Title:
Evaluation of an herbal compound on urinary saturation for calcium oxalate in dogs that have formed calcium oxalate uroliths

Investigators:
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Study description:
Management of canine calcium oxalate urolithiasis has relied on dietary modification with the goal to decrease the degree of urinary saturation for calcium oxalate. These diets typically increase urine volume, induce an alkaline pH, and decrease intake of dietary calcium and oxalate. In a recent pilot study, we evaluated an herbal supplement used in dogs with urinary tract issues and found it significantly decreased urine saturation for calcium oxalate in healthy dogs. We propose to evaluate this commonly used herbal supplement in dogs with a history of calcium oxalate urolithiasis with the objective being to determine if it decreases urine saturation for calcium oxalate.

Inclusion criteria:
Spayed female or castrated male adult dogs with a history of calcium oxalate uroliths will be eligible for enrollment. Dogs with active urolithiasis will be excluded as this has been shown to alter urine saturation.

Dogs will be screened prior to initiation of the study and will receive a baseline physical exam and lab work consisting of complete blood count, biochemical analysis, ionized calcium, parathyroid hormone concentration, and urinalysis, in addition to a urological ultrasound examination. An overnight urine collection will be performed for estimation of baseline urine saturation for calcium oxalate. Dogs accepted into the study will receive a commercially available herbal supplement administered every 12 hours for 8 weeks. No change in diet or exercise will be permitted during the study period. At the end of 8 weeks, an overnight voided urine sample will be collected by the owner, prior to feeding. Biochemical analysis, ionized calcium, parathyroid hormone concentration, urinalysis, and urological ultrasound examination will be repeated at an 8 week recheck appointment.

The costs of the office exams, herbal supplement, and required laboratory analysis and ultrasound examination will be paid for by the study.

Duration of study:
This study is currently OPEN.

Potential benefits to veterinary medicine:
Results from this study may provide veterinarians and pet parents with another treatment option for lowering levels of calcium oxalate in urine and thus reducing the risk for calcium oxalate urinary stone formation.