Seroprevalence of WEST NILE Virus antibodies in dogs in Kaduna and Zaria metropolises, Kaduna State, Nigeria.

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Abstract
West Nile virus is an arbovirus transmitted by mosquitoes. Birds are the natural reservoir of the virus, which is maintained in nature in a mosquito–bird–mosquito transmission cycle. The study was aimed at determining the seroprevalence of West Nile virus in dogs attending government based Veterinary clinics and at slaughters in Kaduna metropolis and Zaria. The diagnosis was based on the use of the Enzyme Linked Immunosorbent Assay. Blood samples were collected from 92 dogs from the period of October 2016- April 2017. At each collection unit, the animals were selected using systemic random sampling and were examined for West Nile virus antibodies using competitive enzyme linked immunosorbent assay (ID-VET). The results revealed a prevalence of 30.4% (28/92) seropositivity with West Nile virus antibodies. This first report on the status of West Nile virus infection in dogs in Kaduna and Zaria metropolis, Kaduna state suggests that dogs should be screened for the presence of West Nile virus antibodies.

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