EPIDEMIOLOGIC CHARACTERISTICS OF MALIGNANT NEOPLASMS IN TAIWAN:

Ⅱ. LIVER CANCER

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Mortality and incidence rates of liver cancer were analyzed to examine the epidemiologic characteristics of the disease in Taiwan. A significant upward secular trend for age-adjusted mortality rates from 1954 to 1983 was observed in males but not in females. The mortality rate of liver cancer increased significantly for all the age groups during the interval between two periods of 1954-1963 and 1964-1973. However, the mortality rate decreased for the age group of 20-29 in males and for most age groups in females during the interval between two periods of 1964-1973 and 1974-1983. Both international comparison and migrant study indicated an extraordinarily high risk of liver cancer among Chinese than other populations throughout the world. The cumulative mortality rate of liver cancer was 4.83% and 1.74% for males and females, respectively. The cumulative rate in Taiwan ranked as the second among 18 selected countries and areas compared. Mortality rates of liver cancer in Taiwan were lower than those in Hong Kong and higher than those in Mainland China for most age groups in both males and females. Striking geographical variation of liver cancer mortality was observed in Taiwan with high risk areas clustered in the Penghu Islets, the blackfoot disease endemic area and eastern mountainous aboriginal townships. The observations suggest environmental risk factors in addition to hepatitis B virus infection may be involved in the development of liver cancer.

(Key words: *liver cancer, epidemiology, Taiwan*).

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Introduction

Liver cancer is a common malignant neoplasm in Subsaharan Africa and Far East[1]. China is one of the countries with the highest incidence rate of liver cancer[1]. In Taiwan, annual mortality rate of liver cancer was as high as 26.1 and 7.0 per 100,000 for males and females, respectively in 1986[2]. It was the first leading cancer deaths for males and the third for females.

Although descriptive study is inherently less rigorous and more limitative on inference than analytic study, it may suggest clues to risk factors of diseases and be used to form their etiological hypothesis. The purpose of this paper is to describe epidemiologic characteristics of liver cancer such as age curve, sex ratio, secular trend, migrant difference, geographical clustering and international variation in Taiwan.

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