

Equine Piroplasmosis

Equine Babesiosis, Equine Theileriosis, Biliary Fever

Equine piroplasmosis is a tick-borne protozoal infection of horses. The symptoms of this disease range from acute fever, inappetence and malaise, to anemia and jaundice, sudden death, or chronic weight loss and poor exercise tolerance.

Etiology

Equine piroplasmosis results from infection by the protozoa *Babesia caballi* or *Theileria equi* formerly *Babesia equi*

Epidemiology...

- 1-Equine piroplasmosis affects horses, mules, donkeys and zebras.
- 2-The parasites that cause equine piroplasmosis are endemic in many tropical and subtropical regions
- 3-*B. caballi* and *T. equi* are transmitted by ticks, which become infected when they ingest parasites in the blood of infected equids. Approximately 14 species of ticks in the genera *Dermacentor*, *Hyalomma* and *Rhipicephalu*

Clinical findings ...

- 1-The incubation period is 8-10 days. Acute cases in adults show a sudden onset of immobility and reluctance to move; some are in lateral recumbency and do not respond to stimuli.
- 2-There is complete anorexia and fever of 40°C
- 3-Edema of the fetlocks occurs and may also be present on the head and ventral abdomen.
- 4-Fecal balls are covered with thick mucus, and colic occurs frequently.
- 5-5- Often there is no hemoglobinuria, however, the mucosa are pale pink and tinged which become icteric .
- 6-In young horses, the signs are more severe -jaundice, mucosal pallor and weakness are marked, and mucosal petechiae are evident.
- 7-Affected horses may die within 24-48 hours of the first signs appearing.
- 8-Chronic cases may survive for months and ' carriers' may persist for as long as 4 years.

Clinical pathology...

1-Hematology

Severe anemia with erythrocyte counts as low as 2 million/iLL and hemoglobin levels down to 3 g/dL

2-Detection of babesia

- Direct examination of blood smears. For best results, blood films should be prepared from capillary blood collected after pricking the tip of the tail or margin of the ear.

3-PCR

4-Serological test ...

Elisa, CFT.

Treatment

For *B.equi* infection

1-Imidocarb 10% 4.4mg/kgBW I.M four injections during 72 hours

2-Bubarvaquone 4-6mg/kgBW ..it can be repeated 48 h later

3-Oxytetracycline 10% 10-20mg/kg.BW.I.M for 3 days .

4-Acombination between Imidocarb and Bubarvaquone

For *B.caballi* infection

1- Imidocarb 2mg/.I.M one time and can be repated 48 h later

Note:- Imidocarb is contra indicated in donkeys because it might cause death(The LD50 is less than 2 mg/kg BW)

Supportive treatment

In all species, treatment regimens for severely affected patients should include blood transfusions and anti-shock preparations.In chronic cases and convalescent patients, hematinics should be provided.