

Managing Urinary Incontinence in Female Dogs

Urinary sphincter mechanism incompetence is a common cause of urinary incontinence in adult female dogs. Medical management options include sympathomimetic or parasympatholytic drugs and estrogen, but these are not curative. When medical treatment fails, surgery may be indicated. In colposuspension, the lateral vaginal walls are anchored to the prepubic tendon, shifting the bladder cranially such that any rise in intra-abdominal pressure compresses the urethra and the bladder, which decreases the tendency for leakage. Urethropexy repositions the bladder more cranially by anchoring the urethra to the prepubic tendon. Reported success rates for these

procedures are 53% and 56%, respectively. Complications include urinary retention, dysuria, and anuria, sometimes requiring surgical revision.

This article describes a new combined urethropexy–colposuspension (CUC) technique. Using a caudal midline approach, the bladder is exteriorized and tractioned cranially. Urethropexy is performed using a simple interrupted 2-0 polypropylene suture anchored around the prepubic tendon and passed through the urethral wall. A second suture is anchored in the caudal linea alba just cranial to the pubic brim. Colposuspension is then performed using bilateral 2-0 polypropylene mattress sutures. Owner perceptions of long-term outcomes were measured using a standardized grading system. The authors reported a 70% success rate in treating the clinical signs of incontinence and conclude that CUC is a relatively simple procedure that can be more effective than either urethropexy or colposuspension alone.

Commentary

This summary article is based on one of the author's published retrospective series of 30 dogs.¹ A Foley catheter was left in place for 36 hours with 10% of dogs needing diazepam to help with dysuria after catheter removal. With a mean follow-up of 36 months, this technique appears to have improved the results of this disease, though owners still need to be warned that medication may still be necessary. The key to the surgical technique seems to be putting just the right amount of tension on the urethra while avoiding over-tensioning, which leads to dysuria.—*Jonathan Miller, DVM, MS, DACVS*

Reference

1. Martinoli S, Nielssen P, White RAS. The outcome of combined urethropexy and colposuspension for management of bitches with urinary incontinence associated with urethral sphincter mechanism incompetence. *Vet Surg*. 2014;43(1):52-57.

Source

White RAS. Improvements in the surgical management of bitches with urinary incontinence. *Companion Animal*. 2014;19(8):423-427.

Diagnosing Canine Pyoderma

Cutaneous cytology is a point-of-care test used in the diagnosis of canine pyoderma. Although the test is widely used, there are limited published studies on its reproducibility. In this study, impression smears from 20 dogs with superficial pyoderma and 5 normal dogs were examined at least twice by 4 different clinicians using a quantitative cytological technique to evaluate its reproducibility. Slides were scanned at low power, and an additional 10 separate oil immersion fields were evaluated. Investigators

noted the presence or absence of nuclear streaming and quantified polymorphonuclear leukocytes (PMNs), extracellular (EC) and intracellular (IC) cocci, EC and IC rods, and yeast. Overall agreement was considered poor for IC and EC rods and yeast, fair for IC cocci, moderate for PMNs, and good for nuclear streaming and EC cocci. Skin cytology had a sensitivity of 93% in identifying dogs with superficial bacterial pyoderma and 51% specificity in identifying normal dogs when considering all of these criteria. However, if the criteria were limited to the absence of PMNs and IC bacteria, the sensitivity was 64% and specificity was 98%.

Commentary

It may be surprising that universally used dermatologic techniques such as

impression cytology do not have universally accepted methodology. There is variation in method and technique recommended for different lesion types and suspected differential diagnoses. This probably explains why some practitioners often make positive diagnoses while others are frustrated in dermatologic workups. This paper adds insight into the pitfalls of cutaneous cytology interpretation and provides an impression smear-evaluation technique that appears reproducible. This is especially valuable both for tracking patient response to therapy and clinical research evaluation.—*Elizabeth Layne, DVM*

Source

Udenberg TJ, Griffin CE, Rosenkrantz WS, et al. Reproducibility of a quantitative cutaneous cytological technique. *Vet Dermatol*. 2014;25(5):435-e67.