THE SCIENCE WORLD
A Monthly e Magazine
ISSN:2583-2212
May, 2023; 3(05), 745-747

Popular Article

Hemorrhagic Septicemia: A Deadly Contagious Disease

Anju Bala[1], *Anju Poonia[2], Umesh Kumar Jaiswal[3], Anamika[4]

[1]PhD Scholar, Department of Veterinary and Animal Husbandry Extension Education
[2]PhD Scholar, Department of Veterinary Surgery and Radiology
[3]PhD Scholar, Department of Veterinary and Animal Husbandry Extension Education
[4]PhD Scholar, Department of Animal Genetics and Breeding
COVS, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana- 125004
https://doi.org/10.5281/zenodo.7954137

Introduction

It is one of the most economically important pasteurelloses. Haemorrhagicsepticaemia in cattle and buffaloes was previously known to be associated with one of two serotypes of P. multocida: Asian B: 2 and African E:2 according to the Carter-Heddleston system, or 6:B and 6:E using the Namioka-Carter system.

The disease occurs mainly in cattle and buffaloes, but has also been reported in goats, African buffalo, camels, horses and donkeys, in pigs infected by serogroup B, and in wild elephants. Serotypes B:1 and B:3,4 have caused a septicemic disease in antelope and elk, respectively. Serotype B: 4 was associated with the disease in bison (Bison bison).

Clinical signs

A wide variety of clinical signs have been described for HS in cattle and buffaloes. The incubation periods (the time between exposure and observable disease) for buffalo calves 4–10 months of age varies according to the route of infection. The incubation period is 12–14 hours, approximately 30 hours and 46–80 hours for subcutaneous infection, oral infection and natural exposure, respectively.

Generally, progression of the disease in buffaloes and cattle is divided into three phases. Phase one is characterized by fever, with a rectal temperature of 40–41 °C (104–106 °F), loss of appetite and depression. Phase two is typified by increased respiration rate (40–50/minute), labored breathing, clear nasal discharge (turns opaque and mucopurulent as the disease progresses), salivation and submandibular oedema spreading to the pectoral (brisket) region and even to the forelegs. Finally, in phase three, there is typically recumbency, continued acute respiratory distress and terminal septicemia. The three phases overlap when the disease course is short. In general, buffaloes have a more acute onset of disease than cattle, with a shorter duration.

Pathology and pathogenesis

On post-mortem examination (necropsy), the most obvious gross lesion is subcutaneous oedema in the submandibular and pectoral (brisket) regions. Petechial hemorrhages are found subcutaneously and in the thoracic cavity. In addition, congestion and various degrees of consolidation of the lung may occur. Animals that die within 24–36 hours, have only few petechial hemorrhages on the heart and generalized congestion of the lung, while in animals that die after 72 hours, petechial and ecchymotic hemorrhages were more evident and lung consolidation are more extensive.

Diagnosis

Diagnosis should be based on blood smear and Clinical findings.

Management

1. Sulphadimadine 100 ml orally.
2. Injection of oxytetracycline 40 ml for 3 days continuously.

Disease prevention and treatment

If glutton is spreading in any area, then the following measures should be taken…..

1. Sick animals should be separated from other healthy animals if they see symptoms and utensils used by sick animals should not be used by healthy animals.
2. Do not allow sick animal to drink water in river, pond, puddle etc. Give fodder, grain and water to healthy animals before the sick animal.
3. The floor, walls etc. of the place where the sick animal is tied should be cleaned with 3 percent caustic soda or percent phenyl solution.

Official Website
www.thescienceworld.net
thescienceworldmagazine@gmail.com
Published **20.05.2023**

4. The excreta and urine of the sick animal should be burnt by putting it in a pit with lime. Death due to disease. The animal carcass should be disposed of scientifically by digging a deep pit, adding salt/lime or by burning it.
5. Animals that came in contact with sick animals should be given 15-20 ml. Antiserum should be given intradermally (by mutagenic method.
6. Prompt arrangements should be made for vaccination of healthy animals. Every year before the rains, all the animals must be vaccinated collectively. The effect of this vaccine lasts for 6 months. The animals must be vaccinated even before long journeys.

Official Website
www.thescienceworld.net
thescienceworldmagazine@gmail.com

Published **20.05.2023**