

PT.082**EVALUATION OF CLINICAL ASPECTS, FLUORESCENT ANTIBODY TEST AND N GENE QUANTIFICATION OF RABV VARIANTS ISOLATED FROM DIFFERENT ANIMAL SPECIES**

Allendorf SD¹, Harary CMA², Vicente AF², Antunes JMAP², Peres MG², Fonseca CR², Megid J² – ¹FMVZ-UNESP – DHVSPMI, ²FMVZ/UNESP – DHVSPMI

The rabies virus (RABV) isolated from different mammals seem to have unique characteristics that influences the outcome after animals get infected. The RABV circulates in nature and is maintained by reservoirs that are responsible for persuading the disease for almost 4,000 years. As different clinical aspects are observed in animals naturally and experimentally infected the aim of this study was to evaluate clinical aspects, quantify the viral replication in brain tissue of experimentally infected mouse associated with FAT results of RABV isolated from 5 animal species. The selected virus were isolated from some of the main reservoirs in Brazil being related to a bat (*Myotis* spp.), to a fox (*Cerdocyon thous*), to a dog (*Canis familiaris*), to a bovine (related to *Desmodus rotundus*) and to a monkey (*Challithrix jacchus*). The mice were 40, female, specific pathogen free (SPF), swiss albino mice, 45 days old that were divided into 5 groups of 6 animals. The intracerebral mouse inoculation was performed with 0,03mL of the inoculums (standard dilution) for clinical observation and sample collection. Although all virus resulted in an infection with 100% of lethality, it is remarkably notated that the time of evolution of some samples is much longer than others variants. When the animals get sick after being inoculated with samples originated from fox and monkey it takes more time to death to occur when comparing to the other studied samples. The monkey and fox samples had similar evolution period, for monkey sample the symptoms initiated after 10 days and the evolution to death of all inoculated animals were of 4 days, in the fox sample the symptoms initiated after 9 days and the evolution in this case was of 8 days. Otherwise the samples isolated from the bat, dog and bovine initiated symptoms after 8 days and had an evolution period of three days. The presence of the RABV was investigated by FAT. The virus was identified by this technique in all samples. Some differences could be observed. The pattern of positivity in some infected tissues is smoother when comparing samples related to dog, fox, and vampire bats. The virus isolated from *Challithrix jacchus* and *Myotis* spp. presented a discrete fluorescence and some points of fluorescence in the tissue, while the samples isolated from the bovine, a variant probably related to *Desmodus rotundus* (V3), the corpuscles were big and with strong fluorescence, such as those observed in canine related samples. In order to quantify the viral replication in the brain of the infected animals the Real Time was performed, the cDNA was made using oligo dt and Super Script II (Invitrogen), and the reaction was performed using GoTaq qPCR Mster Mix (Promega). The dog, fox and bovine sample presented a higher rate of replication, which could be observed by the detection of viral antigen in brain of infected animals. The time to death was not related to the viral replication once the virus isolated from *Cerdocyon thous* presented replication similar to the dog and *Desmodus rotundus* and was the sample with the longest incubation and evolution time. On the other hand virus isolated from monkey had the lowest replication comparing to the other isolated virus followed by the virus isolated from the bat (*Myotis* spp.). This results demonstrated that virus isolated from different species have unique characteristics that can reflect on the viral replication but not necessary on the evolution period and lethality of the infection.

PT.083**EPIDEMIOLOGICAL ANALYSIS OF RABIES IN HERBIVORES IN THE REGION OF ARAÇATUBA – SÃO PAULO, BRASIL: PRELIMINARY RESULTS**

Alves AJS¹, Carvalho C², Casagrande DKA³, Souza Filho VN⁴, Pedro WA⁵, Queiroz LH² – ¹USP – Faculdade de Medicina Veterinária e Zootecnia – Doutoranda do Departamento de Medicina Veterinária Preventiva e Saúde Animal, ²UNESP – Faculdade e Medicina Veterinária de Araçatuba – Departamento de Apoio, Produção e Saúde Animal, ³UNESP – Faculdade e Medicina Veterinária de Araçatuba – Mestranda do Programa de Ciência Animal – Departamento de Apoio, Produção e Saúde Animal, ⁴Coordenadoria de Defesa Agropecuária – SAA/SP – Coordenador do Programa Estadual de Raiva dos Herbívoros – EDA de Bauru, ⁵UNESP – Faculdade e Medicina Veterinária de Araçatuba – Bolsista de Produtividade em Pesquisa CNPq – Departamento de Apoio, Produção e Saúde Animal

Rabies is a major zoonosis of great impact on both economic and public health and veterinary medicine. Rabies in herbivores is distributed in almost all Latin American countries and its control constitutes a major challenge for Livestock Defense. This study aims to make an epidemiological analysis of Rabies in herbivores in rural areas of most municipalities included in the Office of Agriculture and Livestock Defense Araçatuba (EDA). To this end, an epidemiological questionnaire was elaborated and applied to obtain information related to rabies in herbivores. The following variables were analyzed: presence, frequency and period of occurrence of bat bites marks on the animals, the presence and types of shelters for bats; recent occurrence of death of animals with neurological signs on the property, use of vaccine against rabies, use of methods for bats control and environmental change in the area of the property. The results show that out of 111 properties sampled, 23.4% of them observed marks of bat biting in the animals, and of these, 23% observed the marks of bites daily, 4% weekly, 8% monthly and 65% rarely. The observation of bite marks occurs more during the rainy season (73.1%). 11.7% of owners surveyed report the presence of shelters of bats and the main types of shelters are abandoned houses (38%), hollow trees (38%) and others (15%). Only 70.9% of those surveyed vaccinate the animals against rabies and 76.32% of these vaccinate the entire herd. In 4.5% of the properties it was reported the use of some method for the control of bats. Approximately 60% of properties had some kind of environmental change, particularly with respect to the advance of sugarcane in the region. The quantitative variables studied were the number of animals in the properties sampled, according to the kind, with an average of 243 animals per farm (237 cattle and six horses) and median 93 (90 and 3), respectively. We also performed the association between properties where it was found seropositive bats with the variables of the questionnaires, by the method of chi-square test or Fisher. The variables that showed a strong association with seropositivity of bats were the presence of shelter and vaccination. All statistical analyzes were performed using SPSS 20.0. In each of the properties were obtained geographic coordinates using a GPS, allowing a spatial characterization by plotting the points with the help of the program ARCGIS 10.0.