Fear of anesthesia risks is fueling an increase in the use of anesthesia-free pet dentistry, despite recommendations that dental cleanings be done under anesthesia.

In other news, geneticists disabled a cell receptor to produce pigs resistant to what is currently the U.S. pork industry’s most harmful disease.

Perioperative morbidity and long-term outcome of unilateral nephrectomy in feline kidney donors
Renal allograft transplantation has become a well-recognized treatment for end-stage renal disease in cats. Several studies have documented the outcome of feline kidney recipients, but less information is available on the outcome of donors. In a review of medical records of 141 cats that underwent nephrectomy for kidney donation, intra- and postoperative complications were uncommon (2 cats and 17 cats, respectively). Median time from nephrectomy to hospital discharge was 3.6 days. Long-term follow-up information was available for 99 cats, and most cats (84%) for which follow-up information was available had no associated long-term effects. However, a small subset (7%) developed renal insufficiency or died of urinary tract disease.

Computed tomography for measurement of kidneys in dogs without renal disease
Renal size is routinely measured radiographically and ultrasonographically in dogs. However, as the availability of CT increases and the use of CT for assessment of the abdomen in dogs becomes more common, objective measurements of renal size obtained with this modality are needed. In a cross-sectional study of 21 dogs without renal disease that underwent abdominal CT, body weight, aorta diameter, and length of the L2 vertebral body were significantly correlated with renal length. Renal length-to-aorta diameter and renal length-to-L2 vertebral body length ratios (7.4 and 2.7, respectively) fell within the ranges of previously published values for these measurements. Intraobserver and interobserver agreement were excellent.

Prognostic value of rectal temperature at hospital admission in client-owned rabbits
Several textbooks of rabbit medicine have questioned the clinical value of measuring rectal temperature in rabbits. However, a new cohort study involving 316 client-owned rabbits found that rectal temperature at hospital admission was a major predictor of death. Specifically, rabbits with hypothermia at admission had a risk of death 3 times that of rabbits without hypothermia (relative risk, 3.09; 95% confidence interval [CI], 2.17 to 4.39). For each 1°C (1.8°F) decrease in admission rectal temperature, the odds of death were doubled (OR, 2.11; 95% CI, 1.69 to 2.64). Older age, suspected presence of a systemic disease, and presence of gastrointestinal stasis were also significantly associated with an increased risk of death.
Association between a shelter-neuter-return program and cat health at a large municipal animal shelter

Considerable controversy surrounds the use of trap-neuter-return programs under which free-roaming cats are trapped, neutered, and returned to their sites of capture, with major questions raised as to whether such programs have a substantial effect on numbers of feral cats. A review of records for 2006 through 2013 for the San Jose Animal Care Center, which initiated a shelter-neuter-return (SNR) program in 2010, found that initiation of the program was associated with a decreased number of cats admitted to the shelter and a lower proportion euthanized. In addition, with implementation of the SNR program and a new treatment policy for cats with upper respiratory tract infection, more cats received treatment with less medication, yielding cost savings. See PAGE 298

Surgical management of vesicoureteral reflux with recurrent urinary tract infection after renal transplantation in a dog

A 3-year-old male Cocker Spaniel renal transplant recipient was readmitted 39 weeks after transplantation. Hydronephrosis and hydroureter were identified, and vesicoureteral reflux (VUR) and urinary tract infection (UTI) were diagnosed. Despite appropriate treatment of the UTI, the VUR persisted and the UTI recurred. Therefore, surgical correction by means of revision extravesicular ureteroneocystotomy incorporating a long submucosal tunnel (with tunnel length approximately 5 times the inner diameter of the ureteral orifice) was performed. Both VUR and hydronephrosis resolved after surgery. No recurrences of clinical signs of urinary tract complications were observed during the subsequent 22-month follow-up period. See PAGE 309

Zoo Animals

Amoebic meningoencephalitis and disseminated infection caused by Balamuthia mandrillaris in a Western lowland gorilla

A 22-year-old male gorilla (Gorilla gorilla gorilla) housed in a zoo was evaluated for signs of lethargy, head-holding, and cervical stiffness that had progressed to signs of depression, lip droop, and tremors. The gorilla’s condition deteriorated, and the animal was euthanized. Histological examination of the brain revealed multifocal areas of necrosis and hemorrhage associated with mixed inflammation, vascular necrosis, and intralesional amoebic trophozoites. Immunohistochemical testing positively labeled free-living amoebae within the brain and other organs. Subsequent PCR assay of CSF and frozen kidney samples identified the organism as Balamuthia mandrillaris, confirming a diagnosis of amoebic meningoencephalitis. See PAGE 315