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# "HOGG SENSE..."



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Editor  
Vol. 4 No. 2

Sponsored By:  
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Ralston, NE 68127

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**Diagnosis, Pathogenesis and Management of PRRS in 1996:** PRRS is currently thought to be the most important swine disease. Pat Halbur, DVM, PhD, VDL, ISU, one of the leading experts on PRRS presented an excellent overview about this disease at the NVMA Centennial Convention in Lincoln on January 17, 1996. This presentation is abstracted below for practitioners who were not able to hear Dr. Halbur's presentation. (Editor).

**History of PRRS:** PRRS was first observed in the USA in 1986 and in 1990 in Europe. In 1991 researchers at the Central Veterinary Institute in Lelystad, The Netherlands, were the first to isolate the causative agent, an RNA virus.

**Clinical Disease/Breeding Herd:** Anorexia, fever and lethargy in sows and gilts for a 1-7 day period. Transient blue discoloration of ears, tail or vulva is less common. Abortions in late gestation, stillborns and premature and weak piglets. Mid-gestation abortions, mummies, early embryonic death and infertility. Reproduction returns to normal after 2-3 months.

**Strains of PRRS:** The number of strains of PRRSV that exist is not clear and if infection with one strain protects against disease induced by other strains.

**Pathogenesis of Reproductive Failure:** Recent evidence suggests that the lesions responsible for abortions may be in the fetal umbilicus and the uterus of the dam. Segmentally-hemorrhagic and swollen umbilical cords with microscopic necrotizing arteritis may be an important lesion. Submit suspect umbilical cords for immunohistochemical examination.

**Clinical Disease in Newborn or Nursing Pigs:** Dyspnea, tachypnea, unthriftiness, fading, Splay-leggedness, muscle tremors, eyelid edema, conjunctivitis and fever.

**Clinical Disease in 3 to 10 Week Old Pigs:** Respiratory distress, lethargy, failure to thrive, or just decreased performance. Clinical disease depends on concurrent infections.

**Clinical Disease in Grow/Finish Pigs:** Depends on concurrent infections such as: MP, S. choleraesuis, APP, PRC, or swine influenza and management style (AIAO, off-site finishers).

**Prevalence of PRRSV:** The prevalence of PRRSV infection in the USA and Canada is estimated to be 60-80%. Antibodies to the Lelystad virus are common in the USA.

**Diagnosis of PRRS:** Gross lesions in PRRS-induced abortion: segmentally hemorrhagic, swollen and necrotic umbilical cords; colonic mesenteric edema, hemorrhages on the surface of the skin, edema in the dermis and subcutis and covering of the fetus with dark-brown-black meconium paste.

**Gross Lesions in Growing Pigs:** Enlarged tan lymph nodes and pneumonia. A more pathognomonic lesion induced by nearly all PRRSV isolates is enlarged, tan, edematous lymph nodes particularly in the cervical, mediastinal and inguinal lymph nodes.

**PRRS Vaccination Regimens:** Nobl Laboratories MLV vaccine is licensed for use in 3-16 week old swine. This vaccine has been widely used by practitioners in all ages of pigs, sows, boars.