

The various forms of *Haemophilus parasuis*

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H*aemophilus parasuis* infection is an acute fulminating infection that results in a fibrinopurulent polyserositis.¹ It can involve any mesothelial surface, including the synovial membrane, peritoneum, pleura, pericardium, and meninges. The polyserositis form of *Haemophilus parasuis* infection is commonly called Glasser's Disease. At the Illinois Department of Agriculture Animal Disease Laboratory at Galesburg, Illinois, approximately 15% of the cases of polyserositis are due to *Haemophilus parasuis*. *Streptococcus suis* causes identical lesions and is responsible for approximately 50% of polyserositis cases.

Haemophilus parasuis can cause an acute fulminating septicemia without lesions of polyserositis.² In these cases, there may be no gross lesions, or there may be subcapsular hemorrhages in the kidney. Usually necropsy of additional pigs will show more lesions typical of Glasser's disease.

A somewhat unusual *Haemophilus parasuis* infection is an acute myositis involving the masseter muscles.³ Polyserositis is not observed to be associated with this condition. Grossly, the head is swollen and cyanotic. The masseter muscle and fascia contain microscopic evidence of fibrinopurulent inflammation similar to the serosal lesions of Glasser's polyserositis. *Haemophilus parasuis* is isolated from the involved skeletal muscle, but may not be isolated from internal organs.

Haemophilus parasuis is generally a secondary bacterial infection of swine pneumonia precipitated by other infectious agents.⁴ Occasionally, it is isolated from pneumonic lungs

without the isolation of other significant infectious biologic agents. There are no specific gross or microscopic pneumonic lesions to suggest that *Haemophilus parasuis* is involved.

In repopulated herds, minimal disease/high health herds, and multiple site production units, always consider *Haemophilus parasuis* infection in the differential diagnosis of acute death. Be aware that gross lesions of polyserositis are not always present. Other manifestations of *Haemophilus parasuis* include:

- lesions of septicemia;
- evidence of swollen heads; or
- no gross lesions at all.

References

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Diagnostic notes are not peer-reviewed.