CAHFS CONNECTION
July 2013

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Bovine

Leptospirosis was the cause of an abortion storm in 6-8 month gestation fetuses from one dairy. Serology of the dams at the time of abortion revealed *L. pomona* titers of 1:1600 and greater in four of four aborting cows with low to moderate titers to other serovars. A second dairy had a sporadic abortion eight days after vaccination with a multivalent vaccine containing Leptospira. Fetuses submitted from both dairies were icteric with bile stasis, and Leptospira was confirmed by fluorescent antibody testing on kidney impression smears.

Atresia coli of the spiral colon was the cause of a failure to defecate, bloat and death in multiple dairy calves from two separate premises. Affected calves submitted were less than five days of age. One premise reported a 30 percent incident while all five calves submitted from a second premise were affected.

Nervous coccidiosis was diagnosed in three of five Longhorn heifers with bloody diarrhea followed by spasms, incoordination and seizures. Two heifers became recumbent, one was paddling before death and the other was euthanized and submitted for necropsy. The third animal recovered. The remaining animals had mild diarrhea or no clinical signs. At necropsy, the heifer had diffuse severe, abomasal edema associated with large numbers of *Ostertagia* sp. and diffuse colitis due to coccidiosis. This animal was also deficient in copper and selenium. The pathogenic mechanisms for nervous coccidiosis are not fully understood and experimentally have not been reproduced.

Hairy vetch toxicosis was the presumptive cause of death of an Angus cow from a herd of 350 where seven had died over a 3-month period. Some herd mates had scaly skin lesions and weight loss. At field necropsy one Angus cow was markedly anemic (pale) and the liver and kidney had mottling and hemorrhages. On histopathology, the tissues submitted revealed lymphohistiocytic to granulomatous kidney, liver, heart and lung lesions compatible with hairy vetch toxicosis. The pasture contained hairy vetch.

Equine

*Salmonella arizonae* was the cause of septicemia leading to meningoencephalitis and ventriculitis with septic thrombi and necrosis in the brain, pneumonia and hepatitis in a 2-week-old colt. The colt had separated from his dam and developed abnormal flexure of the neck and was blind. CBC revealed increased white blood cells and neutrophils.

*Streptococcus equi ssp. zooepidemicus* was the cause of severe bronchopneumonia in a 10-month-old wild burro filly. The filly was from northwestern Riverside county where as many as 40 other burros had been reported as sick, lethargic and dying with no apparent cause. Extensive testing included PCR on nasal swabs and lung tissue for equine herpesvirus-1 and influenza, both of which were negative. *Streptococcus equi ssp. zooepidemicus* is one of the most common causes of pneumonia in horses submitted.
Small Ruminant

Unilateral mastitis caused by Streptococcus sp. and Fusobacterium necrophorum was found at necropsy in a ewe from a flock of 80 in which eight to 10 ewes had unilateral hard udders, anorexia and weight loss. Five ewes had died. The ewe also had lungworms and severe selenium deficiency.

Camelids

Oleander toxicosis was the cause of illness in five llamas out of a group of nine showing acute respiratory signs, lethargy and anorexia of which one died and two were euthanized after consuming a bale of hay. One of the dead animals was submitted for necropsy and oleandrin was detected in the stomach contents. It is speculated that only the one bale of hay was contaminated by the oleander leaves. Oleander is the most common toxicosis seen in camels in California.

Porcine

H3N2 influenza virus was the cause of coughing in 100 percent of piglets removed from the farrowing barn to the nursery in a 100 sow farrow to finish operation. The virus was diagnosed by PCR on a tracheal swab of an affected pig and confirmed by H and N typing.

Poultry

Mycoplasma synoviae (MS) infection was diagnosed in a group of 6 1/2-week-old, commercial “organic” broilers submitted with a history of increased mortality and depression. At necropsy the birds exhibited polyserositis with accumulation of a white-yellowish caseous exudate in multiple organs of the coelomic cavity. Tracheal swabs taken at necropsy were positive for MS by PCR. Escherichia coli, causing a secondary bacterial infection was isolated from the heart sac and air sac.

Systemic aspergillosis was diagnosed in multiple submissions of 1- to 10-day-old turkey pouls. The birds were submitted with a clinical history of lingering high mortality and breathing difficulty. At necropsy the birds exhibited multiple, small, whitish nodules mainly in the lungs and air sacs. Few birds had a yellowish exudate in the anterior chamber of the eye (hypopyon). Fungal hyphae associated with pneumonia and panophthalmitis were seen by histopathological examination. Aspergillus fumigatus was isolated from the lung.

Pasteurella multocida was isolated from breast blisters and synovitis in 12-week-old turkeys that had increased mortality of 50-200/days. These lesions can be associated with chronic fowl cholera. However, there was no report of previous Pasteurella infection in this flock. Most cases of breast blisters are due to Mycoplasma synoviae or Staphylococcus in turkeys so this was an unexpected finding. Pasteurella multocida was also isolated from subcutis in 12-week-old turkeys with head and neck cellulitis in an unrelated flock experiencing swollen wattles and increased mortality. Some birds had discharge from the nose and mouth. The birds affected with cellulitis also had enlargement of the liver and spleen.

Lead toxicosis was the cause of an inability to stand, a twisted neck and not eating and drinking in a one-year-old backyard chicken that died. Brain and gizzard kolin lesions were found on histopathology. Eggs that were laid by chickens exposed to lead can contain lead leading to human health concern. The egg shell usually contains the highest amount. Several cases of lead poisoning in backyard chickens have been diagnosed by CAHFS in the past few years.

Other Avian

Chlamydia infection (psittacosis) was the cause of weight loss and death in two parakeets in a household of 30 birds. The affected birds were one year and five months old respectively and were housed in adjacent cages. Inflammation of the spleen and liver were found at necropsy and Chlamydia was confirmed by fluorescent antibody testing and Gimenez stain.