

BOOK REVIEWS

Heat and Heart Diseases

Cardiovascular Disease in the Tropics. Ed. A. G. Shaper, M. S. R. Hutt, and Z. Jeffer. (Pp. 394; £4.25.) British Medical Association. 1974.

One of the most important developments of the last 20 years or so has been the growth of what is called "geographical medicine." It constitutes an exciting and fruitful application of comparative epidemiology. We are seeing only the first fruits of the study of diseases as they occur in different climates, in societies at different stages of economic development, and in different ethnic groups. Dr. Shaper and his colleagues have provided a fascinating account of the application of those principles to the problems of cardiovascular disease.

This is not a textbook in the sense of a systematic account of these diseases at a certain level of detail, but a collection of essays by 37 contributors drawn from the five continents. It is a particular pleasure to note that many of these authors represent nations which have joined somewhat late in the pursuit of scientific medical knowledge. The reader will appreciate very quickly that

these writers do so with authority in that they review knowledge to which they themselves have contributed substantially. In reading one can feel the hot sun, the pounding monsoon rain, the burgeoning insect life, and the dire poverty.

There is a pleasing mixture of the common and the relatively rare. The relative incidence and characteristics of such world-wide diseases as rheumatic heart disease, hypertension, and cerebrovascular disease are reviewed along with such little known conditions as blackfat tobacco disease, which is an important cause of cor pulmonale in the sugar workers in Guyana, or primary arteritis of the aorta and its branches which affects the young women of East Asia. Danaraj in considering this latter subject casts doubt on the widely held hypothesis that it is a variety of giant celled arteritis and is linked with rheumatism under the general label of "autoimmune." He regards the condition as of unknown aetiology. Prata and his colleagues of Bahia in Brazil provide an interesting account of Chagas' heart diseases which is found in 10% of the necropsies at Bahia and is the most frequent cause of

cardiac failure and death in the rural population.

There is an excellent account in French, with an English synopsis, of myocarditis by Bertrand from Abidjan in the Ivory Coast, based on his personal experiences there and in Madagascar. It is in this essay that I found the only mention of diphtheritic myocarditis, which is in fact one of the commoner acute dangerous forms of heart disease prevalent in the tropics but now rare in well-immunized temperate lands. This subject merits more detailed treatment, and my comment represents the only criticism I can make of this very good book.

I recommend the volume as obligatory reading for all cardiologists and general physicians practising in the tropics, and as selected pleasure reading for all others. The printing and style are excellent, in particular the photographs and x-ray reproductions. It would be a convenience if the author's name were at the head of each essay. The inclusion of references with full titles is highly commendable.

W. MELVILLE ARNOTT

Impossible Campaign: Magnificent Medicine

Medical Support of the U.S. Army in Vietnam 1965-1970. Major General Spurgeon Neel. (Pp. 196; \$3.35.) U.S. Government Printing Office. Washington. 1973.

Many volumes on the history of the medical service of the army of the United States of America and of its activities until the end of the second world war have been reviewed in the *B.M.J.* The Surgeon-General of the United States is about to issue a series of volumes on the lessons of the campaigns in support of the South Vietnam government and, as a forerunner, has issued this small book packed with information on the new style modern medical support. The author is the most highly decorated senior flight surgeon, senior parachutist, and senior gliderist in America and is regarded as the Army's leading exponent of aviation and preventive medicine.

Vietnam was a war in which the soldiers were unaware of what they were fighting for; they went to Asia for a spell of 12 months duty which could be reduced by various means including chloroquine dodging. The U.S. army coped magnificently with almost impossible logistic problems, especially with blood banks based thousands of miles away in the U.S.A. with supporting banks in Alaska, the Ryukyu islands, and

Japan. The most important advance to come out of the blood distribution programme was the introduction of the Collins styrofoam blood box. The use of additives such as adenine to increase the shelf life of stored blood was closely studied, as were the various causes of coagulopathies, hepatitis, and other difficulties resulting from far flung blood banks. A very high standard of surgical technique was developed in mobile hospitals and a new chapter was written in vascular and fascial surgery. Extensive use of helicopters made the employment of regimental and other forward doctors unnecessary. Indeed, divisions were able to reduce their medical establishment from 34 to 12 without impairing efficiency. Special armoured seats and protective suits reduced helicopter casualties, but 70% of air accidents were attributable to pilot fatigue.

Veneral diseases, though very prevalent, were treated by outpatient methods; drug addiction was a constant source of worry; and a high proportion of neuropsychiatric illness was expected and encountered. The outstanding importance of fungus skin infections in causing serious morbidity had been underestimated, and the problem of immersion foot in the crews of boats operating in the Mekong delta was difficult to counter. Chloroquine resistance

and even quinine resistance provided unexpected puzzles and led to the adoption of a chloroquine-primaquine-dapsone preventive procedure in areas of high infection, but without doubt chloroquine dodging was prevalent and malaria casualties were drastically reduced when a sensitive chemical test for chloroquine in urine was introduced.

The U.S. authorities, both naval and military, continued their splendid work on cholera, plague, and other tropical diseases, implicating the shrew as a carrier of plague and revealing a source of melioidosis, the disease called "morphine injector's disease" by Colonel Whitmore I.M.S. so many years ago in Rangoon.

In this campaign one could wish for the touch of vanished hands—Bill Slim and Hamilton Fairley. The regimental doctors of Merrill's Marauders who wrote to Washington that only battalion doctors who carried packs and marched with the outfit could testify about the mental and physical fitness of their men would not approve (see *B.M.J.*, 18 April, 1970, p. 166), but this is an important book which must be read widely and will act as an appetizer for the detailed volumes promised by the Surgeon-General.

GEORGE McROBERT