



UC DAVIS

VETERINARY MEDICINE

California Animal Health and
Food Safety Laboratory System

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY • JUNE, 2017



Out With the Old...In With the New

CAHFS is excited to announce that effective June 1 our client report will have a new look. While the report will include the same information as before, the color and CAHFS logo have changed to reflect our long standing ties to the UC Davis School of Veterinary Medicine.

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CAHFS Case # DVF0466
Primary Version #
Ref: N. Smith and others

Coordinator: John Adams DVM, MS, PhD, Dip. ACVP
© Signed and Authenticated by: Susan Lutz on
 behalf of Adams, John M. on 5/23/2017
 8:32:21am

Collection Site:
 Coordinates: None
 USDA Dairy Locus
 Toller CA 95774
 Toller County, Precip ID: 046402

Email To:
 adams@ucdavis.edu
 adams@ucdavis.edu

Specimens Received: 1 Canine
Date Collected: / **Date Received:** 05/19/2017

SUBMITTER		Case Comments	
Submitter:	adams@ucdavis.edu	Case:	CA
Director:	Chadwick, Betty	USDA Dairy Locus:	Toller, CA 95774

SPECIMENS & DETAILS				
Animal/Source:	ID Type:	Taxonomy:	Gender:	Age:
Horse		Horse/Equine		

Original History

File Case

View Observations

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Equine

Basisphenoid bone fracture was the cause of sudden onset of neurologic signs in a two-year-old Quarter horse gelding found down and bleeding from the nose and mouth in its stall. Upon rising, this horse exhibited head tilt, dilated pupils and unusual ear carriage, which did not improve over 24 hours. The horse was euthanized and necropsy revealed a complete, comminuted and displaced fracture of the basisphenoid bone and extensive hemorrhage on the ventral surface of the brain with damage of the optic chiasma.

***Clostridium difficile* colitis** was diagnosed in a 1.5-month-old American miniature male horse that had a one-week-history of diarrhea and dehydration before death. At necropsy, the mucosal surface of the entire cecum and colon presented multiple linear mucosal erosions and was diffusely covered by a thin pseudomembrane. Microscopically, severe typhlocolitis was confirmed. *C. difficile* was isolated from colon tissue and toxins A/B of this microorganism were detected by ELISA in colon contents.

Bovine

Cranial mesenteric aneurysm rupture and exsanguination caused the sudden death of two 11 to 16-month-old Holstein heifers. Gross findings consisted of abundant partially clotted intraperitoneal hemorrhage and mesenteric hematomas resulting in exsanguination. Ruptured aneurysms of the cranial mesenteric artery was the cause for the hemorrhage in both heifers. This is a recognized but idiopathic syndrome predominately seen in Holsteins 2 to 5 years of age so these two heifers are slightly younger than usual.

Strangulated section of jejunum caused peritonitis and death in an adult Angus bull that had been lethargic for over a week and was found dead. The peritoneum contained fetid gas and fluid mixed with ingesta. There was a 5-meter section of infarcted jejunum which was strangulated on its mesenteric axis leading to necrosis and intestinal rupture.

Jejunal hematoma was the cause of sudden death in two adult Holstein cows in mid lactation. Gross findings in both animals consisted of intramural hematomas in the jejunum with distension of the intestine by bloody content. While intramural jejunal hematomas are common, the presentation of two in one day in the same dairy is unusual. The underlying cause for the syndrome remains unknown.

Continued





UCDAVIS

VETERINARY MEDICINE

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Food Safety Laboratory System

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Small Ruminants

***Corynebacterium pseudotuberculosis* internal abscesses** were found in a five-year-old goat with a history of decreased appetite, weight loss and front leg lameness. The main gross findings were multiple, large liver and pancreatic abscesses that contained soft, yellow caseous exudate. *Corynebacterium pseudotuberculosis*, the etiologic agent of caseous lymphadenitis, was isolated from this exudate.

Ovine Herpesvirus-2 (OvHV-2) associated systemic disease was diagnosed in a 10-week-old, male castrated lamb. The lamb became slow, quiet, developed diarrhea, and had a peak rectal temperature of 104.4° Fahrenheit. The disease progressed and the animal died on day 3 after the onset of the clinical signs despite antibiotic therapy and supportive care. There were moderate to severe ulcerative lesions throughout the whole alimentary tract, accompanied by necrotizing hepatitis and marked lympholysis in various lymph nodes, Peyer's patches and spleen. The diagnosis of OvHV-2 infection was confirmed by PCR on a sample of spleen and positive in-situ hybridization tests performed on all organs with lesions. In addition, this lamb had concurrent white muscle disease compatible lesions in the heart and skeletal muscle, although vitamin E or selenium deficiency could not be confirmed due to supplementation with vitamin E and selenium as part of the supportive care.

Pig

Myelomalacia of the lumbar spinal cord resulted in paralysis of the rear legs in a 4-month-old pig after suffering anorexia and fever for a few days. On post-mortem examination, this animal had a ruptured bladder and histology of the spinal cord revealed a lesion suggestive of an infarct. The pig had concurrent porcine circovirus-2 infection which had caused lymphocyte depletion.

Poultry and Other Avian

Coccidiosis and necrotic enteritis were the cause of increased mortality, and swollen and hemorrhagic intestine in several flocks of 15-28 day old broiler chickens. Histopathology was compatible with severe coccidiosis and necrotic enteritis produced by *Clostridium perfringens*.

Blackhead (histomoniasis) was diagnosed in 12-week-old turkeys on two ranches with a history of increased mortality, lethargy, depression and reluctance to walk. All affected birds had necrotic cecal cores and enlarged livers with round, pale, 3-5mm foci. Histomonads were identified histologically associated with the liver and cecal lesions, and in the spleen and bursa.

Gizzard worm infestation was diagnosed in two adult roller pigeons that were part of a group of 100 individuals of which approximately 15 died within three weeks. Clinical signs included weight loss, depression and unsteady gait. Two submitted birds were moderately emaciated and dehydrated. The gizzard was mildly enlarged and the koilin layer appeared thickened and irregular, and small numbers of hair-like roundworms were detected under it. Severe inflammation was seen throughout the wall of the gizzard. Gizzard worms alter the structure of the gizzard and compromise digestion. Heavy infestations can be lethal, particularly in young birds. Several species of gizzard worms have been identified, including *Hardjelia truncata* which has been found in pigeons in the United States since 2009. The exact life cycle of this parasite is still not known.

Holiday Schedule

CAHFS will be closed on **Tuesday, July 4, 2017** in observance of Independence Day.

Please plan your testing needs accordingly.

