

LEPTOSPIRA INFECTION AT THE UNIVERSITY OF PERADENIYA TEACHING HOSPITAL, SRI LANKA: CLINICAL AND LABORATORY INVESTIGATIONS

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Abstract. To help formulate a local intervention for leptospirosis in Sri Lanka, we determined the serogroups of leptospiral species among 97 patients diagnosed with leptospirosis at the University of Peradeniya Teaching Hospital, Sri Lanka. Ninety-two point eight percent of the patients were men; nearly two-thirds were ≥ 35 years old; the majority had secondary or higher education level, half were farmers or laborers; and 57.7% presented in the acute-phase of the illness. Twenty-five patients (25.8%) were confirmed to have leptospirosis by a positive laboratory method; 17 and 8 cases were confirmed with a positive test by quantitative MAT and nested PCR, respectively. Of the 17 MAT positive cases, infection occurred in a variety of serogroups, but the predominant groups were Sejroe and Tarassovi. Of the 8 nested PCR positive cases, 7 were seen among those with a MAT titer < 200 and 1 occurred in a patient with a MAT titer ≥ 200 but < 400 . Of the 8 PCR positive cases, 7 were infected with the leptospiral species *L. interrogans*. Approximately 26% of the clinically diagnosed patients were confirmed by the two laboratory methods. Laboratory positivity was based on the time of blood collection after the onset of fever. Further studies are warranted to refine the clinical diagnostic criteria and to develop more efficient and accurate diagnostic tests for leptospirosis in resource limited settings.

Keywords: leptospirosis, emerging infectious disease, epidemiology, febrile patients, Sri Lanka

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