



Dr Bata

Growell

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## Mycoplasma hyorhinis

A respiratory tract infection caused by *Mycoplasma hyorhinis* has been reported from various countries and this infection is typified by inflammatory lesions on the pleura of the lungs and the heart sac with the latter typically being manifested as a serofibrinous pericarditis. Typically, the infection spreads on the farm from older to younger pigs and the causal organism can be isolated quite regularly from the noses of sows and weaners. *M. hyorhinis* is also often found in pneumonic lungs of slaughtered pigs at the abattoir.

## Pathogenesis

*M. hyorhinis* is common in the upper respiratory tract of young pigs (3-10 weeks of age) and diseases like pneumonia or stress facilitate a septicaemic infection in such pigs. When this happens the micro-organism can localise in serous membrane lined body cavities such as the heart sac and the chest cavity and joints where it typically produces an acute serofibrinous inflammatory reaction, resulting in polyserositis or arthritis.

*M. hyorhinis* can remain in infected joints for six months or longer.

## Clinical signs

Clinical signs typically occur 3-10 days after a precipitating stress and in the acute phase a moderate increase in temperature, roughened hair, listlessness, inappetence, reluctance to move, respiratory distress, abdominal sensitivity and swollen joints and lameness are seen. Within two weeks most of these signs subside but the lameness persists and can do so for up to six months.

*M. hyorhinis* can infect the eustachian tube in the ears of young pigs causing an eustachitis.

## Lesions

In the acute stage these are typically an acute serofibrinous and fibropurulent pericarditis and pleuritis which may be accompanied by a similar, but less severe peritonitis (inflammation of the membranes lining the abdominal cavity and organs contained therein).

As the condition progresses into the more chronic form these lesions become more organised and include fibrinous adhesions and thickened serous membranes.

## Treatment

Treatment with antibiotics which act against mycoplasmas has a varied success as the inflammatory response on the serous membranes either inhibits antibiotic penetration or is self-perpetuating. Control programmes should emphasise management of conditions which precipitate the clinical manifestation of the disease.