Bovine Special Edition
CAHFS CONNECTION
November 2012

Bovine herpesvirus-2

Bovine herpesvirus-2 (Bovine herpesvirus 2, BoHV-2) caused **facial and ear dermatitis** with alopecia, scabs and crusting of the skin on the ears and around the eyes of 3-week-old calves on one dairy in September. Lesions resolved over 3-6 weeks. Almost 100 percent of the calves were affected. The scabs from one animal had numerous herpes-like syncytial cells with intranuclear inclusions on histopathology. PCR testing of the scab material confirmed BoHV-2. Infections by this virus cause mammillosis and pseudo-lumpy skin disease and have been associated with identical lesions in calves in the past in California. On affected premises face flies probably serve as mechanical vectors transmitting the virus between calves.

Clostridial myositis and cellulitis

Clostridial myositis and cellulitis in eight postpartum Holstein heifers was secondary to injections in the neck muscle. Severe neck swelling followed by death occurred. *Clostridium septicum* was isolated from the necrotic and edematous skeletal muscle. The opened bottles of the injectable product were negative on culture for anaerobic and aerobic bacteria. The organism was probably introduced from skin contamination and damage from the injections allowed it to proliferate. On a second dairy, three postpartum heifers died suddenly. The one submitted had *C. septicum myocarditis*. Though clostridial myositis and cellulitis can affect any age animal, at CAHFS the disease is most commonly seen in unvaccinated calves from 8 to 24 months of age. At CAHFS, the most common clostridia isolated from the necrotic muscle are *Clostridium septicum* and *Clostridium chauvoei*. Both organisms can cause acute fibrinous pericarditis and heart necrosis. *Clostridium septicum* is also associated with severe swelling (cellulitis) below the vulva and the escutcheon area post-calving in heifers. Anaerobic culture and fluorescent antibody testing of affected sites are used to diagnose these diseases.

Retropharyngeal cellulitis

Submandibular swelling due to retropharyngeal cellulitis secondary to traumatic perforation of the back of the throat was found in one postpartum cow submitted. The trauma probably occurred one week earlier when treating the cow for ketosis with an oral preparation. In the preceding 2 months, 6-7 postpartum cows had developed pneumonia with submandibular swelling. Though none of the pneumonia cows were submitted, aspiration pneumonia can be secondary to oral dosing which may damage the back of the throat causing cellitis and allowing aspiration into the trachea. Also swelling from the cellitis around the larynx can result in respiratory distress.

Hair loss and scabs on face, edge and base of ear
Epizootic hemorrhagic disease virus and Bluetongue virus

Nitrate and nitrite toxicosis

Yew (Taxus) ingestion

New CAHFS Fee List Now Available