

Abstract

Since Milton Halpern, a medical examiner in New York City, recognized an outbreak of fatal malaria in intravenous drug abusers, the forensic pathologists have recognized as an informer of the infectious disease surveillance. In this project, over 2800 autopsy cases during 1999 to 2000 collected from the institute of Forensic Medicine, Ministry of Justice (Taiwan) have been established into a databank and analyzed by using retrospective method. The epidemiological data will include direct and indirect cause of death, mechanism of death, manners of death and social background especially natural cause of death including sudden death. Manner of death of natural, accidental, suicidal, homicidal and unceratinal cause of death are 29.1%, 34.5%, 12.5%, 18.2% and 5.5% of total fatalities, respectively. Mechanism of death of respiratory failure, neurogenic failure, cardiogenic failure and hypovelemic failure are 31.9%, 16.4%, 11.8% and 10.0% of total cases, respectively. 75% of cardiac disease of natural cause of death is identified including atherosclerosis of coronary arteries, hypertrophic cardiomyopathy, cardiac embolic and carditis is recognized. Coronary heart disease (CHD) and carditis are two most frequently identified during autopsy and pathololgical diagnostic procedure of sudden death. Four pancarditis of nine carditis-related deaths and four mutifocal carditis and one focal carditis invade to the nerve bundle are noted. No positive finding of immunohistochemical stain including Coxsackie (A9) and Enterovirus (71) is observed. One meningococcus meningitis of 20 years old female revealed the evidence of cardiac muscle infiltration by acute neutrophils after positive group Y of meningococcus stain in addition to the mild meningitis finding. One streptococcal (6 month baby) and one viral (4 years old child) meningoencephalitis and two encephalitis associated with cerebrovascular accident and traumatic head injury are observed. One Taiwan citizen infected with typhus fever during his traveling to the mainland China was proved by immunohistochemical study. Pumonary disease is 14% of natural cause of death. 2 interstitial pneumonia, 1 chronic bronchitis, 2 chronic alveolitis of 7 sudden infant death syndrome-related deaths are distinguished. Fatty change associated with cirrhosis of liver is 70% of all hepatic diseases. Combination of hepatic disease with other diseases including respiratory disease, cardiac disease renal disease and sepsis is essential to the cause of death. Lobar pneumonia associated with illicit drug abusers are the major cause of death of illicit drug-related fatalities. These results support the medical examiners and coroners can play an important public health role in conducting surveillance for

fatal infectious diseases. Surveillance information of medical examiner system should be promptly disseminated to public health officials and health care providers so that they can take immediate actions such as disease-control efforts and is also useful to describe long-term trends and patterns in disease occurrence and distribution, to portray the natural history of certain conditions, and to evaluate control and prevention measures.

Key Word : Epidemiological 、 Pathological 、 forensic medicine