

R2793

Abstract (publication only)

Human leptospirosis in north-western Greece during the last two decades

C. Boboyianni, D. Papamichail, N. Koborozou, G. Tseliki, A. Myari, C. Gartzonika, E. Priavali, S. Levidiotou* (Ioannina, GR)

Objectives: Leptospirosis continues to be a significant zoonosis with worldwide distribution. The infection follows a biphasic pattern. The first phase is the septicemic or leptospiraemic phase. The second or immune phase is characterized by the appearance of IgM antibodies and in some severe cases is associated with renal failure, liver failure and pulmonary hemorrhage (Weil's disease). The aim of this study was to determine the seroprevalence of leptospirosis in North-Western Greece. **Methods:** Serum samples from 4500 suspected patients (adults and children) were tested in the University Hospital of Ioannina for the period of two decades (1991-2012). The presence of specific IgM antibodies was determined by the use of a commercially available enzyme-linked immunosorbent assay (Elisa-Virion/Serion). All positive samples were confirmed with an immunochromatographic assay (CA-Cypress Diagnostics) or an indirect haemoagglutination assay (IHA-Dade Behring) or an indirect immunofluorescence assay (IFA-Bios). **Results:** According to our study, of 4500 patients examined 217 (4.8%) were found seropositive for IgM antibodies. Positive results were confirmed with a second or a third sample after one or two weeks. All seropositive patients had symptoms compatible with the disease and a history of exposure to high risk factors (farmers/dairy farmers, sewer workers, septic tank cleaners, military personnel, fresh water fishing etc). Of the 217 seropositive patients 136 (62.7%) were men and 81 (37.3%) were female while only 10 (4.6%) were children. Variation of the annual distribution of cases was recorded, without the appearance of any outbreak. Higher incidence of disease was observed during the summer (36.4%) and autumn (30.9%). **Conclusion:** The incidence of leptospirosis in NW Greece is significant, thus demanding a continuous awareness with meticulous registration of cases from both clinicians and Health Authorities.