

Distribution of Anti-leptospira Antibodies in the Sera of Patients Suspected Leptospirosis

Roohi, Z. (MSc)

MSc of Microbiology, Leptospira Laboratory Reference, Razi Vaccine & Serum Research Institute, hessarak, Karaj, Iran

Khaki, P. (PhD)

Assistant Professor of Microbiology, Leptospira Laboratory Reference, Razi Vaccine & Serum Research Institute, Karaj, Iran

Moradi Bidhendi, S. (PhD)

Assistant Professor of Microbiology, Leptospira Laboratory Reference, Razi Vaccine & Serum Research Institute, Karaj, Iran

Corresponding Author: Moradi Bidhendi, S.

Email: s.bidhendi@rvsri.ac.ir

Received: 30 Oct 2013

Revised: 2 Apr 2014

Accepted: 5 Apr 2014

Abstract

Background and Objective: *Leptospirosis* is a zoonosis infectious disease that is prevalent in tropical and subtropical regions and is caused by the pathogenic serovars of leptospires. Hence, we aimed at investigating the prevalence of antibodies against these bacteria in the blood samples of suspected leptospirosis.

Material and Methods: the human serum samples (N = 130) were obtained from patients clinically suspected leptospirosis. The Serum level of IgM antibodies were studied by ELISA kit (PrioCHECK) in Razi Vaccine and Serum Research Institute (Karaj), 2011-2012.

Results: Anti-*leptospira* IgM class was observed in 21(16%) samples. The relative distribution of the disease was reported in men (80.95%), women (19.04%), and farmers (30.95%) and in 20-40-year group (57.14%). Contact with contaminated water was the most common cause of infection (52.38%) and fever was the most common sign of *Leptospirosis* (72.2%).

Conclusion: Due to the occurrence of anti-*leptospira* antibodies in 16% of suspected cases, it is recommended that routine ELISA be done at least in major diagnostic centers.

Keywords: *Leptospira*, Leptospirosis, Human, ELISA