CARDIOVASCULAR EPIDEMIOLOGY—A STUDY IN NEW GUINEA

By Peter Sinnett

A complete tribal community of 1500 Enga-speaking people living in the Western Highlands of New Guinea are subjects of a longitudinal study of cardiovascular disease. The aims are: to establish prevalence in a traditional New Guinea society, to correlate this with multiple parameters, especially “coronary risk” factors and to assess the effects of progressive urbanization.

Valvular heart disease is the most common cardiovascular condition encountered. Hypertension is uncommon, blood pressure falls significantly with advancing age. Coronary artery and peripheral vascular diseases are virtually absent inspite of the fact that osteoarthritis, arcus senilis, cataract, hair greying and other degenerative conditions are frequently encountered. Their diet was low in proteins, sugar and fat. Other coronary “risk factors”, obesity, hypercholesterolaemia, hyperuricaemia and diabetes are extremely uncommon.

Although the nutritional status and the level of physical fitness of young adults is excellent, ageing is associated with a progressive decrease in muscle mass and electrocardiographic voltage. The possible role of myocardial degeneration in accounting for the mortality experience of this group is discussed.

EPIDEMIOLOGY OF CORONARY HEART DISEASE IN JAPANESE MEN LIVING IN JAPAN, HAWAII, AND CALIFORNIA

By A. Kagan, J.L. Belsky and S.L. Syme

Since 1965 cohorts of Japanese men age 45 to 69 have been studied in Japan, Hawaii and California to determine the epidemiology of coronary heart disease and stroke in indigenous and migrant Japanese populations. Similarity has been found in such characteristics as blood groups, stature, and skeletal size. Differences among the cohorts have been noted in diet and smoking habits, in weight, blood pressure, glucose tolerance and in serum lipid and uric acid levels.

The prevalence of hypertension was highest in California, lowest in Hawaii, and intermediate in Japan. Differences in the occurrence of Minnesota Code I (Q-QS) abnormalities were not statistically significant. Necropsy studies were performed in Hawaii and Japan only. Among the men dying and coming to necropsy, the increased frequency of evidence of coronary heart disease in the Hawaii decedents was three to four-fold for severe grades of coronary artery atherosclerosis, nearly two-fold for old myocardial infarction and five to six-fold for recent myocardial infarction.