VETERINARY VIROLOGY - VV

Congresse Brasileino

(Remoderation



Veterinary Virology: VV

Numerous yiral infections are known to affect the health of dogs. Canine distemper virus, a common viral threat for dogs, is highly contagious and often fatal, causing fever, vomiting and diarrhea, respiratory symptoms, seizures and paralysis. Canine parvovirus 2 (CPV2) is found worldwide, is highly contagious and can also be lethal, causing the symptoms of fever, vomiting and hemorrhagic diarrhea. Canine coronavirus (CCoV) also causes vomiting, diarrhea and/or respiratory symptoms, and different strains have been identified, including enteric CCoVs, canine respiratory coronavirus and canine pantrophic coronavirus. Canine rotavirus and adenovirus are reported as potential dog pathogens, also causing episodes of diarrhea. In this study, a total of 107 rectal swabs were screened for these agents. The samples were collected from dogs with or without diarrhea, of any gender, age and breed, in municipal dog shelters, veterinary clinics, and pet shops from Rio Grande do Sul, Santa Catarina, Paraná, Mato Grosso and Rondônia. during a 4-year period (February 2008 - June 2012). Rectal swab samples were tested by using PCR (CPV2 and CAV) and reverse transcription-PCR (CDV, CCoV and CRV) with specific primer pairs. We found canine parvovirus in 14/107 (13%) samples, canine distemper virus in 20/107 (18.7%) samples, canine coronavirus in 29/107 (27.1%) samples, canine rotavirus in 6/107 (5.6%) samples and canine adenovirus in 2/107 (1.8%) samples. Of total, 51 (47.6%) were negative for all agents analyzed. Mixed infections were detected in 19 (17.7%) dogs, most of them (13 - 12.1%) infected with CCoV plus one of the other viruses, being 6 of them with CDV and 5 dogs were co-infected with CPV2. Also, 2 (1.8%) dogs were co-infected with 3 different viruses, being one with CCoV, CDV and CPV2 and the other with CCoV, CDV and CRV. Analysis of different viral agents in fecal samples is needed to assess the real importance of each agent, mainly to establish a relationship with cases of diarrhea. In this study, canine coronavirus infections were the most frequent (27.1%), followed by canine distemper virus (18.7%) and canine parvovirus (13%). Mixed infections were found in 19 dogs, most infected with CDV/CCoV, viruses that may exacerbate disease caused by other viruses, such as CPV, CRV and CAV. This study provides a snapshot of the situation of infectious diseases caused by CCoV, CDV, CPV, CAV and CRV in Brazil. Financial support: CAPES, CNPq.

VV601 - CO-CIRCULATION OF PANDEMIC 2009 SWINE H3N2 AND H1N2 INFLUENZA VIRUSES IN PIGS IN THE STATE OF RIO GRANDE DO SUL.

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Swine influenza virus (SIV) is an Orthomyxovirus that causes acute respiratory disease in pigs, characterized by sudden outbreaks with high morbidity and low mortality. Three subtypes of influenza A virus circulate in swine populations world wide H1N1, H1N2, and H3N2. Reports of SIV infections in Brazilian swine are scarce. The present study was conducted in search for antibodies to different subtypes of SIV in pigs from commercial farms in the state of Rio Grande do Sul, Brazil. Serum samples collected (in 2012) from six commercial farms with history of respiratory disease were examined. The number of samples tested was determined with basis on an estimated prevalence of 50% in herds with a 95% confidence interval. Ten pigs (66 to 120 days old) were sampled from each 6 farms, totaling 60 samples. Hemagglutination inhibition (HI) tests were performed against classic H3N2 (strain A/sw/IA/8548-2/99-NVSL/USDA); H1N2 (strain 31/11) and pandemic H1N1pdm09 (strain 107b/10-3A), the last two isolated from field cases of SIV. The results demonstrate that thirteen of the samples tested (22%) had HI antibodies to H1N1pdm09; 60 (100%) reacted with high titers for H3N2 and 8 (13%) had HI antibodies to H1N2. In relation to herds, antibodies to SIV were detected in all sampled farms, which 4(4/6) had seropositive animals to pandemic H1N1pdm09, 6 (6/6) to classic H3N2 and 4 (4/6) to H1N2. In addition, three farms were positive for three tested SIV subtypes. These findings reveal that these three subtypes of influenza virus are circulating in the pig population of Rio Grande do Sul. These results highlight the need for continuous influenza surveillance in swine populations within the state.

VV602 - PHYLOGENETIC ANALYSIS OF BRAZILIAN CHICKEN PARVOVIRUS (CHPV)

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Chicken parvovirus (ChPV) belong to the Parvoviridae family. Chicken parvovirus induces enteric disease in broilers and may also cause neurologic disease in young chickens. The aim of this study was to report the identification and phylogenetic analyses of ChPV