

Failure to detect antibodies against Equine infectious anemia virus in donkeys (*Equus asinus*) in Grenada and Carriacou, West Indies

Dear Editor,

Equine infectious anaemia (EIA) is an acute to chronic lentivirus disease affecting members of equidae. The virus causes a persistent infection characterized by intermittent fever, depression, weight loss, progressive weakness, oedema and anemia. Unlike other lentiviruses, EIA virus is unique in that, despite a rapid virus replication and antigenic variation animals progress from a chronic stage which is recurring peaks of viremia and fever, to an asymptomatic stage of infection¹. Modes of transmission include the transfer of blood cells from infected animals by mechanical vectors (blood-sucking flies) and contaminated hypodermic needles and transplacentally.

EIA virus is closely related to human immunodeficiency virus (HIV) and the innate ability of EIA virus-infected equids to effectively control viral replication might help in the development of an effective vaccine against lentiviruses such as HIV¹.

The virus was first observed in France in 1843. The disease was described in 1904 in USA and termed 'swamp fever'². The pathogenesis and features of the EIA agent were a mystery for at least 50 years because isolation proved difficult until 1964^{1,2}. EIA virus has a worldwide distribution. In the Caribbean, it has been reported in Haiti, Honduras, Belize and the Dominican Republic².

Since EIA has been reported in the above mentioned Caribbean countries, a seroprevalence survey was conducted to determine the status of EIA exposure in Grenada and Carriacou. Serum samples collected from 76 apparently healthy donkeys, (57 from Carriacou and 17 from Grenada) and were subjected to 2 test methods (agar gel immunodiffusion test (antigen supplied by United States Department of Agriculture) and ELISA (Viral Check/EIA from Synbiotics, San Diego, California, USA) for the detection of antibodies. These results suggested that EIA is not present in donkeys in Grenada and Carriacou. This study provides base line information on the status of Equine Infectious Anaemia in donkeys in Grenada and Carriacou.

We thankfully acknowledge the donation of Viral Check EIA kit by Symbiotics, USA.

Yours sincerely,

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