

Canine Brucellosis Outbreaks: A Lingering Concern

Canine brucellosis is a zoonotic health concern in developing nations with large populations of free-roaming, sexually intact dogs. This study described an outbreak of brucellosis that occurred in a group of dogs in Buenos Aires, Argentina. An intact female (with a history of abortion and stillbirths) and 3 of her puppies, were Brucella canis seropositive. One puppy died from brucellosis 20 days before castration; the remaining were neutered on day 30 postisolation. Two months later, treatment with enrofloxacin (7 mg/kg IV q24h for 30 days) was initiated. The female dog died of undetermined causes 13 months after initial isolation. The remaining pups were treated with a second course of enrofloxacin at a higher dose (10-12 mg/kg IV q24h for 30 days). Blood and urine cultures were negative for Brucella canis in both pups thereafter.

A survey of dogs (n = 41) living in the vicinity revealed 9 to be seropositive for brucellosis. Variable number of tandum repeat (VNTR) analysis comparing human and study dog *B canis* isolates indicated 13 of the 17 VNTR loci considered were identical. Persistent *B canis* infection was concluded to be a source of infection for neighborhood dogs, likely via contaminated urine. Brucellosis can persist beyond neutering and antibiotics; stray dogs should be controlled and educational programs enacted to protect public health.

Commentary

Canine brucellosis outbreaks continue, although they are rarely reported. This outbreak was confirmed by several methods, but the report did not offer new or substantial information on the disease or its epidemiology, treatment, or control.



Owner infection was noted only with the mention of a human isolate. Treatments were attempted, but results were inconsistent. Control in free-ranging dogs involved castration. Transmission of *B canis* via urine was implied, but no quantitative determination of bacterial numbers was performed.—*L.E. Carmichael, DVM, PhD, Dhc (Liege)*

Source

Monitoring infected dogs after a canine brucellosis outbreak. Reynes E, López G, Ayala SM, et al. COMP IMMUNOL MICROB 35:533-537, 2012.

Preoperative Ultrasonography for Retained Testes

Canine and feline testes usually descend into the scrotum by 10 days of age. If testes have not descended by 8 weeks, cryptorchidism is likely. Although considered congenital, cryptorchidism's exact mode of inheritance is unknown. Incidence is higher in dogs than in cats, and complications include sterility and testicular torsion. Risk for neoplastic transformation is higher in undescended testicles of dogs. Diagnosis and localization of undescended testicles can be difficult; in one evaluation, palpation to locate the retained testis was successful 48% of the time.

This study evaluated ultrasound use to locate undescended testes in 30 dogs and 4 cats; final testicular location was confirmed surgically. Forty-three testes were retained (26 right, 17 left), 18 were in the normal scrotal position, and 7 were absent from previous surgical removal. Twentyeight retained testes were in the abdomen and 14 in the inguinal region. There was a 100% positive predictive value for the 42 abdominal and inguinal testes seen on ultrasound; all were found during surgery. One abdominal-retained testis was not identified via ultrasound. Preoperative ultrasound can help facilitate location of retained testes before surgical exploration or laparoscopy.

Commentary

This study could be useful for those with intermediate to advanced ultrasonography skills. A small fat accumulation palpated in the inguinal region may be mistaken for a retained testicle and result in unnecessary surgical time. On sonographs, testicles can be distinguished from fat and intraabdominal testes and should not be confused with mesenteric lymph nodes. With experience, testes can be readily differentiated from fat and lymph nodes. Private practitioners wishing to increase proficiency in identification of retained testes are encouraged to receive appropriate training and routinely image normal testicles in the scrotum of patients presenting for neutering. Ultrasonography for preoperative planning can reduce surgical time and perioperative morbidity, thereby improving patient care, increasing client satisfaction, and reducing practitioner stress.— *Ajay Sharma, BVSc, MVSc, DVM, DACVR*

Source

Use of ultrasound to locate retained testes in dogs and cats. Felumlee AE, Reichle JK, Hecht S, et al. *VET RADIOL ULTRASOUND* 53:581-585, 2012.