Collagen Injection for Canine Incontinence

Urinary incontinence is a common problem in spayed, female dogs. This retrospective study evaluated 40 dogs. A cystoscope was passed into the urethra to make 3 collagen deposits into the submucosa. The injection yielded long-term benefits for many dogs. Twenty-seven were continent for 1 to 64 months (mean 17) after injection, and incontinence improved in another 10 dogs. When medication was added, 6 of these dogs regained full continence. Deterioration occurred in some dogs that were continent right after treatment. Two of these received a second treatment, and although one did not improve, the other dog regained continence for 30 months before declining again. The incidence of complications was 15%, which is comparable to that of women having a similar procedure. This procedure compared well with other surgical methods of treatment.

COMMENTARY: Urethral incompetence in female dogs before but particularly after ovariohysterectomy is usually treated medically with alpha-adrenergic agents with or without supplemental estrogens. Patients that fail to respond or subsequently become unresponsive have been treated with urethropexy, colposuspension, and submucosal injection of substances to increase the bulk of the mucosal tissue. All methods present challenges. The open surgical methods seem to be operator-dependent and results improve with the experience of the surgeon. Endoscopic injection requires some specialized endoscopic equipment and accessories. Teflon paste was used in the past but tissue rejection and distant migration proved a problem. Glutaraldehyde cross-linked bovine collagen appears to be a more suitable material for submucosal injection because it is not rejected and it doesn’t tend to migrate. This study supports the contention that submucosal injection of collagen is at least as effective as urethropexy and colposuspension for treatment of urethral incompetence that is unresponsive to medical treatment; however just as in the case of other surgical alternatives, additional medical treatment may be required to achieve continence—and the collagen is expensive.—David F. Senior, BVSc, Diplomate ACVIM & ECVIM-CA