LEPTOSPIROSIS CARRIER STATUS AMONG GOATS IN KANDY DISTRICT PROVINCE OF SRI LANKA

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Leptospirosis is an emerging zoonotic disease with worldwide distribution. The disease is mainly endemic in humid tropical countries and it affects humans, domestic animals and wild animals. Wild rodents are known as a reservoir of leptospirosis and, humans and other animals become infected through a direct or indirect contact of urine of infected animals. Leptospirosis is a well-recognized as an occupational infection among individuals working with animals or in environments contaminated by infected animals. In livestock industry, infected animals cause not only rigorous economic losses but also zoonotic threat to farmers. Infected animals may unveil disease symptoms or can be asymptomatic and self-recover. Eventually self-recovered animals excrete leptospires throughout their life and act as a source of the infection. Thus, understanding carrier status of domestic animals is a vital step towards to formulate better preventive measures to decrease the risk of transmission to humans and enhance livestock production. In Sri Lanka, other than rodents, cattle were documented as an important carrier and transmitter of the disease toward humans. Present study attempted to determine the carrier status of leptospirosis in free roaming goat in Sri Lanka.

Goat kidney samples were bought from the municipal council meat shops in Kandy city, Sri Lanka. Samples were originated from semi-extensive goat farms. Prior to DNA extraction samples were stored in freezer (-20°C). Extracted DNA was subjected to nested PCR to detect leptospiral *flaB* gene, and then the amplicons were sequenced. Nucleotide sequence data were analyzed by MEGA4 to determine the phylogenetic distance and a phylogenetic tree was drew with the assistance of standard reference species and strains.
Out of hundred kidney samples, three (3%) were identified containing of pathogenic leptospires by nested *flaB* PCR. Further analysis of nucleotide sequence data revealed that those goats harbored *Leptospira weilii*. Present study confirmed that free roaming goats