Abstract

Caprine arthritis encephalitis virus (CAEV) is present in Mexico, but its precise prevalence and incidence remains unknown. In order to evaluate the use of immunoelectrotransference or western blot (WB) for the detection of anticaprine arthritis encephalitis virus antibodies in goats, 50 random serum samples from indigenous animals were analyzed (25 from Amazcala, Queretaro and 25 from Cuatitlan, State of Mexico), and compared with the ELISA. Animals were considered positive for WB when at least a single protein was codified by the gag gene simultaneously with another gene: env/pol; the same criteria used for HIV/AIDS detection. Five antigen - antibody bands (12, 14, 25, 50 and 135 kDa) were considered reliable diagnostic markers. When ELISA was used, 33 sera were positive, and 17 were negative. All 33 ELISA - positive sera were also WB positive. Of the 17 negative ELISA - sera samples, nine were positive and eight were negative by WB. There is a significant correlation between ELISA and WB serological tests (P < 0.0003). The WB had greater sensitivity than ELISA since it detected eight more positive sera. These results indicate that WB is a useful tool for confirmatory diagnosis of CAEV, as has been the case with VIH/AIDS in Mexico.

Keywords

CAPRINE ARTHRITIS ENCEPHALITIS VIRUS, WESTERN BLOT, ELISA.