Animal Bites and their Management with Reference to Rabies Prevention in a Sri Lankan Rural Population: A Preliminary Survey

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Rabies is a deadly viral infection transmitted by animal bites. More than fifty deaths occur due to rabies in Sri Lanka annually while a large number of animal bites are reported daily. Anti-rabies vaccination given to animal bite victims is costly for a developing country. Therefore, the aims of this preliminary hospital survey were to describe the types of animal bites and their management with reference to rabies prevention in a rural population in Sri Lanka.

All animal bite victims presented on the same day of each week from January 6th to February 10th, 2010 (six consecutive Wednesdays) at Mahiyanganaya base hospital, a leading referral centre in Uva province of Sri Lanka, were interviewed using an interviewer-administered questionnaire. Details of wound management with reference to rabies prevention also were recorded. Frequencies and associations were determined statistically.

A total of 55 animal bite victims [32 (58%) males, 23 (42%) females] in an age range of 2 - 60 years were recorded during the study. Of them, 19 (34.5%) were below 16 years. There were 12 (22%) upper limb bites and 42 (76%) lower limb bites. One child patient had sustained a bite on the genital area. Moreover, 18 (33%) patients had past history of animal bites while 19 (34.5%) stated that at least one family member had experienced an animal bite. There were 43 (78%) dog bites and 12 (22%) cat bites accounting for 14 (25.5%) major wounds and 41 (74.5%) minor wounds. Dog bites showed an association with males (Fishers' exact test=0.04, P= 0.05). Furthermore, 37 (67%) were provoked bites. Only 14 (25.5%) animals had been vaccinated and 44 (80%) were observable. Eleven bites (20%) were caused by stray animals. Anti-rabies vaccine (ARV) was given to 54 victims. Both ARV and anti-rabies serum (ARS) were given to 06 patients. One person was subjected to post-exposure therapy (PET) delay. Notably, 36 (65.5%) patients presented to the hospital within 24h. All had cleaned the bite wounds with soap and water.

In conclusion, males in this community are commonly affected by animal bites particularly caused by dogs. The commonest site affected by animal bites is the lower limb. Dogs and cats were the only animals that caused bites during this study. Experiencing animal bites in several occasions by the same patient and at least one family member of each patient receiving an animal bite may indicate that animal bites are a common problem in this community. In addition, many were provoked bites due to unvaccinated animals leading to ARV and ARS therapy. Although a big proportion seeks early medical treatment there are late comers. People should be educated on the importance of preventing animal bites, vaccinating animals and receiving early treatment for prevention of rabies.