Seroprevalence of bovine viral diarrhea virus (BVDV) infection in sheep of Khouzestan province


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Abstract

This serological survey was carried out to determine the prevalence rate of bovine viral diarrhea virus (BVDV) infection in sheep in Khouzestan province, Southwest of Iran. For this purpose, blood samples were taken from 318 sheep of 5 districts, Baghmalek, Shoshtar, Hendijan, Ahvaz, and Behbehan that dived into sex and four age groups (1, 2, 3, and ≥4 years old). Sera were tested by virus neutralization test (VN) using NADL, strain of bovine viral diarrhea virus genotype 1 for detection of antibodies of BVDV. The results indicated 134((41.2%) sheep had antibodies to BVDV. The prevalence of infection in females and males were 40.8% and 55.2%, respectively. The prevalence of infection in 4 age groups were 36.5%, 31.4%, 44%, and 47.1% respectively. Behbehan (70.2%) and Baghmalek (26%) respectively, had higher and lower rate of infection. Statistical analysis showed no-relationship between age and sex groups with infection while this difference between districts were significant. It is concluded that BVDV infection in Khouzestan province are endemic and infection of sheep and transmit to cattle should be considered in control and eradication of BVDV in cattle.

Keywords: BVDV, Seroprevalence, Infection, Sheep, Khouzestan

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