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Serological evidence of West Nile Virus infection in horses from the municipality of Castelo Branco

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West Nile Virus (WNV) is an RNA virus from the family Flaviviridae. It is transmitted by several genera of mosquitoes, with *Culex* spp. as the main vectors identified in Europe and North America. Birds are amplifying agents and important to the transmission cycle, during the viremia period. Equines are considered dead-end hosts and are recognized as sentinels of the virus in many countries.

This work presents a WNV seroprevalence study in 40 horses from the Castelo Branco county. Breed, gender, age and geographical area were analyzed. An enzyme-linked immunosorbent assay (ELISA) was performed to detect total antibodies against WNV, using a commercial kit, according to the manufacturer's instructions. Twelve animals were found seropositive (30%; 95% CI: 18.1-45.4%) and 1 (2.5%) was regarded as doubtful.

We truly believe there is much more to study in Portugal regarding the epidemiology WNV, and an active surveillance plan is needed in the short term.

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