days—22.5 mg daily) to all Australian troops returning to Australia from malarious areas. We do this for two reasons. The first is that though malaria has been eradicated from the Northern Territory of Australia the area remains potentially malarious and the Commonwealth Department of Health require such a

course for all persons entering the Northern Territory who have lived or passed through a malarious area within three years before their arrival in the Northern Territory. The second reason is that we now have a fair number of Australian troops stationed in or visiting New Guinea for training.

The New Guinea strain of *Vivax* is like that encountered in Korea, that is, very likely to give rise to overt attacks after cessation of suppressive treatment. The strain found in Malaysia differs; our experience with the Malaysian strain is that not more than 5 per cent of those exposed to infection will develop malaria after cessation of suppressive treatment. If suppressive paludrine was continued for twenty-eight days only on return to Australia of troops from New Guinea some 60 per cent could be expected to develop overt *Vivax* malaria within twelve months of their return; even with the course of primaquine given 5 to 8 per cent have an attack of malaria, usually within a few months of return. An eight weeks course of 45 mg primaquine weekly has been suggested for complete eradication of *Vivax* infections but we have some trouble in supervising the fourteen days course and consider that the eight week course would not be effectively supervised.

Troops returning from Vietnam are also given the chloroquine-primaquine course. There have been some cases of *Vivax* malaria amongst troops after their return but not many. Because the course has been given from the beginning of Australian operations in Vietnam it is not possible to say at this stage whether the *Vivax* strain in Vietnam resembles the strains found in Korea and New Guinea, or those of Malaysia.

I am, etc.,

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