

PT.027**KINETIC OF RABIES ANTIBODIES IN DOGS PRIME VACCINATED**

Babboni SD¹, COSTA HF², Martorelli LFA³, Kataoka APAG³, VICTORIA C¹, PADOVANI CR⁴, Modolo JR¹ – ¹UNESP -Botucatu – Departamento de Higiene Veterinária e Saúde Pública, ²UNESP- Araçatuba – Departamento de apoio, produção e saúde animal, ³Centro de Controle de Zoonoses – Laboratório de Zoonoses e Doenças Transmitidas por Vetores, ⁴UNESP -Botucatu – Departamento de Bioestatística, Instituto de Biociências

Introducción: Half of the world population (3.5 billion people) occupies areas where there is an increase of dogs, cats and rodents, and zoonosis transmitted by these animals, where rabies is the most worrisome. The protection of humans against urban rabies is achieved mainly by the prophylaxis of dog and cat with vaccines that induce a minimum of antibody titers (≥ 0.5 IU/mL). This study aimed to evaluate the kinetic of antibodies in dogs that were prime vaccinated with Fuenzalida&Palácios modified vaccine during 12 months. Materials and methods: The study was conducted in 2009 during the 41st Annual vaccination campaign against rabies in dogs and cats in the urban area of Botucatu, São Paulo, Brazil. It was considered to determine the sample size at 95% confidence along an estimation error of the order of 10% random contribution associated with the casual participation of the animal. Thus, the study involved 576 dogs over the age of three months, never vaccinated against rabies before, regardless of breed, age or sex randomly selected for blood collection. Samples were collected during five moments at the study period, which are: 0 (first dose of vaccine), 1 [30 days after first vaccination (dafv) and the second dose of vaccine], 2 (60 dafv), 3 (180 dafv) and 4 (360 dafv). Thirty days after the first vaccination (time 1) dogs received the booster vaccination with the same type of vaccine (Fuenzalida&Palácios modified vaccine- Institute of Technology of Paraná – TECPAR[®]). Serum neutralizing antibodies to rabies was held at the Center for Zoonosis Control of São Paulo through the rapid fluorescent focus inhibition test (RFFIT). Results: Total (urban and rural) of rabies vaccination coverage reached 81.36% in Botucatu / SP, and 329 (16.97%) of dogs in urban were first time vaccinated. At 360 days after first vaccination, only 51.5% of the dogs had protective titers throughout over all period of the study (over 5 moments). Discussion and conclusion: In Brazil, by the Control Program, the canine rabies vaccination is annual and mandatory after three months of age. The low concentration of antibodies after vaccination of dogs against rabies has been reported, also the immune response of dogs with prime vaccination (Fuenzalida&Palácios modified vaccine) without booster was evaluated, where the results observed rapid decline of antibody titers, suggesting that many animals cannot be protected between the campaigns. According to the Institute Pasteur in 2000, titers below 0.5 IU/mL do not confer protection against rabies. In addition, rabies can infect the dogs at any period during the campaigns. The coverage of vaccination shows weak protection, since only 51.5% of dogs had protective titers at all time of moments analyzed. Furthermore, it is also known that half of the dogs prime vaccinated are not immunized against rabies virus after 12 months, the results allow us to infer a new vaccination strategy in dogs prime vaccinated should be adopted.

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PT.028**COMPARAÇÃO DA COBERTURA VACINAL DE CÃES E GATOS NAS CAMPANHAS ANUAIS DE VACINAÇÃO CONTRA A RAIVA, NO MUNICÍPIO DE SÃO PAULO, PERÍODO DE 2004 A 2012.**

Paranhos NT¹, Bernardi F¹, Silva EA¹, Mendes MCNC¹ – ¹Centro de Controle de Zoonoses da Coordenação de Vigilância em Saúde – Secretaria Municipal de Saúde de São Paulo

A Campanha de Vacinação Contra Raiva em Cães e Gatos no Município de São Paulo é uma das atividades do Programa de Controle da Raiva desenvolvido desde 1973 pelo Centro de Controle de Zoonoses. A Campanha tem duração de 14 dias e foi descentralizada a partir de 2004, quando passou a ser executada pelos Serviços Regionalizados de Vigilância à Saúde (SUVIS), sob a Supervisão e Coordenação do Centro de Controle de Zoonoses. Com essa estratégia um maior número de postos de vacinação foi disponibilizado. O presente trabalho analisou a cobertura vacinal nos 96 Distritos Administrativos (DA) do Município para os anos 2004 a 2012, com o objetivo de verificar a tendência de cobertura vacinal e se a interrupção da campanha em 2010 e 2011 acarretou em diminuição na vacinação de 2012. Comparando os anos de 2004 e 2009 houve um aumento de 17,23% no total da cobertura vacinal. Em 2008 observou-se uma diminuição de 3,86% do número de cães vacinados e aumento de 7,7% na vacinação de felinos em relação a 2007. Em 2010, a Campanha foi suspensa no seu quarto dia devido à notificação de eventos adversos acima do esperado tendo sido vacinados 24,75% (247.550 animais) do total da meta estimada. No ano de 2012 a vacina voltou a ser disponibilizada e a Campanha foi viabilizada no período de 21 de maio a 3 de junho. Os resultados observados mostraram um decréscimo de 16,6% no número total de animais vacinados em relação a 2009, sendo a diminuição de 21,18% para cães e um acréscimo 2,27% para gatos. Observou-se aumento de felinos vacinados em 42 DAs quando se comparou 2012 e 2009, sendo 31 destes pertencentes a áreas de maior exclusão (áreas homogêneas 4 e 5). Nos DAs Iguatemi, Pedreira, Pêrus e Jaçanã a vacinação de felinos foi respectivamente 21,23%, 31,41%, 38,3% e 40% superior a 2009. Houve diminuição de cobertura vacinal de gatos em 53 Distritos de áreas de maior inclusão como Tatuapé, Santa Cecília, Saúde e Santana. Em relação à vacinação de cães, em 2012 houve um decréscimo em geral, sendo que em 29 DAs a vacinação foi inferior a 70% do total de 2009. Somente os DAs Marsilac, Vila Curuçá e Bela Vista vacinaram mais cães do que em 2009. Observa-se uma tendência anual de crescimento na cobertura vacinal do município, sendo mais evidente em felinos. Com a suspensão da campanha por dois anos consecutivos, verificou-se um decréscimo no total de animais vacinados em 2012. Sugere-se estudos periódicos de estimativa das populações canina e felina a fim de se avaliar a relação entre número de animais vacinados e população de cães e gatos.

PT.029**AN EXPLORATION OF THE KNOWLEDGE, ATTITUDES AND PERCEPTIONS OF NON-MEDICALLY TRAINED, ADULT GRENADIANS ABOUT ZONOTIC DISEASES**

Bidaisee S¹ – ¹St. George's University – Department of Public Health and Preventive Medicine

Whether people own dogs, cats, birds, reptiles, rabbits or fish, they need to be aware that domestic animals can have an effect on their health by transmitting certain diseases. Animal diseases, that are zoonotic diseases, are those naturally transmitted from vertebrate animals to humans. The aim of the

research was to explore the perceptions of the local Grenadian public about their knowledge towards certain zoonotic diseases. In Grenada, there are known reservoirs for zoonotic diseases in the form of rabies from stray dogs and mongoose. Rabies is a fatal viral disease that infects the brain and spinal cord in mammals including humans. The virus is transmitted through the saliva of a rabid animal, usually by a bite. The study population comprised adults, non-health professional, Grenadian citizens in the parish of St. George. A total of 450 participants comprised the sample base for the collected data. Rabies was correctly identified as being caused by a virus among 28.4% of the sample population. Rabies as obtained from the bite of an infected animal was correctly identified by 434 (96.4%) of participants. Knowledge of the mongoose as the animal reservoir of Rabies in Grenada was correctly recognized by 434 (96.4%) of the participants. Rabies prevention, requiring vaccination of animals, was identified by 339 (75.3%) of the study population. For Rabies, 20 (4.4%) of the population selected nervous reactions as the associated symptom.

PT.030 RABIES ANTIGEN SPREAD AMONGST APPARENTLY HEALTHY DOGS IN NIGERIA: A REVIEW

Ogunkoya AB¹, Aina OA², Adebayo OO³, Oluwagbenga AA⁴, Tirmidhi AB⁵, Audu SW⁶, Atuman YJ⁷, Babasola OO³, Garba A⁷ – ¹Ahmadu Bello University, Zaria, Nigeria – Veterinary Medicine, ²Department of Zoology, Faculty of Science, University of Ibadan, Ibadan, Oyo State, Nigeria – Zoology, ³Department of Veterinary Public Health and Preventive Medicine, Faculty of Veterinary Medicine, University of Ibadan, Ibadan, Oyo State, Nigeria – Veterinary Public Health and Preventive Medicine, ⁴Department of Virology, College of Medicine, University of Ibadan, Ibadan, Oyo State, Nigeria – Virology, ⁵Dept. of Animal Sciences, Faculty of Agric, Taraba State University, Jalingo. – Animal Sciences, ⁶Dept. Vet. Surgery & Med, Fac. Vet. Med. Ahmadu Bello University, Zaria-Nigeria – Veterinary Medicine, ⁷Diagnostic and Extension Dept, National Veterinary Research Institute, Vom- Nigeria – Diagnostic and Extension

Rabies with a timeline history of over 2300 years BC is 100% preventable. Yet over 55,000 people are reported dead annually due to rabies. Most of the deaths are in the developing countries, India and Africa. In Nigeria, the first officially documented report of human rabies was in 1912 and that of canine rabies was in 1925. The long history of rabies and the evidences of its endemicity have been found in all native dialects in Nigeria that described only the violent rabies. Researchers over the years have reported the presence of rabies virus antibodies in over 15.93 to 30.7% of unvaccinated dogs and humans respectively, in south western part of Nigeria. Of recent, researchers in Nigerian Universities and Research Institutes are experiencing and reporting cases of the presence of rabies virus antigen in the brains of apparently healthy dogs and even in the wild life across the country. Some studies of the prevalence of rabies antigens in the brain and saliva of apparently healthy dogs slaughtered for human consumption in Nigeria; revealed a 28% consumed dogs in N/west, 31% – 44% from N/east and 24% from N/central tested positive for rabies antigen in their brain. Similarly, 6%-8% of the dogs had rabies antigen in their saliva at the point of slaughter. In wildlife brain tested for rabies antigen revealed prevalence in mongoose to be 11%, jackals 9%, squirrels 8.3%, hyrax link 17% and wild cats 16%. The intent of this review is to bring into focus the prevailing carrier status of high percentage of Nigerian dogs and wildlife and its possible consequences on human before the rabies interest groups of the international community. This is with a view to open facets for discussion and understanding the epidemiology of rabies and to seek for further collaboration on the

situation of rabies in Nigeria. It may necessitate drawing new protocol for human prophylaxis following bite from apparently healthy dogs. **Key words:** Rabies antigen spread, Apparently healthy dogs, Nigeria.

PT.031 DISCUSSING THE RABIES SURVEILLANCE SYSTEM IN BRAZIL: AN EXPERIENCE OF SURVEILLANCE TOWARD BATS AFTER THE HALT OF MASS VACCINATION OF DOGS AND CATS IN CAMPINAS, SAO PAULO

Dias RA¹, De Lucca T², Rodrigues RCA³, Castagna C³, Presotto D³, De Nadai DV³, Fagre A⁴, Braga GB⁵, Guilloux AGA⁵, Alves AJS⁵, Martins CM⁵, Ferreira F⁵ – ¹Universidade de Sao Paulo – Departamento de Medicina Veterinária Preventiva e Saúde Animal, ²Prefeitura de Campinas – Vigilância Sanitária Norte, ³Prefeitura de Campinas – Centro de Controle de Zoonoses, ⁴Colorado State University, ⁵Universidade de São Paulo – Departamento de Medicina Veterinária Preventiva e Saúde Animal

Bats are less vulnerable to forest fragmentation than any other mammal, and for that reason, some species can disperse to peri-urban or urban areas. Insectivore bats are abundant in urban areas due to the density of artificial roosts and insects attracted by city lights. Inter-species transmission of the rabies virus between bats can occur, and this is the most probable mechanism of virus circulation in bat populations. Bats can also transmit the rabies virus to other mammal species, like dogs and cats. With the halt of vaccination campaigns of dogs and cats in 2010, the importance of rabies surveillance in bats has increased in Brazil. In Campinas, Sao Paulo State, a passive surveillance system for bats was implemented in 1994 and rabies-positive bats from the families Molossidae, Phyllostomidae and Vespertilionidae were found in a peri-urban area. In these areas, a vaccination blockage in dogs and cats was recommended after the halt of the massive vaccination campaign in 2010. This control strategy was able to increase the proportion of vaccinated animals above a critical value while in the rest of the study area it did not. The probability of infectious contact between bats and dogs or cats was higher in the blockage areas, evidencing the importance of the implementation of control measures.

PT.032 RABIES IN NIGERIA: A NEW PARADIGM SHIFT?

Jahun BM¹, Ehimiyein AM², Audu SW², Orasetin AT³, Adawa DAY¹ – ¹Ahmadu Bello University Zaria – Veterinary Teaching Hospital, ²Ahmadu Bello University Zaria – Veterinary Medicine, ³Ahmadu Bello University Zaria – Veterinary Public Health and Preventive Medicine

Rabies is an infectious disease of the central nervous system (CNS) that kills over 50,000 people each year. The prevalence rate is between 15-20% in Nigeria, however, because of the problem with reporting, the true picture is difficult to obtain. Most of the cases are from the rural areas and are not reported to the relevant authorities. Recent survey of dog brain from dog market across three states showed an increase in the prevalence of rabies up to 54% from Kaduna State, 50 from Abuja while Plateau State had 58% prevalence. In addition, the emergence of asymptomatic rabies which after several mouse inoculations will kill the mice without showing clinical signs of rabies is case of concern. This paper demonstrates the public health significance of the observed high rabies prevalence and the dangers of having asymptomatic rabid dog in the society.