Seroprevalence of bovine viral diarrhoea in buffaloes at Chennai

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ABSTRACT


The seroprevalence of bovine viral diarrhoea in adult she-buffaloes slaughtered at Chennai was 27.4% by ELISA.

Keywords: Buffalo, BVD, ELISA, seroprevalence

Bovine viral diarrhoea (BVD) virus is recognised as having worldwide distribution. The BVD virus infection produces a wide spectrum of diseases including subclinical infections, diarrhoea, immunosuppression, repeat breeding, abortion, mummification, congenital defects, immunotolerance, persistent infections and acute and chronic mucosal disease. The majority of infections (70-90 per cent) in susceptible cattle are subclinical. Cattle under going subclinical infections may have a mild fever and leukopenia that is followed by the development of serum neutralizing antibodies. The serum antibody prevalence in cattle ranged from 50-90 per cent3.

A total of 168 sera samples from apparently healthy adult she-buffaloes (Non-descript -166; Murrah graded-2; Pregnant-16; Non-pregnant-152) slaughtered at Corporation slaughterhouse, Chennai-12 were collected. The sera samples were then transported on dry ice to High Security Animal Disease Laboratory Bhopal and analysed using ELISA kit (Ingenasa, Madrid, Spain) for BVD virus. Out of the 168 sera samples tested, 46 (27.4 per cent) showed positive reaction by ELISA. The present incidence is about four per cent more than the observation of previous researcher5 who screened 210 buffalo sera samples from Uttar Pradesh for BVD and found 23.4 per cent seropositivity whereas other researcher4 detected 65.9 per cent seropositivity in buffaloes with history of abortion or diarrhoea by serum neutralization test. Cattle immunotolerant to BVD virus are persistently infected and viraemic constantly shed virus into the environment, have no or low concentrations

REFERENCES