s

***Ministry of Higher Education and scientific research***

***UNIVERSITY OF kerbala***

***College of Veterinary Medicine***

******

خناق الخيول

 ***Supervision أشراف***

***Assistant Professor Dr. Hayder Badri Abboud***

***الأستاذ المساعد الدكتور حيدر بدري عبود***

***By***

***RAFFAL Mohammed HUSSAIN***

***Fourth year 2014-2015***

***رفل محمد حسين***

***المرحلة الرابعة 2014-2015***

Strangles is a highly contagious and serious infection of horses and other equids caused by the bacterium, Streptococcus equi. The disease is characterized by severe inflammation of the mucosa of the head and throat, with extensive swelling and often rupture of the lymph nodes, which produces large amounts of thick, creamy pus.

Strangles is caused by Streptococcus equi subspecies equi, better known as Streptococcus equi (S. equi). The organism can be isolated from the nose or lymph nodes of affected animals, and is usually readily identified in the laboratory by simple sugar tests.



Strangles is an infectious, transmissible, world-wide disease of horses, donkeys and mules. It continues to rank among the three most significant respiratory diseases of horses. Its widespread distribution is favored by its highly contagious mode of spread and a mobile horse population(1) ..

Etiology: The causal agent, Streptococcus equi subspecies equi, is a gram-positive, beta-hemolytic coccobacillus organism. Si. iequiis highly host adapted to equids and demonstrates no genetic or phenotypic variation although there is variation in virulence related to factors such as hyaluronic acid capsule, the M-like proteins SeM and SzPSe, streptolysin S, and pyrogenic superantigenic exotoxins(2).

Clinical findings: After an incubation period of 1-3 weeks, the disease develops suddenly with complete anorexia, depression, fever, and a serous nasal discharge which rapidly becomes copious and mucopurulent. Retropharyngeal lymph node enlargement may cause obstruction of the oro- and nasopharynx with subsequent dyspnea and dysphagia. Death by asphyxiation may occur at this time in severe cases(3).

 Diagnosis

Diagnosis is confirmed by bacterial culture of exudate from abscesses or nasal swab samples. CBC reveals neutrophilic leukocytosis and hyperfibrinogenemia. Serum biochemical analysis is typically unremarkable. Complicated cases may require endoscopic examination of the upper respiratory tract (including the guttural pouches), ultrasonographic examination of the retropharyngeal area, or radiographic examination of the skull to *identify the location and extent of retropharyngeal abscesses.*4))

 Treatment

The environment for clinically ill horses should be warm, dry, and dust-free. Warm compresses are applied to sites of lymphadenopathy to facilitate maturation of abscesses. Facilitated drainage of mature abscesses will speed recovery. Ruptured abscesses should be flushed with dilute (3%–5%) povidone-iodine solution for several days until discharge ceases. NSAIDs can be administered judiciously to reduce pain and fever and to improve appetite in horses with fulminant clinical disease. Tracheotomy may be required in horses with retropharyngeal abscessation and pharyngeal compression

Ruptured submandibular abscesses, horse

Antimicrobial therapy is controversial. Initiation of antibiotic therapy after abscess formation may provide temporary clinical improvement in fever and depression, but it ultimately prolongs the course of disease by delaying maturation of abscesses. Antibiotic therapy is indicated in cases with dyspnea, dysphagia, prolonged high fever, and severe lethargy/anorexia. Administration of penicillin during the early stage of infection (≤24 hr of onset of fever) will usually abort abscess formation. The disadvantage of early antimicrobial treatment is failure to mount a protective immune response, rendering horses susceptible to infection after cessation of therapy. If antimicrobial therapy is indicated, procaine penicillin (22,000 IU/kg, IM, bid) is the antibiotic of choice. Untreated guttural pouch infections can result in persistent guttural 5))

REFRENCES

1. http://www.omafra.gov.on.ca/english/livestock/horses/fcts/03-037.htm#intro

(2)https://www.addl.purdue.edu/newsletters/2003/spring/strangles.shtml

(3)https://www.addl.purdue.edu/newsletters/2003/spring/strangles.shtml

[(4)http://www.merckmanuals.com/vet/respiratory\_system/respiratory\_diseases\_of\_horses/strangles\_in\_horses.html](%284%29http%3A//www.merckmanuals.com/vet/respiratory_system/respiratory_diseases_of_horses/strangles_in_horses.html)

[(5)http://www.merckmanuals.com/vet/respiratory\_system/respiratory\_diseases\_of\_horses/strangles\_in\_horses.htm](%285%29http%3A//www.merckmanuals.com/vet/respiratory_system/respiratory_diseases_of_horses/strangles_in_horses.htm)