

# In This Issue • July 15, 2018

## JAVMA News

Canine sports and rehabilitation medicine is growing as more dogs run, jump, and dive in a variety of athletic competitions. In other news, a few in every thousand dogs and cats have food allergies, but a few in every hundred are allergic to fleas or to molds, pollen, or other environmental allergens. See PAGE 134

## Letters to the Editor

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## What Is Your Diagnosis?



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## What Is Your Neurologic Diagnosis?

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## Pathology in Practice



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## Small Animals

### Effect of refrigeration of clinical canine urine samples on quantitative bacterial culture

In dogs, diagnosis of urinary tract infection depends on quantitative bacterial culture of a urine sample collected by cystocentesis. However, storage and handling of urine samples can influence results of QBC. In a study of urine samples from 104 dogs with clinical signs consistent with UTI, sample refrigeration for 24 hours resulted in no significant decrease in numbers of bacterial colony-forming units, compared with results when samples were immediately processed. But, sensitivity was 95% (35/37). Urine samples mixed with tryptic soy broth and refrigerated had significantly lower CFU counts, and sensitivity was only 89% (33/37). See PAGE 177

### Characterization of and factors associated with causes of pleural effusion in cats

Congestive heart failure and neoplasia were the most common underlying causes in a study of 380 cats with pleural effusion, occurring in 155 (40.8%) and 98 (25.8%) cats, respectively. Other causes included pyothorax, idiopathic chylothorax, trauma, feline infectious peritonitis, and nontraumatic diaphragmatic hernia. Eighty-seven (22.9%) cats died or were euthanized before discharge. Cats with trauma or feline infectious peritonitis were significantly younger than those with CHF or neoplasia. Cats with CHF had a significantly lower rectal temperature at hospital admission than did cats with pleural effusion from other causes. See PAGE 181

### Survival estimates and outcome predictors for shelter cats with feline panleukopenia virus infection

Feline panleukopenia virus infection can be deadly for shelter cats. In a study involving 177 shelter cats with FPV infection, median survival time after hospital admission was 3 days, and only 36 of the 177 (20.3%) cats survived to discharge from the hospital. Risk of nonsurvival was greater for cats with signs of lethargy, rectal temperature  $< 37.9^{\circ}\text{C}$  ( $100.2^{\circ}\text{F}$ ), or low body weight at hospital admission. Remarkably and contrary to the existing literature, leukopenia at admission had no association with outcome, possibly owing to early prevention of complications. See PAGE 188

### **Relationship of preoperative neurologic score with intervals to regaining micturition and ambulation following surgical treatment of thoracolumbar disk herniation in dogs**

Times required for dogs to regain micturition and ambulation following surgical treatment for thoracolumbar Hansen type I intervertebral disk extrusion were associated with preoperative modified Frankel score in a study involving 54 dogs weighing < 20 kg (44 lb). Mean  $\pm$  SD interval from surgery to regaining micturition was  $4.1 \pm 4.4$  days, and mean interval from surgery to regaining ambulation was  $13.8 \pm 25.1$  days. Significant negative correlations with MFS were identified for interval to regaining micturition ( $r = -0.63$ ) and interval to regaining ambulation ( $r = -0.64$ ). See PAGE 196

### **Incidence and characteristics of acute-onset postoperative bacterial and sterile endophthalmitis in dogs following elective phacoemulsification**

Findings of several large retrospective studies involving humans suggest that the incidence of postoperative infectious endophthalmitis following phacoemulsification ranges from 0.05% to 0.2%. In a review of medical records for 1,447 dogs that underwent elective unilateral or bilateral phacoemulsification (2,630 eyes) because of cataracts, infectious endophthalmitis developed in 4 eyes of 4 dogs, representing 0.15% of eyes and 0.28% of dogs. Unilateral sterile endophthalmitis developed in 3 (0.11%) eyes of 3 (0.21%) dogs. All eyes with infectious endophthalmitis responded poorly to medical treatment and were enucleated. See PAGE 201

### **Ischemic necrosis of the digits and hyperlipidemia associated with atherosclerosis in a Miniature American Shepherd**

A 2.5-year-old Miniature American Shepherd was referred because of a crusted lesion on the digital pad of right hind digit 3. Serum biochemical analyses indicated severe hypercholesterolemia and hypertriglyceridemia. Ultrasonography of major arterial vessels revealed substantial arteriosclerotic change. Treatments

included atorvastatin calcium, a low-fat diet, and omega-3 fatty acids to reduce serum lipid concentrations; clopidogrel to prevent thrombosis; and pentoxifylline to improve microcirculatory blood flow. The digit and eventually the entire limb were amputated, but the response to treatment was poor, and euthanasia was elected. See PAGE 209

### **Sternotomy and ventral slot decompression for treatment of T1-2 intervertebral disk disease in a Dachshund**

A 9-year-old Dachshund was referred because of acute pelvic limb paraplegia. A spinal cord lesion between T3 and L3 was suspected given the dog's history and neurologic examination results, but CT revealed extrusion of disk material from the T1-2 space and marked spinal cord compression. Sternotomy of the manubrium and ventral slot decompression of the T1-2 disk space were performed without entering the thoracic cavity, and a large amount of disk material was removed from the spinal canal. The dog maintained pelvic limb pain sensation postoperatively and regained motor function 2 days after surgery. See PAGE 215

## **Special Report**

### **Evaluation of various hemostatic knot configurations performed by veterinary students**

In a 1-hour training session, an experienced surgeon showed veterinary students how to perform 5 hemostatic knot configurations (giant, slip, strangle, surgeon's, and transfixing), which they then practiced at home on a hemostasis simulator for 2 weeks. Thereafter, students performed each knot 4 times (twice each with monofilament and multifilament suture) on a hemostasis simulator. Students considered the surgeon's knot the easiest to learn and the strangle knot the most difficult. The slipknot was considered the easiest knot to perform, and the giant knot was considered the most difficult. The strangle knot was the most effective in reducing vessel pressure distal to the ligature. See PAGE 219