Biogal | TIPS

5 Tips in diagnostics of Mycoplasma haemofelis

Hemotropic mycoplasmas are Gram-negative parasitic bacteria that lack cell walls and have an affinity for erythrocyte outer membranes.

DID YOU KNOW?

Organisms may be numerous, rare, or undetectable in a given blood sample due to **cyclic parasitemia.**

An **asymptomatic carrier** state can occur resulting in potential spread of the disease and re-occurrence when under stress.

Parasitemia is episodic and is directly coupled with **decreased hematocrit levels at the time of increased parasitic load.**

Acute infection often results in severe hemolytic anemia with a marked regenerative response, especially in young cats, mild anemia can also occur.

Chronic infection is not usually associated with anemia.

Laboratory confirmation was traditionally accomplished by microscopic blood smear analysis BUT the technique has limitations therefore, using molecular assays (PCR) increases your diagnostic performance.

Mycoplasma haemofelis geographics distribution

CVBD

Canine Vector-Borne Disease World Forum

"The reported feline species Mycoplasma haemofelis (Mhf), Candidatus Mycoplasma haemominutum (CMhm) and Candidatus Mycoplasma turicensis (CMt), **possess worldwide geographical variation in prevalence" 2020**

Clinical Signs:

Pyrexia and regenerative anemia are common features of Mycoplasma haemofelis infection. Always consider Mycoplasma haemofelis as a part of your clinical investigation.

01

Blood smear limitations:

False negative

Up to 50% of the times due to organism number fluctuations, detached organism from RBC (e.g, aged sample) and due to antibiotic treatment .

False positive

Due to stain precipitate, drying artifacts, Howell-Jolly bodies, Basophilic stippling etc.

02

PCR reaction:

Can detect pathogens when the organism is not present on the cell and in low parasitemia cases.

Therefore, **PCR is the best option for a practical and accurate detection** of M.haemofelis infection.

03

PCR reaction:

Samples should be taken **before treatment initiation** to avoid false negative results.

04

Blood donors:

Should always be screened for M.haemofelis infection.

05

PCRun by Biogal Galed Labs.

A revolutionary point-of-care molecular detection kit for a highly specific diagnosis of infectious diseases in small animals.