



Most Dreadful and Fatal Equine Infections of Worldwide Occurrence: A Brief Review

Subha Ganguly*

Associate Professor, Department of Veterinary Microbiology, ARAWALI VETERINARY COLLEGE
(Affiliated with Rajasthan University of Veterinary and Animal Sciences, Bikaner),
N.H. – 52 Jaipur Road, V.P.O. Bajor, Sikar – 332001, Rajasthan, India

*Corresponding Author E-mail: ganguly38@gmail.com

Received: 27.10.2016 | Revised: 15.11.2016 | Accepted: 18.11.2016

ABSTRACT

The healthy horse gets infected from another infected one. Mosquito or tick acts as the vectors for transmitting most of the deadly disease in equines. The review focuses on the prominent equine infections very important in the field of equine practice and causing huge economic losses worldwide.

Keywords: Disease, Horse, Prevention

INTRODUCTION

Equine Influenza (Flu)

Equine influenza involves the most severe respiratory infectious disease of equines. It is a highly contagious disease which spreads through direct contact and by contaminated surroundings. The incubation period of the disease is 1-3 days which is followed by the appearance of clinical signs and symptoms and outbreaks.

The clinical signs and symptoms include fever, dry cough, clear nasal discharge, depression and loss of appetite [1,2].

Prevention:

By implementing strict biosecurity measures through quarantine for 2 weeks period. Veterinary consultation should be followed for vaccinating the animal [1,2].

Strangles

Strangles is an infectious bacterial disease of horses which is characterized by the formation of abscesses in the lymphoid tissue of the upper respiratory tract. *Streptococcus equi*, is the etiology which spreads by direct contact with infected horses or indirectly

through contact with farm utensils and farm attendants. Infection generally spreads through the nasal discharges and pus from the affected lymph nodes.

The clinical symptoms include Fever (103°–106°F), difficulty in swallowing, respiratory noise, extended head and neck, nasal discharge, lethargy and swollen lymph nodes. In some outbreaks the abscesses may break down and the pus may infect the other visceral organs which prove to be fatal [1,3].

Prevention:

The affected horses should be separated from the healthy herd with veterinary care and management. Vaccination is often the best preventive measure for Strangles.

Tetanus (Lockjaw)

Tetanus is a very popular bacterial disease among the equines which is caused by the bacterium *Clostridium tetanii* which can be found in soil and manure. The bacteria can remain viable in the environment for prolonged period. The infection generally spreads through wound contamination.

The bacterium is anaerobic in nature and multiplies rapidly in damaged tissues. It produces neurotoxin while multiplication and produces the clinical signs of the disease. It is the most fatal infection of equines with mortality rate may rise up to 75% of the affected cases.

The predominant symptoms include muscular spasms, difficulty moving and eating, tail often held straight out, development of an anxious expression due to facial spasms, sweating. In advanced and complicated cases death occurs due the spasms of respiratory muscles [1,4].

Prevention:

Tetanus can be prevented by the administration of vaccines and regular management of the wounds and/or bruised areas on the body of horses. Veterinary consultation is primarily recommended.

Potomac Horse Fever

This disease affects the horses during spring, summer, and early fall and remains associated with pastures. It is characterized by acute enterocolitis syndrome which produces fever, mild colic and diarrhea in horses of all ages. It also causes abortion in pregnant mares.

Etiology of the disease is *Neorickettsia risticii*. It is identified as flatworm developing in aquatic snails. The infected immature flatworms are released from the snail into the aquatic environment in warm temperature. The horses after consuming the immature flatworms through contaminated water become infected. Vectors like mayflies help in the transmission of the disease by carrying the flatworms to horses while grazing [1,5].

Signs and symptoms:

It is characterized by fever, inappetance, depression, diarrhea and mild colic. The infected horses may also develop signs of laminitis. Laboratory diagnosis can be done by PCR technique by employing the horse blood or manure specimen.

Prevention:

Commercial vaccines are available to combat against the disease.

Equine Herpesvirus (EHV)/ Rhinopneumonitis

EHV is a highly contagious viral disease which spreads through contaminated feed and utensils. It is characterized by abortions, inflammation of the spinal cord, respiratory infections, paralysis and occasionally death in young horses. The two most clinically important forms of the disease are EHV1 and EHV4 respectively. The disease spreads through contact with infected horses and its discharges [1,6].

Clinical Symptoms:

The prominent clinical signs of EHV include nasal discharge, lethargy, urine dribbling, incoordination, hind limb weakness, loss of tail tone, leaning against a fence or wall to maintain balance and inability to rise.

Prevention

There exists no licensed vaccine against EHV. Biosecurity practices should be implemented by quarantining the newly introduced animals in the herd for checking the spread of the infection are can be implemented to prevent outbreaks of EHV in the stud farm [1,7].

REFERENCES

1. Gabby Gufler. Top 5 Most Deadly Horse Diseases. **2015**, *Manna Pro*. <http://info.mannapro.com/equine/top-5-most-deadly-horse-diseases>
2. Panchaud, Y., Gerber, V., Rossano, A. and Perreten, V. Bacterial infections in horses: a retrospective study at the University Equine Clinic of Bern. *Schweiz Arch Tierheilkd*, **2010**, 152(4):176-82. doi: 10.1024/0036-7281/a000040
3. Craig Wood, University of Kentucky. *Bacterial diseases of the horse- eXtension* <http://articles.extension.org/pages/11396/bacterial-diseases-of-the-horse>
4. White, Stephen, D., Equine Bacterial and Fungal Diseases: A Diagnostic and Therapeutic Update. *Clin. Tech. in Equine Pract.*, **2005**, 4(4): 302-310.
5. Overview of respiratory diseases of horses. *The Merck Veterinary Manual*.
6. Equine Bacterial Diseases. *The Flashcards*. www.flashcardmachine.com
7. Bacterial Disease. *Equine Medical Services*. <http://www.equmed.com/?cat=14>