ABSTRACT

Brucellosis is one of the major zoonotic diseases that affect several domestic animals, wild animals and also marine mammals. Though there is no specific Brucella sp. that can affect horses, B. abortus and B. suis can affect horses naturally and B. canis experimental infection has also been reported in equines. Brucellosis in equines is characterized by two conditions namely Poll evil and fistulous withers. Organism has its predilection for joints, ligaments and tendons in case of equines and causes inflammatory conditions leading to formation of fistula. Equine brucellosis has been documented from several parts of the world and prevalence has been reported time to time mostly based on serological diagnosis. Diagnosis of brucellosis mainly depends on serological methods though isolation of the organism is the gold standard. Due to hazardous nature of the pathogen, tests like Rose Bengal plate agglutination test, Standard tube agglutination test and other serological assays are commonly employed. Isothermal amplification assay like LAMP are gaining momentum these years due to swiftness in diagnosis of the pathogen. LAMP with high specificity and sensitivity for detection of Brucella spp. and also B. abortus has been developed in the recent years. Prevention and control of brucellosis is of utmost important to halt the spread of the organism to other animals and human. Trauma is a major reason for predisposition of poll evil and fistulous withers hence proper fitting of saddle will help to prevent the disease. Housing and feeding the horses separately can prevent spread of disease from cattle. The present review discusses equine brucellosis, its epidemiology, pathogenesis, clinical signs along with appropriate prevention and control strategies to be adapted.

EQUINE BRUCELLOSIS: REVIEW ON EPIDEMIOLOGY, PATHOGENESIS, CLINICAL SIGNS, PREVENTION AND CONTROL

Kumaragurubaran Karthik¹,*, Govinthaśamy Prabakar², Ramasamy Bharathi¹, Sandip Kumar Khurana³ and Kuldeep Dhama²

¹Tamil Nadu Veterinary and Animal Sciences University, Chennai- 51, India
²Indian Veterinary Research Institute, Izatnagar, Bareilly, U.P., India
³NRCE, Hisar, Haryana, India

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* Corresponding author
E-mail: karthik_2bvsc@yahoo.co.in (Kumaragurubaran Karthik)

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