Rabies

Rabies is a viral infectious disease that can infect any mammal. It is transmitted from animal to man by bites, scratches, or licks over open wounds or mucous membranes (eyes, nose and mouth). The virus, on entering the body, slowly multiplies at the bite of site and then enters a nerve ending. From there, it travels towards the spinal cord and brain. Once in the brain, it starts to multiply rapidly, causing virtually inevitable death within a few days.

This entire process from infection to the first symptoms and death takes from a week to several years, but commonly less than three months. The victim is symptom-free during this “incubation” period. The only way to interrupt this chain of events is by the potent post-exposure prophylaxis with vaccine and immune globulin as soon as possible after an exposure.

Most of the human rabies deaths that occur each year throughout the world come from stray dog encounters. Over 95% of the worldwide rabies victims had not been vaccinated. Although rabies can be found in all mammal (including bats), dogs are the chief villains in Asia. Recent estimates of number of dogs in Thailand hover around 8 millions. Bangkok is home to roughly a half million. We estimate that only half of dogs have been vaccinated against rabies at any one time.

Unfortunately, dog vaccination and canine population control measures have been hampered in Thailand by cultural factors that encourage the feeding of strays, and resist the killing of dogs.

Travelers and residents should be aware the fact that a dog that bit you has had a vaccine history still does not eliminate the risk of rabies. It has been found that one vaccination does not confer long lasting immunity against rabies in dogs and 3-6% found to be rabid do have a vaccine history.

Can it safely be assumed that if one is the victim of a potential rabies exposure that most hospitals in Thailand will be able to adequate post-exposure therapy?

One recent survey of 499 public hospitals in Thailand was not reassuring. The good news from the survey was that all hospitals used modern imported tissue-culture rabies vaccine exclusively. The bad news was that 36% had no RIG (rabies immune globulin) in stock, and either treated exposures with the vaccine without giving RIG, or referred the patients to another facility. The main cited problem was an uncertain supply of RIG and the high cost of both vaccines and RIG.

The problems uncovered by the above survey in Thailand are certainly much greater in neighboring countries such as Bangladesh, India, Nepal, Myanmar, Laos, Vietnam, Cambodia and Indonesia. Most of these countries still use the dangerous, locally manufactured brain-tissue-derived, so-called “Semple” or “Suckling Mouse” vaccines that carry a high rate of adverse reactions and are poorly immunogenic.
Researchers at the “Queen Saovabha Memorial Institute under the Thai Red Cross Society and King Chulalongkorn Hospital” support recommendations for pre-exposure vaccination for people engaged in high-risk activities such as animal handling and extensive rural travel in this region. Children are at a higher risk of animal bites and maybe good candidates for pre-exposure vaccination. Need for vaccination is more important if potential exposure is in remote areas where adequate care following an animal bite is not available.