FINAL PROGRAM & ABSTRACT BOOK

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The genus Lyssavirus has seven sero genotypes namely, the classical rabies virus (RV), Lagos bat virus, Mokola virus (MOKV) Duvenhage virus (DUUV), European bat lyssavirus The (EBLV 1 and EBLV2) and Australians Bat Lyssavirus (ABL, genotype 7). In Mexico, only RV circulating Serotype 1.

Objective:
Describe the state of Guerrero environmental adaptation that has seen the bat Desmodus rotundus and its correlation with the presence of rabies virus infection.

Materials and methods:
We performed a descriptive study of time series and included all confirmed cases of Bovine Paralytic Rabies (PRB) presented in the Mexican state of Guerrero during the years 2000 to 2011. We calculated incidence rates, seasonality, and environmental factors were analyzed.

Results:
It was noted that of 189 confirmed cases of RBP in a period of 11 years, 121 (65%) occurred in 6 microregions specific state. There was a statistically significant difference (p 2400 msl, conditioning the presence of bat has been overcome because populations were found of bats up to 2550 msl. No correlation was found to reduce cases of RBP to capture events.

Conclusion:
The temporal distribution of the disease showed a higher incidence in 5 months, which could be associated with ecological factors such as humidity and temperature. Colonies of bats have presented a rapid adaptation to regions of higher altitude to 2400 meters above sea level which have opened new areas for livestock. The application captures bats showed no anticoagulant ointment alone will be an effective mechanism for reducing the number of cases of RBP if not in conjunction with the implementation of vaccination that is still considered a reactive mechanism.

SEROLOGICAL STUDY OF HEPATITIS E VIRUS INFECTION IN FARMING PIGS IN SERBIA

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Hepatitis E virus (HEV) is recognized as a major cause of liver acute infection in developing countries of Asia, Africa and Middle East. In these epidemic areas HEV is usually transmitted through fecal contamination of water or food. In humans the infection frequently results in clinical features of hepatitis, as jaundice, epigastric pain, vomiting, fever and dark urine. The mortality rate is usually low (0.2-3%), but could be as high as 25% in pregnant women. So far, 4 mammalian and one Avian genotype have been described. Genotypes 1 and 2 are responsible for large epidemics in endemic areas, while 3 and 4 are restricted to industrialized countries where they cause sporadic cases.

In 1997 swine HEV was discovered in domestic pigs. Since then many animal species have been described as potential reservoir of HEV: wild boars, deers, chicken, rats, rabbits, horses and other; however, until now, only genotypes, 3 and 4 have been detected in swine and other mammals. Zoonotic transmission of HEV from animals to human were proven in people infected after consumption of raw wild pig or deer liver and meet, suggesting a potential risk of the virus for environment pollution and public health. Therefore, assessment of HEV incidence in pigs would help to control HEV spread.

Objectives:
The objective of this study was to investigate the seroprevalence of anti-HEV IgG antibodies in 300 pigs from 3 farms located in the Voivodina province, in northern Serbia. Twenty sera from 5 different stages of production: growers, pre-fatteners, gilts, sows and fatteners, were collected from each farm (100 sera per farm) during year 2011.

Methods:
Seras were tested with a validated in house ELISA based on the use of a baculovirus expressed recombinant HEV genotype 3 open reading frame 2 (ORF-2) protein from infected Trichoplusia ni insect larvae extracts. Western blot was used to test 11 sera that gave doubtful results.

Results:
Sero prevalences of 37%, 31% and 54%, respectively, were found in the 3 farms analyzed. Seroprevalence rate in individual pigs was 38% (114/300), but varied between 0% to 85% depending on the age of the pigs, being higher in adult fatteners than in young growers (61,66% vs. 33,33%).

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Conclusion:
This is the first report describing the prevalence of anti-HEV antibodies in farming pigs in Serbia. The seroprevalence found here in farming pigs (31%-54%) was similar to that previously described in backyard pigs (34.6%) from the same geographical region, confirming that HEV infection is wide spread on Serbian pig population.

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SERO Survey of RABIES VIRUS ANTIBODIES IN COMPANION, HUNTING AND STRAY DOGS IN OGUN AND OYO STATES OF NIGERIA

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Objectives
Rabies remains a disease of public health importance as there continues to be reports of cases and outbreaks globally. Over 99% of all human deaths from rabies occurs in the developing world with dogs incriminated as the predominant reservoir of the disease. In Nigeria where rabies is endemic with inadequate vaccination coverage, previous studies reported low to high prevalence of rabies virus (RV) antibodies in vaccinated and unvaccinated dogs. Currently, a rabies surveillance programme is non-existent in Nigeria. Considering the recent upsurge in the keeping of dogs as pets and guard dogs, their use for hunting purposes in several communities and the large number of stray dogs in Nigeria, it is hypothesized that there is an increase in rabies cases in the country. We investigated the presence of RV antibodies in apparently healthy companion, hunting and stray dogs in Ogun and Oyo states of southwestern Nigeria in order to determine the role of these dogs as epidemiological determinants of rabies in the study locations.

Methods
Blood samples were collected from 230 dogs comprising 80 companion, 92 hunting and 58 stray dogs in some cities and peri-urban communities in Ogun and Oyo states, southwestern Nigeria. The sera obtained were screened for RV antibodies using an indirect ELISA optimized with 1:500 dilution of antigen, 1:100 sera and 1:1000 conjugate. The cut-off Sample-Positive ratio was 0.25, which corresponded to twice the OD value of the negative control serum. Results were considered valid only when the difference between the mean OD of the positive and negative controls was greater than 0.2 and the mean OD of the negative control was less than or equal to 0.25. Data obtained were subjected to One-way ANOVA test to determine the significance of differences between sexes, age groups, vaccination status and vaccine types.

Results
Of the 230 dog sera tested, RV antibodies were detected in only 13 (5.7%). The positive sera were obtained from vaccinated companion dogs in Oyo state while all companion dog sera in Ogun state were negative. Sera of the 92 hunting and 58 stray dogs were also negative for RV antibodies. There was no significant difference between sexes, among the different age groups and in the response to various vaccine types. However, there was significant difference (P<0.001) in the RV antibody status of vaccinated and unvaccinated companion dogs.

Conclusion
The low prevalence of RV antibodies in dogs in the study locations indicates poor protection of dogs in these areas against rabies. Besides, the non-detection of RV antibodies in some vaccinated companion dogs and in all unvaccinated companion, hunting and stray dogs indicates that they are a naive and totally unprotected population which are highly susceptible to RV infection and could serve as potential reservoirs of the virus, thus constituting a public health threat. These findings underscore the need for mass antirabies vaccination campaigns to cover companion, hunting and stray dogs in Nigeria as it has been reported that transmission effectively stops when over 70% of the canine population is immune.

Susceptibility of Bank voles (Myodes glareolus) to Infection with a H7N1 Highly Pathogenic Avian Influenza Virus

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