

## **Actinobacillus suis septicemia mimicking erysipelas in sows**

In a recent Cross Canada Disease Report (Can Vet J 1987; 28: 654) one of us (SES) reported on outbreaks of *Actinobacillus suis* in suckling pigs. Since that report there have been acute *A. suis* outbreaks affecting predominantly sows and gilts in two widely separated, minimal disease herds in southwestern Ontario. On both farms the infections resembled erysipelas outbreaks clinically.

The first outbreak occurred in November 1987 in a 300-sow SPF herd where 41 pigs, initially mostly mature sows, exhibited anorexia, moderate fevers (39°C–40.5°C), red, round to elliptical, raised skin lesions, and arthritis. Eleven sows died and three others aborted. A few days later the disease spread to the farrowing barn; about 20 suckling pigs died of acute septicemia. The outbreak lasted two weeks among the sows and litters, and then subsided. It flared up again briefly in the finishing barn ten days later. Erysipelas vaccines were not used on this farm.

The second outbreak occurred in January of 1988 in a 120-sow minimal disease herd, and it affected sows

and gilts in a similar clinical pattern. The red skin lesions were square, rhomboidal, or of irregular geometric patterns. Only one sow died, but towards the end of the outbreak, which lasted three weeks, one nine-week-old weaned pig with similar skin lesions died suddenly. Sows in this herd were routinely vaccinated against erysipelas.

*Actinobacillus suis* was cultured from the internal organs and skin of pigs necropsied from both farms. Treatment with penicillin or broad spectrum antibiotics was effective. Histologically, fibrinocellular thromboses mixed with bacterial emboli occurred frequently in venules throughout the lung, liver, kidney, spleen, tonsil, and skin.

In both of these outbreaks, erysipelas was the initial clinical and gross pathological diagnosis. Understandably, failure of the erysipelas vaccine was claimed by the second producer. Indeed, unless bacteriological confirmation is attempted, similar cases are probably occurring elsewhere and being misdiagnosed.

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## **Saskatchewan**

### **Equine systemic lupus erythematosus**

A two-year-old Arabian mare was admitted to the Western College of Veterinary Medicine with a generalized, severe, seborrheic and alopecic dermatitis. The mare also had intermittent high fever and respiratory distress with tachypnea. Several weeks previously, the animal had an autoimmune hemolytic anemia and a positive Coomb's test. Skin biopsies revealed an interface dermatitis and a positive lupus band test with immunoperoxidase, consistent with systemic lupus erythematosus. An antinuclear antibody titer of 1/320 was also present.

This disease is seen rarely in horses. It has an incompletely understood, autoimmune etiopatho-

genesis. B cell hyperactivity results in the production of antibodies against many tissues, causing various clinical signs that include edema of the extremities, polyarthritis, depression, weight loss, and the dermatitis and fever seen in this case.

Reference: Scott DW. Large Animal Dermatology. Toronto: WB Saunders Co., 1988: 314–317.

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## **Alberta**

### **Ascarid larval pneumonia in pigs**

The owner and the attending veterinarian of a high health status pig herd were alarmed when severe coughing broke out in a few pens of seven-week-old weaners. There was concern that this could be an outbreak of mycoplasma pneumonia or of swine influenza. The problem, however, did not spread to adjacent pens. When a typically affected animal was necropsied, numerous "milk spots" were noted in the liver. The lungs showed generalized petechial and larger

hemorrhages. Histological study confirmed an ascarid larval pneumonia.

When the management was investigated it was found that the owner had spread feces from gilts over the dunging area in order to encourage the weaners to defecate in this area. Unfortunately, the gilts were to be dewormed later, just before they went into farrowing crates.

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