A New Approach to Incontinence

When medical therapy fails to treat urethral sphincter mechanism incompetence (USMI) or if unwanted effects occur, surgical intervention may be necessary. The safety and efficacy of a surgically implanted adjustable urethral sphincter (AUS) was reviewed in 24 female and 3 male dogs with acquired or congenital urinary incontinence: 18 had USMI, 6 were incontinent following ectopic ureter repair, and 3 had pelvic bladder. Following midline celiotomy, a 2-cm section of proximal urethra was isolated and a silicone urethral compression cuff placed around it and secured. The AUS actuating tube was then passed via stab incision through the abdominal wall and attached to a subcutaneous vascular access port located cranial to the flank fold. Urethral patency was tested with sterile saline before lavage and closure. AUS inflation was repeated q1wk until incontinence resolved. At owner survey 6–19 months postoperatively, continence scores improved and owners described themselves as very satisfied (22/27), satisfied (2/27), or unsatisfied (3/27). Complications included mild transient postoperative stranguria. Twelve dogs were continent after AUS implantation without requiring AUS cuff inflation. AUS removal was recommended in 2 dogs that developed functional urethral obstruction, possibly from scar tissue at AUS site and preexisting detrusor dysfunction. AUS implantation may be an effective treatment, but urethral obstruction may occur.

Commentary

Surgical implantation of AUSs has been the next solution attempted for USMI-related incontinence in dogs. Inclusion of both sexes provided a realistic clinical picture with encouraging results. Most dogs, one-third of which showed significant anatomic urinary tract problems, showed significantly improved continence. Some dogs did not need the AUS inflated (the shape itself provided focal compression); however, this close apposition may be a device defect as urethral obstruction was a noted complication. A chronic, foreign body-like fibrous reaction or chronic focal pressure may result in functional obstruction the bladder cannot overcome, requiring device removal. This was only noted in 2 dogs, providing promising results for owners willing to commit to surgery and maintenance.—Kristy Broadus, DVM, MS, DACVS

Source


Respiratory Disease in Snakes: A Refresher Course

Respiratory diseases are common in captive snakes, but it can take extended time for signs to develop. In this study, 80 snakes (Boidae spp [n = 30], Pythonidae spp [n = 50]) from 48 collections were examined pre- and postmortem for respiratory infections. In many collections, respiratory infections were endemic and the collection was culled. BCs ranged from poor to obese. All husbandry practices were technically acceptable for the species. Snakes were placed into 3 groups: no clinical signs (n = 21), respiratory signs (n = 25), and nonrespiratory clinical signs (n = 34). Respiratory signs were described as gasping and having cloudy tracheal wash samples with white–yellow clumps. Nonrespiratory signs included CNS signs, anorexia, vomiting, stomatitis, dermatitis, and diarrhea. Pneumonia was diagnosed in 36/80 snakes (45%) and from 29/48 (60%) collections. Pneumonia was more common with respiratory signs. The most commonly isolated bacterium was Salmonella spp. Ferlavirus was found only in pythons (8/50 Pythonidae spp). In living boid snakes with respiratory disease, tracheal washes were useful diagnostic tools.

Commentary

Poor husbandry frequently contributes to respiratory disease in snakes. A detailed husbandry discussion with owners is vital, paying special attention to details such as environmental temperature and humidity. It is important that clinicians know or research husbandry requirements for a given species rather than assuming most species have similar requirements. Of equal importance is infectious disease testing: the varied pathogens found in this study highlighted that identifying a bacterial or viral infection potentially causing respiratory disease is unpredictable, and thus specific diagnostics (eg, lung wash, viral testing) can be invaluable. General chemistry evaluation and imaging may also assist in determining diagnosis and illness severity.—Sarah Churgin, DVM

Source