

Abstract

There are six kinds of poisonous snake with epidemiological significance. They are arbitrarily assigned to be neurotoxic or hemorrhagic according to the clinical manifestations. But local swelling and erythema were the most frequent and early findings in snakebite of Taiwan. Early and correct diagnosis is prohibited if lacking of clinical experience or laboratory support.

We develop enzyme-linked immunosorbent assay (ELISA) to quantify the venom in the samples of snakebite victims. In cobra snakebite, the detection limit is 0.01 ng/ml. The R value is greater than 0.99 with the standard curve in the concentration between 0.1 ng/ml to 100 ng/ml. The detection limit is 0.5 ng/ml for Russell's viper venom.

In eight months (April to November), we received total 203 cases of snakebite reported from most of the hospitals in Taiwan. 30.5% of victim is bitten by *Trimeresurus stejnegeri*. In cases of cobra snakebite, 84% of samples were confirmed by ELISA method in this preliminary result. The ELISA method might be valuable in the diagnosis and assessment of epidemiological character of snakebite in Taiwan.

Key word : Snake bite 、Venom 、Epidemiology 、Vaccine Carriers