

Abstract

Leptospirosis is a zoonotic disease with worldwide distribution. The disease causes jaundice and high fever and abortion in the severe cases of the affected livestock. Thus, the farmers may be exposed to significant economic losses. In humans, the clinical signs are fever, Weil's syndrome, jaundice and renal failure and myocarditis. The highest prevalence of the disease has been observed in tropical regions with warm and humid weather and inappropriate hygiene conditions. The Baluchistan region in Sistan and Baluchistan province has warm weather in spring and summer and mild climate in autumn and winter. Also the livestock imports from neighboring countries such as Pakistan, India and china, which in the prevalence of the disease are high among their livestock, are carried out from the borders of this region. A Total of 150 blood samples were taken from jugular vein of the cattle population of this region. The sera were isolated and submitted to the Leptospira Research Laboratory of Teaching and Research Hospital of the Faculty of Veterinary Medicine at the University of Tehran, Iran. Five reference strains of *L. interrogans* includes Hardjo, Pomona, Icterohemorrhagiae, Grippotyphosa, canicola serovars were used. The statistical association between the prevalence of infection with leptospira serovars was analyzed by MC Memar test. The results showed that 12 out of 150 samples (8 %) had antibodies against leptospira in their sera. The highest number of reactors (6 %) was due to *L.hardjo* in positive sera the antibody titers of 1:100 ,1:200. Followed by in descending *L.pomona* (2 %). The study showed that infection rate of the cows of Baluchistan area to leptospira is low.

Keywords: Leptospira , Cattle , Baluchistan , Microscopic Agglutination Test (MAT).



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**Serological Survey of *Leptospira* Serovars in Cattle of
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