

JAVMA News

This year's severe drought has hurt horses, livestock, and animal owners and had mixed effects on veterinarians. West Nile disease had been connected with about 90 human deaths by early September in possibly the worst outbreak since the virus spread to the United States. *See PAGE 980*

Letters to the Editor

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What Is Your Diagnosis?



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Pathology in Practice



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FACTS & FIGURES

Employment of female and male graduates of US veterinary medical colleges, 2012

In a survey of veterinary medical students expected to graduate in spring 2012, mean starting salary was \$69,405 for male respondents who had accepted a full-time position (excluding salaries for positions in advanced education) and \$63,844 for female respondents. Mean educational debt was \$129,439 for male respondents and \$137,079 for female respondents. *See PAGE 1040*

Radiographic vertebral heart score and sphericity index in the detection of pericardial effusion in dogs

Cardiac silhouettes of dogs with pericardial effusion are larger and more rounded than those for dogs with other cardiac disorders, but according to results of a new study, objective radiographic indexes of cardiac size and roundness are only moderately accurate at distinguishing dogs with PE from dogs with other cardiac disorders without PE. For the study, radiographs from 51 dogs with PE associated with various cardiac disorders, 50 dogs with left-sided or right-sided cardiac disorders without PE, 50 dogs with bilateral cardiac disorders without PE, and 50 healthy dogs were examined. At optimal cutoffs, sensitivity of vertebral heart score and sphericity index ranged from 0.71 to 0.90 and specificity ranged from 0.66 to 0.76. *See PAGE 1048*

Selamectin versus ivermectin for treatment of *Trixacarus caviae* mange in pet guinea pigs

Both topical application of a single dose of selamectin (15 mg/kg [6.8 mg/lb]) and SC injection of 4 doses of ivermectin (400 µg/kg [181.8 µg/lb], q 10 d) can eliminate *Trixacarus caviae* mites from guinea pigs, according to results of a new study. The study included 17 pet guinea pigs with active mite infestation randomly assigned to 2 treatment groups. Pruritus resolved by day 10 in all animals, and animals were free from mites on day 30 in the selamectin group and day 40 in the ivermectin group, although number of animals with mites did not differ significantly between groups at any time. Recurrence of infection was not noted in either treatment group. No adverse reactions were observed in any of the treated animals. *See PAGE 1056*

Baclofen toxicosis in dogs and cats

Baclofen is a centrally acting skeletal muscle relaxant commonly used to prevent spasticity in people with multiple sclerosis, cerebral palsy, and various spinal disorders. A review of records for a Midwest animal poison control center from November 2004 through April 2010 revealed information on 140 dogs and 5 cats with evidence of baclofen toxicosis. Median age was 0.67 years (range, 0.1 to 15 years) for the dogs and 1 year (range, 0.7 to 16 years) for the cats. Of the 145 patients, 133 (92%) developed clinical signs of baclofen toxicosis, including general malaise and CNS, gastrointestinal, cardiovascular, respiratory, and urogenital abnormalities. Survival rate was 83.8% for the 68 dogs with known survival status. *See PAGE 1059*

Tumor thrombus formation in two dogs with insulinomas

A 9-year-old Staffordshire Bull Terrier and a 9-year-old Boxer evaluated because of intermittent neurologic signs including muscle tremors, ataxia, episodic collapse, disorientation, and seizures

were both found to have low blood glucose and high serum insulin concentrations. In both dogs, exploratory laparotomy revealed a mass that extended from the body of the pancreas into the pancreaticoduodenal vein. Marginal resection of the pancreatic masses was performed, and the tumor thrombi were removed through a venotomy. Histologic evaluation indicated the masses were pancreatic islet cell tumors with tumor thrombi. Clinical signs resolved following surgery, and the dogs were euglycemic 17 and 45 months after surgery. *See PAGE 1065*

Foal production following intracytoplasmic sperm injection and blastocyst culture of oocytes from ovaries collected immediately before euthanasia or after death of mares

Results of a new study suggest that it may be possible to produce foals from oocytes obtained from valuable mares after their death. In the study, ovaries were collected immediately before euthanasia or after death from 16 mares that died or were euthanized for reasons unrelated to the study. Oocytes were subjected to intracytoplasmic sperm injection and presumptive zygotes were cultured for 7 to 10 days. Blastocysts were shipped to embryo transfer facilities for transcervical transfer to recipient mares. Overall, 13 pregnancies were established, and 10 healthy foals were produced from 6 donor mares. Number of blastocysts produced per mare and number of live foals produced per mare were significantly correlated with number of oocytes recovered. *See PAGE 1070*

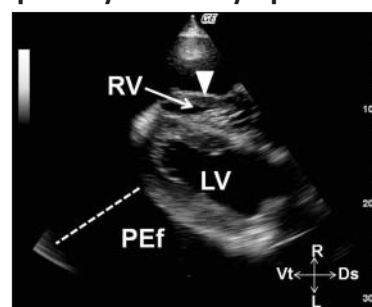
Effect of orally administered electrolyte solution formulation on abomasal luminal pH and emptying rate in dairy calves

Results of a new study suggest that ingestion of bicarbonate-containing orally administered electrolyte solutions may result in sustained abomasal alkalinization in dairy calves. Because persistently high abomasal luminal pH may facilitate growth of enteropathogenic bacteria, the authors concluded that OAEs containing a bicarbonate concentration $> 70\text{mM}$ should not be administered to calves with diarrhea. The study was a randomized crossover study involving 6 male 12- to 31-day-old dairy calves. Administration of high-glucose high-bicarbonate OAEs caused large and sustained increases in mean abomasal

luminal pH from 1.3 to 7.5, whereas feeding of a milk replacer or acetate-containing OAE resulted in more transient increases in pH. *See PAGE 1075*

Echocardiographic findings and clinical signs in dairy cows with primary cardiac lymphoma

A review of medical records of 7 adult Holstein dairy cows with cardiac lymphoma revealed that 5 had clinical signs of right-sided congestive heart failure secondary to cardiac tamponade with moderate to severe pericardial effusion. In the remaining 2 cows, tachycardia was the only clinical sign related to cardiac disease and a heterogeneous mass was observed protruding into the right atrium. Transthoracic echocardiography aided in the diagnosis of primary cardiac lymphoma in the cows and could potentially be used to quantify the severity of pericardial effusion and determine needle placement for pericardiocentesis. A mass within the right atrium was suggestive of cardiac lymphoma and should be differentiated from mural bacterial endocarditis. *See PAGE 1083*



Evaluation of *Cytauxzoon felis* infection status in captive-born wild felids housed in an area endemic for the pathogen

Captive tigers without clinical signs of disease that are housed in an area where *Cytauxzoon felis* is endemic may test positive for the organism. This according to a study involving 11 captive-born wild felids (1 bobcat, 1 cougar, 1 lion, and 8 tigers) and 6 domestic cats (5 pets and 1 feral). Four of the tigers and all 6 domestic cats tested positive for *C felis* infection with a PCR assay. Intraerythrocytic organisms consistent with *C felis* were identified in blood smears from only 1 of the tigers with positive PCR assay results, but were seen in blood smears from all 6 domestic cats. For all 4 infected tigers, sequences of *C felis* 18S rRNA amplicons were identical to sequences of amplicons from domestic cats on the premises. *See PAGE 1088*