THE 1991 DENGUE EPIDEMIC IN KAOHSIUNG CITY

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In Kaohsiung City, dengue fever subsided for two years after the 1987-1988 epidemic. The main reason why it subsequently recurred was the late diagnosis of the fever in patients with mild or atypical clinical presentations. The first patient contracted dengue fever from Thailand in mid-May 1991, and the disease then spread among the co-workers of this patient. Dengue fever was not suspected until the 9th patient contracted fever in early July 1991. Through chain transmission, the epidemic spread in the community and to other parts of Taiwan. There were 113 confirmed dengue cases in Kaohsiung City, and a total of 175 cases on the whole island during the 1991 epidemic. The clinical manifestations were mainly fever, body pain, dizziness, general weakness and skin rash. No instances of severe bleeding, shock or dengue haemorrhagic fever were found. Seven dengue-1 and three dengue-3 viruses were isolated from the sera of patients. The clinical severity of the 1991 dengue epidemic was found to be milder, and the viral isolation rate lower, compared with the 1987-1988 epidemic, although these two outbreaks of dengue fever were both mostly due to dengue type 1. Genetic variation in the dengue virus may be the explanation. Clinically, about 35% of the patients were missed or not reported, although they were finally demonstrated to be dengue fever patients during a patient survey in the epidemic area. For early detection, viral surveys should be performed in new epidemic regions in addition to fixed-spot surveillance.